North Peoria Area Drainage Master Plan

Prepared for the
Flood Control District
of Maricopa County

and the
City of Peoria

Project No. 82000146
Contract FCD 99-45

Attachment 2
Hydrology and Hydraulics

Book 2 of 3

January 2002

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NORTH PEORIA AREA DRAINAGE MASTER PLAN

Attachment 2
Hydrologic and Hydraulic Technical Data Notebook

Book 2 of 3

PREPARED FOR:

FLOOD CONTROL DISTRICT
of
Maricopa County
and
City of Peoria

PREPARED BY:

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January 2002

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Project No. 82000146

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Stantec

APPENDIX A: RAINFALL LOSS PARAMETER CALCULATIONS

TABLE A-1

DTHETA & PSIF Lookup Table
Using XKSAT

Note:
The values in this table taken from Figure 4.3 of the FCDMC Drainage Design Manual.

XKSAT in/hr (1)	DTHETA Dry (2)	DTHETA Normal (3)	PSIF inches (4)
0.01	0.150	0.050	12.400
0.02	0.193	0.100	11.200
0.03	0.223	0.127	10.100
0.04	0.248	0.150	9.700
0.05	0.269	0.150	8.800
0.06	0.287	0.150	8.400
0.07	0.304	0.150	8.000
0.08	0.319	0.150	7.600
0.09	0.332	0.150	7.300
0.10	0.345	0.150	7.000
0.11	0.357	0.169	6.800
0.12	0.369	0.189	6.600
0.13	0.380	0.209	6.400
0.14	0.390	0.229	6.200
0.15	0.400	0.250	6.000
0.16	0.393	0.250	5.800
0.17	0.387	0.250	5.700
0.18	0.381	0.250	5.600
0.19	0.376	0.250	5.400
0.20	0.371	0.250	5.300
0.21	0.366	0.250	5.200
0.22	0.362	0.250	5.100
0.23	0.358	0.250	5.000
0.24	0.354	0.250	4.900
0.25	0.350	0.250	4.800
0.26	0.350	0.250	4.700
0.27	0.350	0.250	4.650
0.28	0.350	0.250	4.600
0.29	0.350	0.250	4.550
0.30	0.350	0.250	4.500
0.31	0.350	0.250	4.450
0.32	0.350	0.250	4.400
0.33	0.350	0.250	4.350
0.34	0.350	0.250	4.300
0.35	0.350	0.250	4.250
0.36	0.350	0.250	4.200
0.37	0.350	0.250	4.150
0.38	0.350	0.250	4.100
0.39	0.350	0.250	4.000
0.40	0.350	0.250	3.950
0.41	0.350	0.251	3.915
0.42	0.350	0.252	3.880
0.43	0.350	0.253	3.845
0.44	0.350	0.254	3.810

TABLE A-1

DTHETA & PSIF Lookup Table
Using XKSAT

XKSAT in/hr (1)	DTHETA Dry (2)	DTHETA Normal (3)	PSIF inches (4)
0.45	0.350	0.255	3.775
0.46	0.350	0.256	3.740
0.47	0.350	0.257	3.705
0.48	0.350	0.258	3.670
0.49	0.350	0.259	3.635
0.50	0.350	0.259	3.600
0.51	0.350	0.260	3.575
0.52	0.350	0.261	3.550
0.53	0.350	0.262	3.525
0.54	0.350	0.263	3.500
0.55	0.350	0.264	3.475
0.56	0.350	0.264	3.450
0.57	0.350	0.265	3.425
0.58	0.350	0.266	3.400
0.59	0.350	0.267	3.375
0.60	0.350	0.267	3.350
0.61	0.350	0.268	3.330
0.62	0.350	0.269	3.310
0.63	0.350	0.270	3.290
0.64	0.350	0.270	3.270
0.65	0.350	0.271	3.250
0.66	0.350	0.272	3.230
0.67	0.350	0.272	3.210
0.68	0.350	0.273	3.190
0.69	0.350	0.274	3.170
0.70	0.350	0.274	3.150
0.71	0.350	0.275	3.130
0.72	0.350	0.276	3.110
0.73	0.350	0.276	3.090
0.74	0.350	0.277	3.070
0.75	0.350	0.277	3.050
0.76	0.350	0.278	3.030
0.77	0.350	0.279	3.010
0.78	0.350	0.279	2.990
0.79	0.350	0.280	2.970
0.80	0.350	0.280	2.950
0.81	0.350	0.281	2.935
0.82	0.350	0.282	2.920
0.83	0.350	0.282	2.905
0.84	0.350	0.283	2.890
0.85	0.350	0.283	2.875
0.86	0.350	0.284	2.860
0.87	0.350	0.284	2.845
0.88	0.350	0.285	2.830

TABLE A-1

DTHETA & PSIF Lookup Table
Using XKSAT

XKSAT in/hr (1)	DTHETA Dry (2)	DTHETA Normal (3)	PSIF inches (4)
0.89	0.350	0.285	2.815
0.90	0.350	0.286	2.800
0.91	0.350	0.287	2.785
0.92	0.350	0.287	2.770
0.93	0.350	0.288	2.755
0.94	0.350	0.288	2.740
0.95	0.350	0.289	2.725
0.96	0.350	0.289	2.710
0.97	0.350	0.290	2.695
0.98	0.350	0.290	2.680
0.99	0.350	0.291	2.665
1.00	0.350	0.291	2.650
1.01	0.350	0.292	2.640
1.02	0.350	0.292	2.630
1.03	0.350	0.292	2.620
1.04	0.350	0.293	2.610
1.05	0.350	0.293	2.600
1.06	0.350	0.294	2.590
1.07	0.350	0.294	2.580
1.08	0.350	0.295	2.570
1.09	0.350	0.295	2.560
1.10	0.350	0.296	2.550
1.11	0.350	0.296	2.540
1.12	0.350	0.297	2.530
1.13	0.350	0.297	2.520
1.14	0.350	0.297	2.510
1.15	0.350	0.298	2.500
1.16	0.350	0.298	2.490
1.17	0.350	0.299	2.480
1.18	0.350	0.299	2.470
1.19	0.350	0.300	2.460
1.20	0.350	0.300	2.450

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S100

Soil Class	...	21	52	108
Sub-Area (acres)	...	38.9	81.5	246.8
XKSAT (bare ground)	...	0.38	0.16	0.31
RTIMP (rock)	...	0%	20%	30%
IA (natural only)	...	0.35	0.25	0.15

XKSAT log avg (bare ground) =	**0.27**	
PSIF =	**4.65**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**24.60**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.19**	

Total Sub Basin Area in sq. miles = 0.5737

S101

Soil Class	...	21	51	52	108
Sub-Area (acres)	...	70.4	30.4	286.5	16.6
XKSAT (bare ground)	...	0.38	0.24	0.16	0.31
RTIMP (rock)	...	0%	0%	20%	30%
IA (natural only)	...	0.35	0.15	0.25	0.15

XKSAT log avg (bare ground) =	**0.20**	
PSIF =	**5.30**	
DTHETA (Dry) =	**0.37**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**15.42**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.26**	

Total Sub Basin Area in sq. miles = 0.6312

S102

Soil Class	...	52	103	108	109
Sub-Area (acres)	...	3.0	0.3	283.4	1.1
XKSAT (bare ground)	...	0.16	0.10	0.31	0.35
RTIMP (rock)	...	20%	65%	30%	35%
IA (natural only)	...	0.25	0.25	0.15	0.25

XKSAT log avg (bare ground) =	**0.31**	
PSIF =	**4.45**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**29.95**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.15**	

Total Sub Basin Area in sq. miles = 0.4495

Table A-2

Worksheet

Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S103

Soil Class	...	21	51	52	103	108
Sub-Area (acres)	...	12.2	39.4	197.1	3.9	0.0
XKSAT (bare ground)	...	0.38	0.24	0.16	0.10	0.31
RTIMP (rock)	...	0%	0%	20%	65%	30%
IA (natural only)	...	0.35	0.15	0.25	0.25	0.15

XKSAT log avg (bare ground) =	**0.18**	
PSIF =	**5.60**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**16.61**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.24**	

Total Sub Basin Area in sq. miles = 0.3947

S104

Soil Class	...	13	51	52
Sub-Area (acres)	...	8.9	190.2	377.0
XKSAT (bare ground)	...	0.01	0.24	0.16
RTIMP (rock)	...	0%	0%	20%
IA (natural only)	...	0.35	0.15	0.25

XKSAT log avg (bare ground) =	**0.18**	
PSIF =	**5.60**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**13.09**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.22**	

Total Sub Basin Area in sq. miles = 0.9002

S105

Soil Class	...	51	52
Sub-Area (acres)	...	128.3	251.7
XKSAT (bare ground)	...	0.24	0.16
RTIMP (rock)	...	0%	20%
IA (natural only)	...	0.15	0.25

XKSAT log avg (bare ground) =	**0.18**	
PSIF =	**5.60**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**13.25**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.22**	

Total Sub Basin Area in sq. miles = 0.5938

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S106

Soil Class	...	51	52
Sub-Area (acres)	...	226.9	136.1
XKSAT (bare ground)	...	0.24	0.16
RTIMP (rock)	...	0%	20%
IA (natural only)	...	0.15	0.25

XKSAT log avg (bare ground) =	**0.21**	
PSIF =	**5.20**	
DTHETA (Dry) =	**0.37**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**7.50**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.19**	

Total Sub Basin Area in sq. miles = 0.5672

S107

Soil Class	...	51	52
Sub-Area (acres)	...	594.8	4.2
XKSAT (bare ground)	...	0.24	0.16
RTIMP (rock)	...	0%	20%
IA (natural only)	...	0.15	0.25

XKSAT log avg (bare ground) =	**0.24**	
PSIF =	**4.90**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**0.14**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.15**	

Total Sub Basin Area in sq. miles = 0.9359

S200

Soil Class	...	109
Sub-Area (acres)	...	613.7
XKSAT (bare ground)	...	0.35
RTIMP (rock)	...	35%
IA (natural only)	...	0.25

XKSAT log avg (bare ground) =	**0.35**	
PSIF =	**4.25**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**35.00**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 0.9588

Table A-2

Worksheet

Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S201

Soil Class ...	109	
Sub-Area (acres) ...	224.1	
XKSAT (bare ground) ...	0.35	
RTIMP (rock) ...	35%	
IA (natural only) ...	0.25	
XKSAT log avg (bare ground) =	**0.35**	
PSIF =	**4.25**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**35.00**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 0.3501

S202

Soil Class ...	109	
Sub-Area (acres) ...	81.2	
XKSAT (bare ground) ...	0.35	
RTIMP (rock) ...	35%	
IA (natural only) ...	0.25	
XKSAT log avg (bare ground) =	**0.35**	
PSIF =	**4.25**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**35.00**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 0.1268

S203

Soil Class ...	109	
Sub-Area (acres) ...	239.0	
XKSAT (bare ground) ...	0.35	
RTIMP (rock) ...	35%	
IA (natural only) ...	0.25	
XKSAT log avg (bare ground) =	**0.35**	
PSIF =	**4.25**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**35.00**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 0.3734

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S204

Soil Class ...	3	52	70	108	109	
Sub-Area (acres) ...	34.1	8.5	0.4	64.1	501.3	
XKSAT (bare ground) ...	0.58	0.16	0.36	0.31	0.35	
RTIMP (rock) ...	0%	20%	0%	30%	35%	
IA (natural only) ...	0.35	0.25	0.25	0.15	0.25	

XKSAT log avg (bare ground) = 0.35
PSIF = 4.25
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 32.28 %
Veg. Cover avg. = 32 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 0.9506

S205

Soil Class ...	3	52	70	108	109
Sub-Area (acres) ...	12.2	61.4	50.6	127.5	12.8
XKSAT (bare ground) ...	0.58	0.16	0.36	0.31	0.35
RTIMP (rock) ...	0%	20%	0%	30%	35%
IA (natural only) ...	0.35	0.25	0.25	0.15	0.25

XKSAT log avg (bare ground) = 0.28
PSIF = 4.60
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 20.80 %
Veg. Cover avg. = 32 %
IA avg. = 0.21

Total Sub Basin Area in sq. miles = 0.4132

S206

Soil Class ...	3	13	52	108	109	110
Sub-Area (acres) ...	17.3	6.8	95.1	88.0	290.3	48.3
XKSAT (bare ground) ...	0.58	0.01	0.16	0.31	0.35	0.13
RTIMP (rock) ...	0%	0%	20%	30%	35%	0%
IA (natural only) ...	0.35	0.35	0.25	0.15	0.25	0.35

XKSAT log avg (bare ground) = 0.27
PSIF = 4.65
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 26.93 %
Veg. Cover avg. = 32 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 0.8529

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S207

Soil Class ...	13	48	108	109	110
Sub-Area (acres) ...	4.7	1.7	14.1	584.5	7.4
XKSAT (bare ground) ...	0.01	0.06	0.31	0.35	0.13
RTIMP (rock) ...	0%	0%	30%	35%	0%
IA (natural only) ...	0.35	0.15	0.15	0.25	0.35

XKSAT log avg (bare ground) = 0.33
PSIF = 4.35
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 34.09 %
Veg. Cover avg. = 32 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 0.9569

S208

Soil Class ...	51	52	108	109	110
Sub-Area (acres) ...	2.0	482.7	129.3	90.5	1.2
XKSAT (bare ground) ...	0.24	0.16	0.31	0.35	0.13
RTIMP (rock) ...	0%	20%	30%	35%	0%
IA (natural only) ...	0.15	0.25	0.15	0.25	0.35

XKSAT log avg (bare ground) = 0.20
PSIF = 5.30
DTHETA (Dry) = 0.37
DTHETA (Normal) = 0.25
RTIMP avg. = 23.67 %
Veg. Cover avg. = 32 %
IA avg. = 0.23

Total Sub Basin Area in sq. miles = 1.1025

S209

Soil Class ...	18	51	52	108	109	110
Sub-Area (acres) ...	111.9	105.8	158.9	15.1	24.6	0.0
XKSAT (bare ground) ...	0.33	0.24	0.16	0.31	0.35	0.13
RTIMP (rock) ...	15%	0%	20%	30%	35%	0%
IA (natural only) ...	0.25	0.15	0.25	0.15	0.25	0.35

XKSAT log avg (bare ground) = 0.23
PSIF = 5.00
DTHETA (Dry) = 0.36
DTHETA (Normal) = 0.25
RTIMP avg. = 14.82 %
Veg. Cover avg. = 32 %
IA avg. = 0.22

Total Sub Basin Area in sq. miles = 0.6504

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S210

Soil Class	...	51	52
Sub-Area (acres)	...	277.6	30.1
XKSAT (bare ground)	...	0.24	0.16
RTIMP (rock)	...	0%	20%
IA (natural only)	...	0.15	0.25

XKSAT log avg (bare ground) =	**0.23**	
PSIF =	**5.00**	
DTHETA (Dry) =	**0.36**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**1.96**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.16**	

Total Sub Basin Area in sq. miles = 0.4809

S211

Soil Class	...	51	52	110
Sub-Area (acres)	...	225.0	58.4	28.7
XKSAT (bare ground)	...	0.24	0.16	0.13
RTIMP (rock)	...	0%	20%	0%
IA (natural only)	...	0.15	0.25	0.35

XKSAT log avg (bare ground) =	**0.21**	
PSIF =	**5.20**	
DTHETA (Dry) =	**0.37**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**3.74**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.19**	

Total Sub Basin Area in sq. miles = 0.4876

S300

Soil Class	...	21	48	52	98	108	109	110
Sub-Area (acres)	...	45.4	27.3	17.5	13.6	30.8	245.4	13.7
XKSAT (bare ground)	...	0.38	0.06	0.16	0.37	0.31	0.35	0.13
RTIMP (rock)	...	0%	0%	20%	0%	30%	35%	0%
IA (natural only)	...	0.35	0.15	0.25	0.35	0.15	0.25	0.35

XKSAT log avg (bare ground) =	**0.29**	
PSIF =	**4.55**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**25.05**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 0.6151

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S301

Soil Class	...	109
Sub-Area (acres)	...	636.5
XKSAT (bare ground)	...	0.35
RTIMP (rock)	...	35%
IA (natural only)	...	0.25

XKSAT log avg (bare ground) =	**0.35**	
PSIF =	**4.25**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**35.00**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 0.9945

S302

Soil Class	...	18	51	52	98	108	109	110
Sub-Area (acres)	...	73.7	17.6	57.3	2.8	20.8	123.9	1.1
XKSAT (bare ground)	...	0.33	0.24	0.16	0.37	0.31	0.35	0.13
RTIMP (rock)	...	15%	0%	20%	0%	30%	35%	0%
IA (natural only)	...	0.25	0.15	0.25	0.35	0.15	0.25	0.35

XKSAT log avg (bare ground) =	**0.29**	
PSIF =	**4.55**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**24.26**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.24**	

Total Sub Basin Area in sq. miles = 0.4645

S303

Soil Class	...	18	51	52	110
Sub-Area (acres)	...	266.0	153.6	15.8	17.6
XKSAT (bare ground)	...	0.33	0.24	0.16	0.13
RTIMP (rock)	...	15%	0%	20%	0%
IA (natural only)	...	0.25	0.15	0.25	0.35

XKSAT log avg (bare ground) =	**0.28**	
PSIF =	**4.60**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**9.51**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.22**	

Total Sub Basin Area in sq. miles = 0.7078

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S304

Soil Class	...	12	18	45	48	51	52	98	110
Sub-Area (acres)	...	0.2	38.6	6.7	2.3	396.1	55.3	1.1	26.2
XKSAT (bare ground)	...	0.01	0.33	0.03	0.06	0.24	0.16	0.37	0.13
RTIMP (rock)	...	0%	15%	0%	0%	0%	20%	0%	0%
IA (natural only)	...	0.35	0.25	0.15	0.15	0.15	0.25	0.35	0.35

XKSAT log avg (bare ground) =	**0.22**	
PSIF =	**5.10**	
DTHETA (Dry) =	**0.36**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**3.20**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.18**	

Total Sub Basin Area in sq. miles = 0.8225

S400

Soil Class	...	13	18	51	52	98	109	110
Sub-Area (acres)	...	42.2	238.7	44.0	253.7	0.9	45.8	45.3
XKSAT (bare ground)	...	0.01	0.33	0.24	0.16	0.37	0.35	0.13
RTIMP (rock)	...	0%	15%	0%	20%	0%	35%	0%
IA (natural only)	...	0.35	0.25	0.15	0.25	0.35	0.25	0.35

XKSAT log avg (bare ground) =	**0.19**	
PSIF =	**5.40**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**15.30**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.26**	

Total Sub Basin Area in sq. miles = 1.0480

S401

Soil Class	...	13	18	70	98	110
Sub-Area (acres)	...	5.6	179.5	19.6	37.3	171.6
XKSAT (bare ground)	...	0.01	0.33	0.36	0.37	0.13
RTIMP (rock)	...	0%	15%	0%	0%	0%
IA (natural only)	...	0.35	0.25	0.25	0.35	0.35

XKSAT log avg (bare ground) =	**0.22**	
PSIF =	**5.10**	
DTHETA (Dry) =	**0.36**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**6.51**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 0.6462

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S402

Soil Class ...	13	18	45	48	98	110
Sub-Area (acres) ...	35.7	105.4	10.5	21.8	175.7	124.4
XKSAT (bare ground) ...	0.01	0.33	0.03	0.06	0.37	0.13
RTIMP (rock) ...	0%	15%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.25	0.15	0.15	0.35	0.35

XKSAT log avg (bare ground) =	**0.18**	
PSIF =	**5.60**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**3.34**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.31**	

Total Sub Basin Area in sq. miles = 0.7399

S403

Soil Class ...	10	12	13	18	45	48	98	110
Sub-Area (acres) ...	9.6	5.0	55.4	3.7	80.2	12.3	42.5	149.0
XKSAT (bare ground) ...	0.94	0.01	0.01	0.33	0.03	0.06	0.37	0.13
RTIMP (rock) ...	0%	0%	0%	15%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.35	0.25	0.15	0.15	0.35	0.35

XKSAT log avg (bare ground) =	**0.07**	
PSIF =	**8.00**	
DTHETA (Dry) =	**0.30**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.16**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 0.5591

S404

Soil Class ...	10	45	98	110	112	118	CF	TSC
Sub-Area (acres) ...	8.7	65.3	0.5	4.3	12.9	34.8	1.2	40.8
XKSAT (bare ground) ...	0.94	0.03	0.37	0.13	0.39	0.42	0.50	0.14
RTIMP (rock) ...	0%	0%	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.15	0.35	0.35	0.35	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.12**	
PSIF =	**6.60**	
DTHETA (Dry) =	**0.37**	
DTHETA (Normal) =	**0.19**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.27**	

Total Sub Basin Area in sq. miles = 0.2633

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S500

Soil Class	...	51	109
Sub-Area (acres)	...	0.2	674.6
XKSAT (bare ground)	...	0.24	0.35
RTIMP (rock)	...	0%	35%
IA (natural only)	...	0.15	0.25

XKSAT log avg (bare ground) =	**0.35**	
PSIF =	**4.25**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**34.99**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 1.0544

S501

Soil Class	...	18	51	52	109
Sub-Area (acres)	...	23.9	126.0	0.1	243.1
XKSAT (bare ground)	...	0.33	0.24	0.16	0.35
RTIMP (rock)	...	15%	0%	20%	35%
IA (natural only)	...	0.25	0.15	0.25	0.25

XKSAT log avg (bare ground) =	**0.31**	
PSIF =	**4.45**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**22.56**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.22**	

Total Sub Basin Area in sq. miles = 0.6142

S502

Soil Class	...	10	18	109	110
Sub-Area (acres)	...	13.3	175.1	29.9	39.4
XKSAT (bare ground)	...	0.94	0.33	0.35	0.13
RTIMP (rock)	...	0%	15%	35%	0%
IA (natural only)	...	0.35	0.25	0.25	0.35

XKSAT log avg (bare ground) =	**0.30**	
PSIF =	**4.50**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**14.25**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.27**	

Total Sub Basin Area in sq. miles = 0.4026

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S503

Soil Class ...	10	51	52	108	109	110
Sub-Area (acres) ...	3.2	81.0	22.5	1.8	406.8	120.8
XKSAT (bare ground) ...	0.94	0.24	0.16	0.31	0.35	0.13
RTIMP (rock) ...	0%	0%	20%	30%	35%	0%
IA (natural only) ...	0.35	0.15	0.25	0.15	0.25	0.35

XKSAT log avg (bare ground) = 0.27
PSIF = 4.65
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 23.17 %
Veg. Cover avg. = 26 %
IA avg. = 0.26

Total Sub Basin Area in sq. miles = 0.9940

S504

Soil Class ...	10	18	68	98	110	113
Sub-Area (acres) ...	45.2	0.9	27.4	46.0	83.0	6.1
XKSAT (bare ground) ...	0.94	0.33	0.63	0.37	0.13	0.39
RTIMP (rock) ...	0%	15%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.25	0.35	0.35	0.35	0.35

XKSAT log avg (bare ground) = 0.32
PSIF = 4.40
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 0.07 %
Veg. Cover avg. = 26 %
IA avg. = 0.35

Total Sub Basin Area in sq. miles = 0.3259

S505

Soil Class ...	18	110
Sub-Area (acres) ...	87.8	3.7
XKSAT (bare ground) ...	0.33	0.13
RTIMP (rock) ...	15%	0%
IA (natural only) ...	0.25	0.35

XKSAT log avg (bare ground) = 0.32
PSIF = 4.40
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 14.39 %
Veg. Cover avg. = 26 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 0.1430

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S506

Soil Class	...	13	18	110
Sub-Area (acres)	...	11.2	60.3	24.9
XKSAT (bare ground)	...	0.01	0.33	0.13
RTIMP (rock)	...	0%	15%	0%
IA (natural only)	...	0.35	0.25	0.35

XKSAT log avg (bare ground) =	**0.17**	
PSIF =	**5.70**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**9.38**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.29**	

Total Sub Basin Area in sq. miles = 0.1507

S507

Soil Class	...	10	18	68	98	110
Sub-Area (acres)	...	3.9	35.7	42.7	11.8	332.1
XKSAT (bare ground)	...	0.94	0.33	0.63	0.37	0.13
RTIMP (rock)	...	0%	15%	0%	0%	0%
IA (natural only)	...	0.35	0.25	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.17**	
PSIF =	**5.70**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**1.26**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.34**	

Total Sub Basin Area in sq. miles = 0.6659

S508

Soil Class	...	10	48	98	110	PWB
Sub-Area (acres)	...	27.7	14.3	21.9	112.1	12.7
XKSAT (bare ground)	...	0.94	0.06	0.37	0.13	0.38
RTIMP (rock)	...	0%	0%	0%	0%	0%
IA (natural only)	...	0.35	0.15	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.20**	
PSIF =	**5.30**	
DTHETA (Dry) =	**0.37**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.33**	

Total Sub Basin Area in sq. miles = 0.2949

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S509

Soil Class ...	52	100	109	110	
Sub-Area (acres) ...	4.5	14.6	60.7	28.7	
XKSAT (bare ground) ...	0.16	0.40	0.35	0.13	
RTIMP (rock) ...	20%	20%	35%	0%	
IA (natural only) ...	0.25	0.25	0.25	0.35	

XKSAT log avg (bare ground) =	**0.27**	
PSIF =	**4.65**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**23.10**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.28**	

Total Sub Basin Area in sq. miles = 0.1695

S510

Soil Class ...	13	52	109	110	113	
Sub-Area (acres) ...	15.8	17.0	4.1	40.6	3.6	
XKSAT (bare ground) ...	0.01	0.16	0.35	0.13	0.39	
RTIMP (rock) ...	0%	20%	35%	0%	0%	
IA (natural only) ...	0.35	0.25	0.25	0.35	0.35	

XKSAT log avg (bare ground) =	**0.09**	
PSIF =	**7.30**	
DTHETA (Dry) =	**0.33**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**5.95**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.32**	

Total Sub Basin Area in sq. miles = 0.1267

S511

Soil Class ...	13	52	109	110
Sub-Area (acres) ...	27.9	3.8	132.0	82.7
XKSAT (bare ground) ...	0.01	0.16	0.35	0.13
RTIMP (rock) ...	0%	20%	35%	0%
IA (natural only) ...	0.35	0.25	0.25	0.35

XKSAT log avg (bare ground) =	**0.17**	
PSIF =	**5.70**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**19.06**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.29**	

Total Sub Basin Area in sq. miles = 0.3849

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S512

Soil Class ...	13	109	110	113	
Sub-Area (acres) ...	56.6	1.4	31.1	47.6	
XKSAT (bare ground) ...	0.01	0.35	0.13	0.39	
RTIMP (rock) ...	0%	35%	0%	0%	
IA (natural only) ...	0.35	0.25	0.35	0.35	

XKSAT log avg (bare ground) =	**0.07**	
PSIF =	**8.00**	
DTHETA (Dry) =	**0.30**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.36**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.35**	

Total Sub Basin Area in sq. miles = 0.2136

S513

Soil Class ...	10	18	48	68	98	110	113	PWB
Sub-Area (acres) ...	24.9	48.9	39.7	34.6	34.9	289.2	15.3	10.3
XKSAT (bare ground) ...	0.94	0.33	0.06	0.63	0.37	0.13	0.39	0.38
RTIMP (rock) ...	0%	15%	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.25	0.15	0.35	0.35	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.19**	
PSIF =	**5.40**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**1.47**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.32**	

Total Sub Basin Area in sq. miles = 0.7778

S514

Soil Class ...	13	48	49	98	110	PWB
Sub-Area (acres) ...	49.9	151.6	2.1	14.3	185.9	11.8
XKSAT (bare ground) ...	0.01	0.06	0.06	0.37	0.13	0.38
RTIMP (rock) ...	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.15	0.25	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.08**	
PSIF =	**7.60**	
DTHETA (Dry) =	**0.32**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.28**	

Total Sub Basin Area in sq. miles = 0.6495

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S515

Soil Class ...	10	13	48	49	68	110	112	PWB	TSC
Sub-Area (acres) ...	0.6	265.7	78.1	55.1	47.4	173.3	21.8	62.5	0.4
XKSAT (bare ground) ...	0.94	0.01	0.06	0.06	0.63	0.13	0.39	0.38	0.14
RTIMP (rock) ...	0%	0%	0%	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.15	0.25	0.35	0.35	0.35	0.35	0.35

XKSAT log avg (bare ground) = 0.05
PSIF = 8.80
DTHETA (Dry) = 0.27
DTHETA (Normal) = 0.15
RTIMP avg. = 0.00 %
Veg. Cover avg. = 26 %
IA avg. = 0.32

Total Sub Basin Area in sq. miles = 1.1015

S516

Soil Class ...	10	110	CF	LcA	MTB	PRB	PWB	PYD	TB	TSC
Sub-Area (acres) ...	3.0	2.1	18.7	2.0	3.8	0.0	73.6	48.9	80.6	112.9
XKSAT (bare ground) ...	0.94	0.13	0.50	0.25	0.15	0.28	0.38	0.20	0.40	0.14
RTIMP (rock) ...	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35

XKSAT log avg (bare ground) = 0.25
PSIF = 4.80
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 0.00 %
Veg. Cover avg. = 26 %
IA avg. = 0.35

Total Sub Basin Area in sq. miles = 0.5400

S600

Soil Class ...	16	31	CmD	Le	Lh
Sub-Area (acres) ...	141.4	263.6	806.1	2.4	78.1
XKSAT (bare ground) ...	0.44	0.33	0.44	0.09	0.14
RTIMP (rock) ...	15%	35%	15%	30%	60%
IA (natural only) ...	0.25	0.25	0.25	0.25	0.25

XKSAT log avg (bare ground) = 0.39
PSIF = 4.00
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 21.83 %
Veg. Cover avg. = 32 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 2.0181

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S601

Soil Class	...	16	31	72	CmD	Le	Lh	Rr
Sub-Area (acres)	...	35.3	58.0	58.4	67.2	50.6	305.2	1.6
XKSAT (bare ground)	...	0.44	0.33	0.09	0.44	0.09	0.14	0.01
RTIMP (rock)	...	15%	35%	30%	15%	30%	60%	50%
IA (natural only)	...	0.25	0.25	0.25	0.25	0.25	0.25	0.25

XKSAT log avg (bare ground) =	**0.17**	
PSIF =	**5.70**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**43.77**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 0.9008

S602

Soil Class	...	8	16	31
Sub-Area (acres)	...	0.8	0.2	1204.3
XKSAT (bare ground)	...	0.96	0.44	0.33
RTIMP (rock)	...	0%	15%	35%
IA (natural only)	...	0.35	0.25	0.25

XKSAT log avg (bare ground) =	**0.33**	
PSIF =	**4.35**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**34.97**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 1.8833

S603

Soil Class	...	8	31	72	104	Lh	Rr
Sub-Area (acres)	...	4.8	197.5	85.4	74.5	27.4	36.0
XKSAT (bare ground)	...	0.96	0.33	0.09	0.14	0.14	0.01
RTIMP (rock)	...	0%	35%	30%	60%	60%	50%
IA (natural only)	...	0.35	0.25	0.25	0.25	0.25	0.25

XKSAT log avg (bare ground) =	**0.16**	
PSIF =	**5.80**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**40.85**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 0.6650

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S604

Soil Class	...	8	31
Sub-Area (acres)	...	6.7	1693.2
XKSAT (bare ground)	...	0.96	0.33
RTIMP (rock)	...	0%	35%
IA (natural only)	...	0.35	0.25

XKSAT log avg (bare ground) =	**0.33**	
PSIF =	**4.35**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**34.86**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 2.6560

S605

Soil Class	...	8	31
Sub-Area (acres)	...	2.9	691.7
XKSAT (bare ground)	...	0.96	0.33
RTIMP (rock)	...	0%	35%
IA (natural only)	...	0.35	0.25

XKSAT log avg (bare ground) =	**0.33**	
PSIF =	**4.35**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**34.86**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 1.0853

S606

Soil Class	...	8	31	41	104
Sub-Area (acres)	...	58.9	239.0	18.7	105.7
XKSAT (bare ground)	...	0.96	0.33	0.17	0.14
RTIMP (rock)	...	0%	35%	0%	60%
IA (natural only)	...	0.35	0.25	0.25	0.25

XKSAT log avg (bare ground) =	**0.30**	
PSIF =	**4.50**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**34.82**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.26**	

Total Sub Basin Area in sq. miles = 0.6600

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S607

Soil Class ...	8	31	33	41	72	104
Sub-Area (acres) ...	12.2	310.5	4.1	11.3	137.4	50.3
XKSAT (bare ground) ...	0.96	0.33	0.23	0.17	0.09	0.14
RTIMP (rock) ...	0%	35%	0%	0%	30%	60%
IA (natural only) ...	0.35	0.25	0.35	0.25	0.25	0.25

XKSAT log avg (bare ground) = 0.22
PSIF = 5.10
DTHETA (Dry) = 0.36
DTHETA (Normal) = 0.25
RTIMP avg. = 34.24 %
Veg. Cover avg. = 32 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 0.8216

S608

Soil Class ...	8	31	72	95	104
Sub-Area (acres) ...	13.3	96.3	146.0	0.2	69.4
XKSAT (bare ground) ...	0.96	0.33	0.09	0.04	0.14
RTIMP (rock) ...	0%	35%	30%	0%	60%
IA (natural only) ...	0.35	0.25	0.25	0.35	0.25

XKSAT log avg (bare ground) = 0.16
PSIF = 5.80
DTHETA (Dry) = 0.39
DTHETA (Normal) = 0.25
RTIMP avg. = 36.64 %
Veg. Cover avg. = 32 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 0.5082

S609

Soil Class ...	8	31	33	41	72
Sub-Area (acres) ...	58.3	270.0	25.5	1.0	3.9
XKSAT (bare ground) ...	0.96	0.33	0.23	0.17	0.09
RTIMP (rock) ...	0%	35%	0%	0%	30%
IA (natural only) ...	0.35	0.25	0.35	0.25	0.25

XKSAT log avg (bare ground) = 0.38
PSIF = 4.10
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 26.68 %
Veg. Cover avg. = 32 %
IA avg. = 0.27

Total Sub Basin Area in sq. miles = 0.5603

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S610

Soil Class	...	8	31	72	95	104
Sub-Area (acres)	...	46.2	133.6	68.4	0.0	138.0
XKSAT (bare ground)	...	0.96	0.33	0.09	0.04	0.14
RTIMP (rock)	...	0%	35%	30%	0%	60%
IA (natural only)	...	0.35	0.25	0.25	0.35	0.25

XKSAT log avg (bare ground)	**=**	**0.22**	
PSIF	**=**	**5.10**	
DTHETA (Dry)	**=**	**0.36**	
DTHETA (Normal)	**=**	**0.25**	
RTIMP avg.	**=**	**38.86**	**%**
Veg. Cover avg.	**=**	**32**	**%**
IA avg.	**=**	**0.26**	

Total Sub Basin Area in sq. miles = 0.6034

S611

Soil Class	...	31
Sub-Area (acres)	...	364.4
XKSAT (bare ground)	...	0.33
RTIMP (rock)	...	35%
IA (natural only)	...	0.25

XKSAT log avg (bare ground)	**=**	**0.33**	
PSIF	**=**	**4.35**	
DTHETA (Dry)	**=**	**0.35**	
DTHETA (Normal)	**=**	**0.25**	
RTIMP avg.	**=**	**35.00**	**%**
Veg. Cover avg.	**=**	**32**	**%**
IA avg.	**=**	**0.25**	

Total Sub Basin Area in sq. miles = 0.5693

S612

Soil Class	...	8	31	72
Sub-Area (acres)	...	0.4	138.0	379.0
XKSAT (bare ground)	...	0.96	0.33	0.09
RTIMP (rock)	...	0%	35%	30%
IA (natural only)	...	0.35	0.25	0.25

XKSAT log avg (bare ground)	**=**	**0.13**	
PSIF	**=**	**6.40**	
DTHETA (Dry)	**=**	**0.38**	
DTHETA (Normal)	**=**	**0.21**	
RTIMP avg.	**=**	**31.31**	**%**
Veg. Cover avg.	**=**	**32**	**%**
IA avg.	**=**	**0.25**	

Total Sub Basin Area in sq. miles = 0.8085

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S613

Soil Class ...	8	10	31	72	104	109	
Sub-Area (acres) ...	11.3	0.1	430.9	162.4	0.9	544.2	
XKSAT (bare ground) ...	0.96	0.94	0.33	0.09	0.14	0.35	
RTIMP (rock) ...	0%	0%	35%	30%	60%	35%	
IA (natural only) ...	0.35	0.35	0.25	0.25	0.25	0.25	

XKSAT log avg (bare ground) =	**0.29**	
PSIF =	**4.55**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**33.97**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 1.7965

S614

Soil Class ...	8	10	31	51	52	72	104	108	109
Sub-Area (acres) ...	5.4	43.5	5.7	3.8	7.2	14.1	80.7	119.9	410.5
XKSAT (bare ground) ...	0.96	0.94	0.33	0.24	0.16	0.09	0.14	0.31	0.35
RTIMP (rock) ...	0%	0%	35%	0%	20%	30%	60%	30%	35%
IA (natural only) ...	0.35	0.35	0.25	0.15	0.25	0.25	0.25	0.15	0.25

XKSAT log avg (bare ground) =	**0.32**	
PSIF =	**4.40**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**34.12**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.24**	

Total Sub Basin Area in sq. miles = 1.0792

S615

Soil Class ...	31	72	104
Sub-Area (acres) ...	25.7	90.6	558.7
XKSAT (bare ground) ...	0.33	0.09	0.14
RTIMP (rock) ...	35%	30%	60%
IA (natural only) ...	0.25	0.25	0.25

XKSAT log avg (bare ground) =	**0.14**	
PSIF =	**6.20**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.23**	
RTIMP avg. =	**55.02**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.25**	

Total Sub Basin Area in sq. miles = 1.0548

Table A-2

Worksheet

Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S616

Soil Class ...	10	21	48	51	52	104	
Sub-Area (acres) ...	11.8	33.2	10.4	138.7	37.3	92.0	
XKSAT (bare ground) ...	0.94	0.38	0.06	0.24	0.16	0.14	
RTIMP (rock) ...	0%	0%	0%	0%	20%	60%	
IA (natural only) ...	0.35	0.35	0.15	0.15	0.25	0.25	

XKSAT log avg (bare ground) = 0.21
PSIF = 5.20
DTHETA (Dry) = 0.37
DTHETA (Normal) = 0.25
RTIMP avg. = 19.37 %
Veg. Cover avg. = 32 %
IA avg. = 0.22

Total Sub Basin Area in sq. miles = 0.5054

S617

Soil Class ...	10	48	51	52	68	70	103	108	109
Sub-Area (acres) ...	42.2	1.5	32.4	146.3	16.9	15.3	38.9	93.0	45.7
XKSAT (bare ground) ...	0.94	0.06	0.24	0.16	0.63	0.36	0.10	0.31	0.35
RTIMP (rock) ...	0%	0%	0%	20%	0%	0%	65%	30%	35%
IA (natural only) ...	0.35	0.15	0.15	0.25	0.35	0.25	0.25	0.15	0.25

XKSAT log avg (bare ground) = 0.25
PSIF = 4.80
DTHETA (Dry) = 0.35
DTHETA (Normal) = 0.25
RTIMP avg. = 22.78 %
Veg. Cover avg. = 32 %
IA avg. = 0.23

Total Sub Basin Area in sq. miles = 0.6754

S618

Soil Class ...	10	21	51	52	72	93	104
Sub-Area (acres) ...	29.8	0.0	309.9	59.7	0.6	11.2	202.0
XKSAT (bare ground) ...	0.94	0.38	0.24	0.16	0.09	0.33	0.14
RTIMP (rock) ...	0%	0%	0%	20%	30%	0%	60%
IA (natural only) ...	0.35	0.35	0.15	0.25	0.25	0.15	0.25

XKSAT log avg (bare ground) = 0.21
PSIF = 5.20
DTHETA (Dry) = 0.37
DTHETA (Normal) = 0.25
RTIMP avg. = 21.74 %
Veg. Cover avg. = 32 %
IA avg. = 0.20

Total Sub Basin Area in sq. miles = 0.9581

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S619

Soil Class ...	66	72	93	95	104
Sub-Area (acres) ...	27.0	125.4	20.5	79.1	277.0
XKSAT (bare ground) ...	0.23	0.09	0.33	0.04	0.14
RTIMP (rock) ...	0%	30%	0%	0%	60%
IA (natural only) ...	0.35	0.25	0.15	0.35	0.25

XKSAT log avg (bare ground) =	**0.11**	
PSIF =	**6.80**	
DTHETA (Dry) =	**0.36**	
DTHETA (Normal) =	**0.17**	
RTIMP avg. =	**38.53**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.27**	

Total Sub Basin Area in sq. miles = 0.8266

S620

Soil Class ...	10	51	52	72	93	95	103	104
Sub-Area (acres) ...	0.4	47.9	2.1	106.3	3.0	5.4	16.0	103.1
XKSAT (bare ground) ...	0.94	0.24	0.16	0.09	0.33	0.04	0.10	0.14
RTIMP (rock) ...	0%	0%	20%	30%	0%	0%	65%	60%
IA (natural only) ...	0.35	0.15	0.25	0.25	0.15	0.35	0.25	0.25

XKSAT log avg (bare ground) =	**0.13**	
PSIF =	**6.40**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.21**	
RTIMP avg. =	**36.79**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.23**	

Total Sub Basin Area in sq. miles = 0.4441

S621

Soil Class ...	10	51	52	103
Sub-Area (acres) ...	30.6	492.5	64.2	3.5
XKSAT (bare ground) ...	0.94	0.24	0.16	0.10
RTIMP (rock) ...	0%	0%	20%	65%
IA (natural only) ...	0.35	0.15	0.25	0.25

XKSAT log avg (bare ground) =	**0.25**	
PSIF =	**4.80**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**2.55**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.17**	

Total Sub Basin Area in sq. miles = 0.9231

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S622

Soil Class	...	10	45	51	52
Sub-Area (acres)	...	38.7	1.7	416.4	117.3
XKSAT (bare ground)	...	0.94	0.03	0.24	0.16
RTIMP (rock)	...	0%	0%	0%	20%
IA (natural only)	...	0.35	0.15	0.15	0.25

XKSAT log avg (bare ground) =	**0.24**	
PSIF =	**4.90**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**4.09**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.18**	

Total Sub Basin Area in sq. miles = 0.8971

S700

Soil Class	...	51	52
Sub-Area (acres)	...	295.2	95.1
XKSAT (bare ground)	...	0.24	0.16
RTIMP (rock)	...	0%	20%
IA (natural only)	...	0.15	0.25

XKSAT log avg (bare ground) =	**0.22**	
PSIF =	**5.10**	
DTHETA (Dry) =	**0.36**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**4.87**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.17**	

Total Sub Basin Area in sq. miles = 0.6099

S701

Soil Class	...	51	52
Sub-Area (acres)	...	128.2	332.7
XKSAT (bare ground)	...	0.24	0.16
RTIMP (rock)	...	0%	20%
IA (natural only)	...	0.15	0.25

XKSAT log avg (bare ground) =	**0.18**	
PSIF =	**5.60**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**14.44**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.22**	

Total Sub Basin Area in sq. miles = 0.7202

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S702

Soil Class	...	51	52
Sub-Area (acres)	...	135.2	29.3
XKSAT (bare ground)	...	0.24	0.16
RTIMP (rock)	...	0%	20%
IA (natural only)	...	0.15	0.25

XKSAT log avg (bare ground) =	**0.22**	
PSIF =	**5.10**	
DTHETA (Dry) =	**0.36**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**3.57**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.17**	

Total Sub Basin Area in sq. miles = 0.2570

S703

Soil Class	...	10	51
Sub-Area (acres)	...	0.0	164.6
XKSAT (bare ground)	...	0.94	0.24
RTIMP (rock)	...	0%	0%
IA (natural only)	...	0.35	0.15

XKSAT log avg (bare ground) =	**0.24**	
PSIF =	**4.90**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.15**	

Total Sub Basin Area in sq. miles = 0.2573

S704

Soil Class	...	18	48	49	51	110
Sub-Area (acres)	...	191.4	24.7	2.6	0.1	42.5
XKSAT (bare ground)	...	0.33	0.06	0.06	0.24	0.13
RTIMP (rock)	...	15%	0%	0%	0%	0%
IA (natural only)	...	0.25	0.15	0.25	0.15	0.35

XKSAT log avg (bare ground) =	**0.24**	
PSIF =	**4.90**	
DTHETA (Dry) =	**0.35**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**10.99**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.26**	

Total Sub Basin Area in sq. miles = 0.4081

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S705

Soil Class ...	18	45	48	49	110
Sub-Area (acres) ...	216.6	0.5	176.0	61.4	28.2
XKSAT (bare ground) ...	0.33	0.03	0.06	0.06	0.13
RTIMP (rock) ...	15%	0%	0%	0%	0%
IA (natural only) ...	0.25	0.15	0.15	0.25	0.35

XKSAT log avg (bare ground) =	**0.13**	
PSIF =	**6.40**	
DTHETA (Dry) =	**0.38**	
DTHETA (Normal) =	**0.21**	
RTIMP avg. =	**6.73**	%
Veg. Cover avg. =	**32**	%
IA avg. =	**0.22**	

Total Sub Basin Area in sq. miles = 0.7542

S705AF

Soil Class ...	48	12	98	49	3	112	45	77
Sub-Area (acres) ...	0.1	51.7	14.0	0.0	7.6	2.5	22.3	18.8
XKSAT (bare ground) ...	0.06	0.01	0.37	0.06	0.58	0.39	0.03	0.05
RTIMP (rock) ...	0%	0%	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.15	0.35	0.35	0.25	0.35	0.35	0.15	0.35

XKSAT log avg (bare ground) =	**0.03**	
PSIF =	**10.10**	
DTHETA (Dry) =	**0.22**	
DTHETA (Normal) =	**0.13**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.31**	

Total Sub Basin Area in sq. miles = 0.1828

S706

Soil Class ...	13	18	45	110	118
Sub-Area (acres) ...	34.4	210.9	20.3	158.0	32.6
XKSAT (bare ground) ...	0.01	0.33	0.03	0.13	0.42
RTIMP (rock) ...	0%	15%	0%	0%	0%
IA (natural only) ...	0.35	0.25	0.15	0.35	0.35

XKSAT log avg (bare ground) =	**0.17**	
PSIF =	**5.70**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**6.93**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.29**	

Total Sub Basin Area in sq. miles = 0.7129

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S707

Soil Class	...	12	13	18	45	110
Sub-Area (acres)	...	24.0	15.0	220.5	41.7	107.4
XKSAT (bare ground)	...	0.01	0.01	0.33	0.03	0.13
RTIMP (rock)	...	0%	0%	15%	0%	0%
IA (natural only)	...	0.35	0.35	0.25	0.15	0.35

XKSAT log avg (bare ground) =	**0.14**	
PSIF =	**6.20**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.23**	
RTIMP avg. =	**8.09**	%
Veg. Cover avg. =	**26**	%
IA avg. =	**0.28**	

Total Sub Basin Area in sq. miles = 0.6383

S708

Soil Class	...	13	45	47	110	W
Sub-Area (acres)	...	71.7	246.4	41.9	91.8	0.3
XKSAT (bare ground)	...	0.01	0.03	0.11	0.13	0.00
RTIMP (rock)	...	0%	0%	0%	0%	100%
IA (natural only)	...	0.35	0.15	0.15	0.35	0.35

XKSAT log avg (bare ground) =	**0.04**	
PSIF =	**9.70**	
DTHETA (Dry) =	**0.25**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.06**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.22**	

Total Sub Basin Area in sq. miles = 0.7065

S709

Soil Class	...	13	45	110
Sub-Area (acres)	...	178.2	71.1	32.7
XKSAT (bare ground)	...	0.01	0.03	0.13
RTIMP (rock)	...	0%	0%	0%
IA (natural only)	...	0.35	0.15	0.35

XKSAT log avg (bare ground) =	**0.02**	
PSIF =	**11.20**	
DTHETA (Dry) =	**0.19**	
DTHETA (Normal) =	**0.10**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 0.4406

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S710

Soil Class	...	45
Sub-Area (acres)	...	71.5
XKSAT (bare ground)	...	0.03
RTIMP (rock)	...	0%
IA (natural only)	...	0.15

XKSAT log avg (bare ground)	**=**	**0.03**	
PSIF	**=**	**10.10**	
DTHETA (Dry)	**=**	**0.22**	
DTHETA (Normal)	**=**	**0.13**	
RTIMP avg.	**=**	**0.00**	**%**
Veg. Cover avg.	**=**	**15**	**%**
IA avg.	**=**	**0.15**	

Total Sub Basin Area in sq. miles = 0.1117

S711

Soil Class	...	13	45	110
Sub-Area (acres)	...	46.5	36.8	18.5
XKSAT (bare ground)	...	0.01	0.03	0.13
RTIMP (rock)	...	0%	0%	0%
IA (natural only)	...	0.35	0.15	0.35

XKSAT log avg (bare ground)	**=**	**0.02**	
PSIF	**=**	**11.20**	
DTHETA (Dry)	**=**	**0.19**	
DTHETA (Normal)	**=**	**0.10**	
RTIMP avg.	**=**	**0.00**	**%**
Veg. Cover avg.	**=**	**15**	**%**
IA avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.1591

S712

Soil Class	...	12	13	45	98
Sub-Area (acres)	...	0.2	4.1	39.0	0.2
XKSAT (bare ground)	...	0.01	0.01	0.03	0.37
RTIMP (rock)	...	0%	0%	0%	0%
IA (natural only)	...	0.35	0.35	0.15	0.35

XKSAT log avg (bare ground)	**=**	**0.03**	
PSIF	**=**	**10.10**	
DTHETA (Dry)	**=**	**0.22**	
DTHETA (Normal)	**=**	**0.13**	
RTIMP avg.	**=**	**0.00**	**%**
Veg. Cover avg.	**=**	**15**	**%**
IA avg.	**=**	**0.17**	

Total Sub Basin Area in sq. miles = 0.0680

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S713

Soil Class	...	45	98
Sub-Area (acres)	...	68.7	0.0
XKSAT (bare ground)	...	0.03	0.37
RTIMP (rock)	...	0%	0%
IA (natural only)	...	0.15	0.35

XKSAT log avg (bare ground) =	**0.03**	
PSIF =	**10.10**	
DTHETA (Dry) =	**0.22**	
DTHETA (Normal) =	**0.13**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.15**	

Total Sub Basin Area in sq. miles = 0.1074

S714

Soil Class	...	10	12	45	98
Sub-Area (acres)	...	0.0	18.9	0.8	18.6
XKSAT (bare ground)	...	0.94	0.01	0.03	0.37
RTIMP (rock)	...	0%	0%	0%	0%
IA (natural only)	...	0.35	0.35	0.15	0.35

XKSAT log avg (bare ground) =	**0.06**	
PSIF =	**8.40**	
DTHETA (Dry) =	**0.29**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.35**	

Total Sub Basin Area in sq. miles = 0.0599

S715

Soil Class	...	10	12	45	98
Sub-Area (acres)	...	1.1	97.9	27.8	13.7
XKSAT (bare ground)	...	0.94	0.01	0.03	0.37
RTIMP (rock)	...	0%	0%	0%	0%
IA (natural only)	...	0.35	0.35	0.15	0.35

XKSAT log avg (bare ground) =	**0.02**	
PSIF =	**11.20**	
DTHETA (Dry) =	**0.19**	
DTHETA (Normal) =	**0.10**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.31**	

Total Sub Basin Area in sq. miles = 0.2196

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S716

Soil Class ...	13	45	110	112	
Sub-Area (acres) ...	264.0	262.0	194.2	2.0	
XKSAT (bare ground) ...	0.01	0.03	0.13	0.39	
RTIMP (rock) ...	0%	0%	0%	0%	
IA (natural only) ...	0.35	0.15	0.35	0.35	

XKSAT log avg (bare ground) = 0.03
PSIF = 10.10
DTHETA (Dry) = 0.22
DTHETA (Normal) = 0.13
RTIMP avg. = 0.00 %
Veg. Cover avg. = 15 %
IA avg. = 0.28

Total Sub Basin Area in sq. miles = 1.1284

S717

Soil Class ...	12	13	45	98	112
Sub-Area (acres) ...	0.1	90.5	91.1	1.2	0.1
XKSAT (bare ground) ...	0.01	0.01	0.03	0.37	0.39
RTIMP (rock) ...	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.15	0.35	0.35

XKSAT log avg (bare ground) = 0.02
PSIF = 11.20
DTHETA (Dry) = 0.19
DTHETA (Normal) = 0.10
RTIMP avg. = 0.00 %
Veg. Cover avg. = 15 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 0.2860

S718

Soil Class ...	10	12	13	45	98
Sub-Area (acres) ...	1.5	125.1	4.6	148.1	3.5
XKSAT (bare ground) ...	0.94	0.01	0.01	0.03	0.37
RTIMP (rock) ...	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.35	0.15	0.35

XKSAT log avg (bare ground) = 0.02
PSIF = 11.20
DTHETA (Dry) = 0.19
DTHETA (Normal) = 0.10
RTIMP avg. = 0.00 %
Veg. Cover avg. = 15 %
IA avg. = 0.25

Total Sub Basin Area in sq. miles = 0.4420

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S719

Soil Class ...	10	12	45	118	
Sub-Area (acres) ...	0.1	85.3	8.1	5.0	
XKSAT (bare ground) ...	0.94	0.01	0.03	0.42	
RTIMP (rock) ...	0%	0%	0%	0%	
IA (natural only) ...	0.35	0.35	0.15	0.35	

XKSAT log avg (bare ground) =	**0.01**	
PSIF =	**12.40**	
DTHETA (Dry) =	**0.15**	
DTHETA (Normal) =	**0.05**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.33**	

Total Sub Basin Area in sq. miles = 0.1538

S720

Soil Class ...	10	12	13	45	98	118
Sub-Area (acres) ...	0.6	142.0	8.3	75.0	7.1	3.7
XKSAT (bare ground) ...	0.94	0.01	0.01	0.03	0.37	0.42
RTIMP (rock) ...	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.35	0.15	0.35	0.35

XKSAT log avg (bare ground) =	**0.02**	
PSIF =	**11.20**	
DTHETA (Dry) =	**0.19**	
DTHETA (Normal) =	**0.10**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.29**	

Total Sub Basin Area in sq. miles = 0.3697

S721

Soil Class ...	45	110
Sub-Area (acres) ...	52.5	161.7
XKSAT (bare ground) ...	0.03	0.13
RTIMP (rock) ...	0%	0%
IA (natural only) ...	0.15	0.35

XKSAT log avg (bare ground) =	**0.09**	
PSIF =	**7.30**	
DTHETA (Dry) =	**0.33**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 0.3346

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S722

Soil Class ...	10	12	13	45	98	112	113
Sub-Area (acres) ...	0.7	24.7	246.8	159.0	40.0	41.6	98.5
XKSAT (bare ground) ...	0.94	0.01	0.01	0.03	0.37	0.39	0.39
RTIMP (rock) ...	0%	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.35	0.15	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.04**	
PSIF =	**9.70**	
DTHETA (Dry) =	**0.25**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 0.9552

S723

Soil Class ...	12	13	45	98
Sub-Area (acres) ...	23.8	1.4	17.6	11.8
XKSAT (bare ground) ...	0.01	0.01	0.03	0.37
RTIMP (rock) ...	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.15	0.35

XKSAT log avg (bare ground) =	**0.03**	
PSIF =	**10.10**	
DTHETA (Dry) =	**0.22**	
DTHETA (Normal) =	**0.13**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.29**	

Total Sub Basin Area in sq. miles = 0.0852

S724

Soil Class ...	3	12	13	45	68	110	112	113
Sub-Area (acres) ...	2.3	92.7	265.1	282.1	4.0	55.3	11.4	27.1
XKSAT (bare ground) ...	0.58	0.01	0.01	0.03	0.63	0.13	0.39	0.39
RTIMP (rock) ...	0%	0%	0%	0%	0%	0%	0%	0%
IA (natural only) ...	0.35	0.35	0.35	0.15	0.35	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.02**	
PSIF =	**11.20**	
DTHETA (Dry) =	**0.19**	
DTHETA (Normal) =	**0.10**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.27**	

Total Sub Basin Area in sq. miles = 1.1564

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S725

Soil Class	...	10	13	45	63	98	110	112	113
Sub-Area (acres)	...	2.2	210.9	174.6	8.7	41.8	212.3	48.8	41.4
XKSAT (bare ground)	...	0.94	0.01	0.03	0.14	0.37	0.13	0.39	0.39
RTIMP (rock)	...	0%	0%	0%	25%	0%	0%	0%	0%
IA (natural only)	...	0.35	0.35	0.15	0.25	0.35	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.05**	
PSIF =	**8.80**	
DTHETA (Dry) =	**0.27**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.29**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 1.1575

S726

Soil Class	...	13	21	44	100	110
Sub-Area (acres)	...	13.8	7.1	1.9	76.0	115.1
XKSAT (bare ground)	...	0.01	0.38	0.03	0.40	0.13
RTIMP (rock)	...	0%	0%	0%	20%	0%
IA (natural only)	...	0.35	0.35	0.35	0.25	0.35

XKSAT log avg (bare ground) =	**0.17**	
PSIF =	**5.70**	
DTHETA (Dry) =	**0.39**	
DTHETA (Normal) =	**0.25**	
RTIMP avg. =	**7.11**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.31**	

Total Sub Basin Area in sq. miles = 0.3341

S727

Soil Class	...	12	13	45	98	110	112
Sub-Area (acres)	...	1.8	67.1	95.4	26.9	36.6	12.3
XKSAT (bare ground)	...	0.01	0.01	0.03	0.37	0.13	0.39
RTIMP (rock)	...	0%	0%	0%	0%	0%	0%
IA (natural only)	...	0.35	0.35	0.15	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.04**	
PSIF =	**9.70**	
DTHETA (Dry) =	**0.25**	
DTHETA (Normal) =	**0.15**	
RTIMP avg. =	**0.00**	%
Veg. Cover avg. =	**15**	%
IA avg. =	**0.27**	

Total Sub Basin Area in sq. miles = 0.3750

Table A-2

Worksheet
Soils compostition and corresponding natural condition Green & Ampt rainfall loss parameters for each subbasin

S728

Soil Class	...	CF	Es	LcA	MTB	PWB	PYD
Sub-Area (acres)	...	0.5	3.8	7.0	90.7	54.9	19.6
XKSAT (bare ground)	...	0.50	0.25	0.25	0.15	0.38	0.20
RTIMP (rock)	...	0%	0%	0%	0%	0%	0%
IA (natural only)	...	0.35	0.35	0.35	0.35	0.35	0.35

XKSAT log avg (bare ground) =	**0.21**		
PSIF =	**5.20**		
DTHETA (Dry) =	**0.37**		
DTHETA (Normal) =	**0.25**		
RTIMP avg. =	**0.00**	%	
Veg. Cover avg. =	**15**	%	
IA avg. =	**0.35**		

Total Sub Basin Area in sq. miles = 0.2757

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S100

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	367.2
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.5737

S101

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	403.9
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6312

S102

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	287.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.4495

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S103

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	252.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.3947

S104

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	576.1
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.9002

S105

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	380.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.5938

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S106

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	363.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.5672

S107

Land Use Class	...	COMM	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	8.4	590.5
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	15%	---
IA (Developed)	...	0.10	---

Natural Area	=	**98.60**	%
Developed Area	=	**1.40**	%
RTIMP (Dev.) avg.	=	**10.00**	%
Veg Cover (Dev.) avg.	=	**15.00**	%
IA (Dev.) avg.	=	**0.10**	

Total Sub Basin Area in sq. miles = 0.9359

S200

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	613.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.9588

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S201

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	224.1
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.3501

S202

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	81.2
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.1268

S203

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	239.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.3734

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S204

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	608.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.9506

S205

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	264.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.4132

S206

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	545.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.8529

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S207

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	612.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.9569

S208

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	705.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 1.1025

S209

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	416.3
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6504

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S210

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	307.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.4809

S211

Land Use Class	...	COMM	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	2.4	309.7
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	15%	---
IA (Developed)	...	0.10	---

Natural Area	=	**99.22**	%
Developed Area	=	**0.78**	%
RTIMP (Dev.) avg.	=	**10.00**	%
Veg Cover (Dev.) avg.	=	**15.00**	%
IA (Dev.) avg.	=	**0.10**	

Total Sub Basin Area in sq. miles = 0.4876

S300

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	393.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6151

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S301

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	636.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.9945

S302

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	297.3
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.4645

S303

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	453.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.7078

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S304

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	526.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.8225

S400

Land Use Class	...	IND	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	177.9	492.8
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	0%	---
IA (Developed)	...	0.15	---

Natural Area	**=**	**73.48**	**%**
Developed Area	**=**	**26.52**	**%**
RTIMP (Dev.) avg.	**=**	**10.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.15**	

Total Sub Basin Area in sq. miles = 1.0480

S401

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	413.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.6462

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S402

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	473.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.7399

S403

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	357.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.5591

S404

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	168.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.2633

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S500

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	674.8
Base RTIMP (Dev.)	...	—
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 1.0544

S501

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	393.1
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6142

S502

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	257.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.4026

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S503

Land Use Class	...	IND	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	278.9	357.3
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	0%	---
IA (Developed)	...	0.15	---

Natural Area	**=**	**56.16**	**%**
Developed Area	**=**	**43.84**	**%**
RTIMP (Dev.) avg.	**=**	**10.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.15**	

Total Sub Basin Area in sq. miles = 0.9940

S504

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	208.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.3259

S505

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	91.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.1430

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S506

Land Use Class	...	IND	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	0.2	96.2
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	0%	---
IA (Developed)	...	0.15	---

Natural Area	=	**99.78**	%
Developed Area	=	**0.22**	%
RTIMP (Dev.) avg.	=	**10.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.15**	

Total Sub Basin Area in sq. miles = 0.1507

S507

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	426.2
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6659

S508

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	188.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.2949

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S509

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	108.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.1695

S510

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	81.1
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.1267

S511

Land Use Class	...	IND	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	2.4	244.0
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	0%	---
IA (Developed)	...	0.15	---

Natural Area	**=**	**99.04**	**%**
Developed Area	**=**	**0.96**	**%**
RTIMP (Dev.) avg.	**=**	**10.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.15**	

Total Sub Basin Area in sq. miles = 0.3849

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S512

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	136.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.2136

S513

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	497.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.7778

S514

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	415.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6495

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S515

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	705.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 1.1015

S516

Land Use Class	...	LDR	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	1.4	344.2
Base RTIMP (Dev.)	...	5%	---
Veg. Cover (Developed)	...	25%	---
IA (Developed)	...	0.30	---

Natural Area	**=**	**99.60**	**%**
Developed Area	**=**	**0.40**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**25.00**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.5400

S600

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	1282.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 2.0040

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S601

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	571.9
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.8935

S602

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	1205.3
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 1.8833

S603

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	420.9
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6576

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S604

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	1699.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 2.6560

S605

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	694.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 1.0853

S606

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	422.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6600

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S607

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	525.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.8216

S608

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	325.3
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.5082

S609

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	358.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.5603

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S610

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	386.2
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6034

S611

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	364.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.5693

S612

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	517.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.8085

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S613

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	1149.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 1.7965

S614

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	690.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 1.0792

S615

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	675.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 1.0548

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S616

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	323.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.5054

S617

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	432.2
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6754

S618

Land Use Class	...	OPEN	DESERT
Natural or Developed	...	N	N
Sub-Area (acres)	...	19.5	593.7
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.9581

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S619

Land Use Class	...	OPEN	DESERT
Natural or Developed	...	N	N
Sub-Area (acres)	...	14.1	514.9
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.8266

S620

Land Use Class	...	OPEN	DESERT
Natural or Developed	...	N	N
Sub-Area (acres)	...	242.5	41.7
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.4441

S621

Land Use Class	...	OPEN	DESERT
Natural or Developed	...	N	N
Sub-Area (acres)	...	182.3	408.5
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.9231

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S622

Land Use Class	...	OPEN	DESERT
Natural or Developed	...	N	N
Sub-Area (acres)	...	411.6	162.6
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.8971

S700

Land Use Class	...	OPEN	DESERT
Natural or Developed	...	N	N
Sub-Area (acres)	...	23.3	367.0
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.6099

S701

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	460.9
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.7202

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S702

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	164.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.2570

S703

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	164.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.2573

S704

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	261.2
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.4081

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S705

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	482.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.7542

S705AF

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	117.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.1828

S706

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	456.3
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.7129

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S707

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	408.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.6383

S708

Land Use Class	...	LDR	OPEN	DESERT
Natural or Developed	...	D	N	N
Sub-Area (acres)	...	6.7	307.4	138.0
Base RTIMP (Dev.)	...	5%	---	---
Veg. Cover (Developed)	...	25%	---	---
IA (Developed)	...	0.30	---	---

Natural Area	=	**98.51**	%
Developed Area	=	**1.49**	%
RTIMP (Dev.) avg.	=	**5.00**	%
Veg Cover (Dev.) avg.	=	**25.00**	%
IA (Dev.) avg.	=	**0.30**	

Total Sub Basin Area in sq. miles = 0.7065

S709

Land Use Class	...	OPEN	DESERT
Natural or Developed	...	N	N
Sub-Area (acres)	...	115.4	166.6
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.4406

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S710

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	71.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.1117

S711

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	101.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.1591

S712

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	43.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.0680

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S713

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	68.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.1074

S714

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	38.3
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.0599

S715

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	140.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.2196

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S716

Land Use Class	...	ARP	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	18.7	703.4
Base RTIMP (Dev.)	...	50%	---
Veg. Cover (Developed)	...	5%	---
IA (Developed)	...	0.10	---

Natural Area	**=**	**97.41**	**%**
Developed Area	**=**	**2.59**	**%**
RTIMP (Dev.) avg.	**=**	**50.00**	**%**
Veg Cover (Dev.) avg.	**=**	**5.00**	**%**
IA (Dev.) avg.	**=**	**0.10**	

Total Sub Basin Area in sq. miles = 1.1284

S717

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	183.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.2860

S718

Land Use Class	...	COMM	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	47.5	235.4
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	15%	---
IA (Developed)	...	0.10	---

Natural Area	**=**	**83.21**	**%**
Developed Area	**=**	**16.79**	**%**
RTIMP (Dev.) avg.	**=**	**10.00**	**%**
Veg Cover (Dev.) avg.	**=**	**15.00**	**%**
IA (Dev.) avg.	**=**	**0.10**	

Total Sub Basin Area in sq. miles = 0.4420

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S719

Land Use Class	...	COMM	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	42.6	55.8
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	15%	---
IA (Developed)	...	0.10	---

Natural Area	**=**	**56.70**	**%**
Developed Area	**=**	**43.30**	**%**
RTIMP (Dev.) avg.	**=**	**10.00**	**%**
Veg Cover (Dev.) avg.	**=**	**15.00**	**%**
IA (Dev.) avg.	**=**	**0.10**	

Total Sub Basin Area in sq. miles = 0.1538

S720

Land Use Class	...	COMM	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	17.9	218.7
Base RTIMP (Dev.)	...	10%	---
Veg. Cover (Developed)	...	15%	---
IA (Developed)	...	0.10	---

Natural Area	**=**	**92.43**	**%**
Developed Area	**=**	**7.57**	**%**
RTIMP (Dev.) avg.	**=**	**10.00**	**%**
Veg Cover (Dev.) avg.	**=**	**15.00**	**%**
IA (Dev.) avg.	**=**	**0.10**	

Total Sub Basin Area in sq. miles = 0.3697

S721

Land Use Class	...	ARP	DESERT
Natural or Developed	...	D	N
Sub-Area (acres)	...	0.9	213.3
Base RTIMP (Dev.)	...	50%	---
Veg. Cover (Developed)	...	5%	---
IA (Developed)	...	0.10	---

Natural Area	**=**	**99.59**	**%**
Developed Area	**=**	**0.41**	**%**
RTIMP (Dev.) avg.	**=**	**50.00**	**%**
Veg Cover (Dev.) avg.	**=**	**5.00**	**%**
IA (Dev.) avg.	**=**	**0.10**	

Total Sub Basin Area in sq. miles = 0.3346

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S722

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	611.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.9552

S723

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	54.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.0852

S724

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	740.1
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 1.1564

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S725

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	740.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 1.1575

S726

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	213.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.3341

S727

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	240.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	%
Developed Area	=	**0.00**	%
RTIMP (Dev.) avg.	=	**0.00**	%
Veg Cover (Dev.) avg.	=	**0.00**	%
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.3750

Table A-3

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Existing condition

S728

Land Use Class	...	DESERT
Natural or Developed	...	N
Sub-Area (acres)	...	176.5
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.2757

Table A-4

Green & Ampt rainfall loss parameters for each subbasin

Sub-basin ID	Total sq. mi.	Area Natural %	Urban %	IA, in inches			RTIMP, in %			Vegetation Cover, in %			XKSAT Bare Ground in/hr	PSIF inches	DTHETA			XKSAT Corrected for Veg. in/hr
				Natural	Urban	Weighted	Natural	Urban	Total	Natural	Urban	Weighted			Natural dry	Urban normal	Weighted	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
S100	0.5737	100.0	0.0	0.19	0.00	0.19	25	0	25	32	0	32	0.27	4.65	0.35	0.25	0.35	0.34
S101	0.6312	100.0	0.0	0.26	0.00	0.26	15	0	15	32	0	32	0.20	5.30	0.37	0.25	0.37	0.25
S102	0.4495	100.0	0.0	0.15	0.00	0.15	30	0	30	32	0	32	0.31	4.45	0.35	0.25	0.35	0.39
S103	0.3947	100.0	0.0	0.24	0.00	0.24	17	0	17	32	0	32	0.18	5.60	0.38	0.25	0.38	0.22
S104	0.9002	100.0	0.0	0.22	0.00	0.22	13	0	13	32	0	32	0.18	5.60	0.38	0.25	0.38	0.22
S105	0.5938	100.0	0.0	0.22	0.00	0.22	13	0	13	32	0	32	0.18	5.60	0.38	0.25	0.38	0.22
S106	0.5672	100.0	0.0	0.19	0.00	0.19	7	0	7	32	0	32	0.21	5.20	0.37	0.25	0.37	0.26
S107	0.9359	98.6	1.4	0.15	0.10	0.15	0	10	0	32	15	32	0.24	4.90	0.35	0.25	0.35	0.30
S200	0.9588	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S201	0.3501	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S202	0.1268	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S203	0.3734	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S204	0.9506	100.0	0.0	0.25	0.00	0.25	32	0	32	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S205	0.4132	100.0	0.0	0.21	0.00	0.21	21	0	21	32	0	32	0.28	4.60	0.35	0.25	0.35	0.35
S206	0.8529	100.0	0.0	0.25	0.00	0.25	27	0	27	32	0	32	0.27	4.65	0.35	0.25	0.35	0.34
S207	0.9569	100.0	0.0	0.25	0.00	0.25	34	0	34	32	0	32	0.33	4.35	0.35	0.25	0.35	0.41
S208	1.1025	100.0	0.0	0.23	0.00	0.23	24	0	24	32	0	32	0.20	5.30	0.37	0.25	0.37	0.25
S209	0.6504	100.0	0.0	0.22	0.00	0.22	15	0	15	32	0	32	0.23	5.00	0.36	0.25	0.36	0.29
S210	0.4809	100.0	0.0	0.16	0.00	0.16	2	0	2	32	0	32	0.23	5.00	0.36	0.25	0.36	0.29
S211	0.4876	99.2	0.8	0.19	0.10	0.19	4	10	4	32	15	32	0.21	5.20	0.37	0.25	0.37	0.26
S300	0.6151	100.0	0.0	0.25	0.00	0.25	25	0	25	32	0	32	0.29	4.55	0.35	0.25	0.35	0.36
S301	0.9945	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S302	0.4645	100.0	0.0	0.24	0.00	0.24	24	0	24	32	0	32	0.29	4.55	0.35	0.25	0.35	0.36
S303	0.7078	100.0	0.0	0.22	0.00	0.22	10	0	10	32	0	32	0.28	4.60	0.35	0.25	0.35	0.35
S304	0.8225	100.0	0.0	0.18	0.00	0.18	3	0	3	32	0	32	0.22	5.10	0.36	0.25	0.36	0.27
S400	1.0480	73.5	26.5	0.26	0.15	0.23	15	10	14	26	0	19	0.19	5.40	0.38	0.25	0.34	0.21
S401	0.6462	100.0	0.0	0.30	0.00	0.30	7	0	7	26	0	26	0.22	5.10	0.36	0.25	0.36	0.26
S402	0.7399	100.0	0.0	0.31	0.00	0.31	3	0	3	26	0	26	0.18	5.60	0.38	0.25	0.38	0.21
S403	0.5591	100.0	0.0	0.30	0.00	0.30	0	0	0	26	0	26	0.07	8.00	0.30	0.15	0.30	0.08
S404	0.2633	100.0	0.0	0.27	0.00	0.27	0	0	0	26	0	26	0.12	6.60	0.37	0.19	0.37	0.14

Table A-4

Green & Ampt rainfall loss parameters for each subbasin

Sub-basin ID	Total sq. mi.	Area Natural %	Urban %	IA, in inches			RTIMP, in %			Vegetation Cover, in %			XKSAT Bare Ground in/hr	PSIF inches	DTHETA			XKSAT Corrected for Veg. in/hr
				Natural	Urban	Weighted	Natural	Urban	Total	Natural	Urban	Weighted			Natural dry	Urban normal	Weighted	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
S500	1.0544	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S501	0.6142	100.0	0.0	0.22	0.00	0.22	23	0	23	32	0	32	0.31	4.45	0.35	0.25	0.35	0.39
S502	0.4026	100.0	0.0	0.27	0.00	0.27	14	0	14	26	0	26	0.30	4.50	0.35	0.25	0.35	0.35
S503	0.9940	56.2	43.8	0.26	0.15	0.21	23	10	17	26	0	15	0.27	4.65	0.35	0.25	0.31	0.28
S504	0.3259	100.0	0.0	0.35	0.00	0.35	0	0	0	26	0	26	0.32	4.40	0.35	0.25	0.35	0.38
S505	0.1430	100.0	0.0	0.25	0.00	0.25	14	0	14	26	0	26	0.32	4.40	0.35	0.25	0.35	0.38
S506	0.1507	99.8	0.2	0.29	0.15	0.29	9	10	9	26	0	26	0.17	5.70	0.39	0.25	0.39	0.20
S507	0.6659	100.0	0.0	0.34	0.00	0.34	1	0	1	26	0	26	0.17	5.70	0.39	0.25	0.39	0.20
S508	0.2949	100.0	0.0	0.33	0.00	0.33	0	0	0	26	0	26	0.20	5.30	0.37	0.25	0.37	0.24
S509	0.1695	100.0	0.0	0.28	0.00	0.28	23	0	23	26	0	26	0.27	4.65	0.35	0.25	0.35	0.32
S510	0.1267	100.0	0.0	0.32	0.00	0.32	6	0	6	26	0	26	0.09	7.30	0.33	0.15	0.33	0.11
S511	0.3849	99.0	1.0	0.29	0.15	0.29	19	10	19	26	0	26	0.17	5.70	0.39	0.25	0.39	0.20
S512	0.2136	100.0	0.0	0.35	0.00	0.35	0	0	0	26	0	26	0.07	8.00	0.30	0.15	0.30	0.08
S513	0.7778	100.0	0.0	0.32	0.00	0.32	1	0	1	26	0	26	0.19	5.40	0.38	0.25	0.38	0.22
S514	0.6495	100.0	0.0	0.28	0.00	0.28	0	0	0	26	0	26	0.08	7.60	0.32	0.15	0.32	0.09
S515	1.1015	100.0	0.0	0.32	0.00	0.32	0	0	0	26	0	26	0.05	8.80	0.27	0.15	0.27	0.06
S516	0.5400	99.6	0.4	0.35	0.30	0.35	0	5	0	26	25	26	0.25	4.80	0.35	0.25	0.35	0.29
S600	2.0181	100.0	0.0	0.25	0.00	0.25	22	0	22	32	0	32	0.39	4.00	0.35	0.25	0.35	0.49
S601	0.9008	100.0	0.0	0.25	0.00	0.25	44	0	44	32	0	32	0.17	5.70	0.39	0.25	0.39	0.21
S602	1.8833	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.33	4.35	0.35	0.25	0.35	0.41
S603	0.6650	100.0	0.0	0.25	0.00	0.25	41	0	41	32	0	32	0.16	5.80	0.39	0.25	0.39	0.20
S604	2.6560	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.33	4.35	0.35	0.25	0.35	0.41
S605	1.0853	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.33	4.35	0.35	0.25	0.35	0.41
S606	0.6600	100.0	0.0	0.26	0.00	0.26	35	0	35	32	0	32	0.30	4.50	0.35	0.25	0.35	0.37
S607	0.8216	100.0	0.0	0.25	0.00	0.25	34	0	34	32	0	32	0.22	5.10	0.36	0.25	0.36	0.27
S608	0.5082	100.0	0.0	0.25	0.00	0.25	37	0	37	32	0	32	0.16	5.80	0.39	0.25	0.39	0.20
S609	0.5603	100.0	0.0	0.27	0.00	0.27	27	0	27	32	0	32	0.38	4.10	0.35	0.25	0.35	0.47
S610	0.6034	100.0	0.0	0.26	0.00	0.26	39	0	39	32	0	32	0.22	5.10	0.36	0.25	0.36	0.27
S611	0.5693	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.33	4.35	0.35	0.25	0.35	0.41
S612	0.8085	100.0	0.0	0.25	0.00	0.25	31	0	31	32	0	32	0.13	6.40	0.38	0.21	0.38	0.16

Table A-4

Green & Ampt rainfall loss parameters for each subbasin

Sub-basin ID	Total sq. mi.	Area Natural %	Urban %	IA, in inches			RTIMP, in %			Vegetation Cover, in %			XKSAT Bare Ground in/hr	PSIF inches	DTHETA			XKSAT Corrected for Veg. in/hr
				Natural	Urban	Weighted	Natural	Urban	Total	Natural	Urban	Weighted			Natural dry	Urban normal	Weighted	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
S613	1.7965	100.0	0.0	0.25	0.00	0.25	34	0	34	32	0	32	0.29	4.55	0.35	0.25	0.35	0.36
S614	1.0792	100.0	0.0	0.24	0.00	0.24	34	0	34	32	0	32	0.32	4.40	0.35	0.25	0.35	0.40
S615	1.0548	100.0	0.0	0.25	0.00	0.25	55	0	55	32	0	32	0.14	6.20	0.39	0.23	0.39	0.17
S616	0.5054	100.0	0.0	0.22	0.00	0.22	19	0	19	32	0	32	0.21	5.20	0.37	0.25	0.37	0.26
S617	0.6754	100.0	0.0	0.23	0.00	0.23	23	0	23	32	0	32	0.25	4.80	0.35	0.25	0.35	0.31
S618	0.9581	100.0	0.0	0.20	0.00	0.20	22	0	22	32	0	32	0.21	5.20	0.37	0.25	0.37	0.26
S619	0.8266	100.0	0.0	0.27	0.00	0.27	39	0	39	32	0	32	0.11	6.80	0.36	0.17	0.36	0.14
S620	0.4441	100.0	0.0	0.23	0.00	0.23	37	0	37	32	0	32	0.13	6.40	0.38	0.21	0.38	0.16
S621	0.9231	100.0	0.0	0.17	0.00	0.17	3	0	3	32	0	32	0.25	4.80	0.35	0.25	0.35	0.31
S622	0.8971	100.0	0.0	0.18	0.00	0.18	4	0	4	32	0	32	0.24	4.90	0.35	0.25	0.35	0.30
S700	0.6099	100.0	0.0	0.17	0.00	0.17	5	0	5	32	0	32	0.22	5.10	0.36	0.25	0.36	0.27
S701	0.7202	100.0	0.0	0.22	0.00	0.22	14	0	14	32	0	32	0.18	5.60	0.38	0.25	0.38	0.22
S702	0.2570	100.0	0.0	0.17	0.00	0.17	4	0	4	32	0	32	0.22	5.10	0.36	0.25	0.36	0.27
S703	0.2573	100.0	0.0	0.15	0.00	0.15	0	0	0	32	0	32	0.24	4.90	0.35	0.25	0.35	0.30
S704	0.4081	100.0	0.0	0.26	0.00	0.26	11	0	11	32	0	32	0.24	4.90	0.35	0.25	0.35	0.30
S705	0.7542	100.0	0.0	0.22	0.00	0.22	7	0	7	32	0	32	0.13	6.40	0.38	0.21	0.38	0.16
S705AF	0.1828	100.0	0.0	0.31	0.00	0.31	0	0	0	15	0	15	0.03	10.10	0.22	0.13	0.22	0.03
S706	0.7129	100.0	0.0	0.29	0.00	0.29	7	0	7	26	0	26	0.17	5.70	0.39	0.25	0.39	0.20
S707	0.6383	100.0	0.0	0.28	0.00	0.28	8	0	8	26	0	26	0.14	6.20	0.39	0.23	0.39	0.16
S708	0.7065	98.5	1.5	0.22	0.30	0.22	0	5	0	15	25	15	0.04	9.70	0.25	0.15	0.25	0.04
S709	0.4406	100.0	0.0	0.30	0.00	0.30	0	0	0	15	0	15	0.02	11.20	0.19	0.10	0.19	0.02
S710	0.1117	100.0	0.0	0.15	0.00	0.15	0	0	0	15	0	15	0.03	10.10	0.22	0.13	0.22	0.03
S711	0.1591	100.0	0.0	0.28	0.00	0.28	0	0	0	15	0	15	0.02	11.20	0.19	0.10	0.19	0.02
S712	0.0680	100.0	0.0	0.17	0.00	0.17	0	0	0	15	0	15	0.03	10.10	0.22	0.13	0.22	0.03
S713	0.1074	100.0	0.0	0.15	0.00	0.15	0	0	0	15	0	15	0.03	10.10	0.22	0.13	0.22	0.03
S714	0.0599	100.0	0.0	0.35	0.00	0.35	0	0	0	15	0	15	0.06	8.40	0.29	0.15	0.29	0.06
S715	0.2196	100.0	0.0	0.31	0.00	0.31	0	0	0	15	0	15	0.02	11.20	0.19	0.10	0.19	0.02
S716	1.1284	97.4	2.6	0.28	0.10	0.27	0	50	1	15	5	15	0.03	10.10	0.22	0.13	0.22	0.03
S717	0.2860	100.0	0.0	0.25	0.00	0.25	0	0	0	15	0	15	0.02	11.20	0.19	0.10	0.19	0.02
S718	0.4420	83.2	16.8	0.25	0.10	0.22	0	10	2	15	15	15	0.02	11.20	0.19	0.10	0.18	0.02

Table A-4

Green & Ampt rainfall loss parameters for each subbasin

Sub-basin ID	Total sq. mi.	Area Natural %	Urban %	IA, in inches			RTIMP, in %			Vegetation Cover, in %			XKSAT Bare Ground in/hr	PSIF inches	DTHETA			XKSAT Corrected for Veg. in/hr
				Natural	Urban	Weighted	Natural	Urban	Total	Natural	Urban	Weighted			Natural dry	Urban normal	Weighted	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
S719	0.1538	56.7	43.3	0.33	0.10	0.23	0	10	4	15	15	15	0.01	12.40	0.15	0.05	0.11	0.01
S720	0.3697	92.4	7.6	0.29	0.10	0.27	0	10	1	15	15	15	0.02	11.20	0.19	0.10	0.19	0.02
S721	0.3346	99.6	0.4	0.30	0.10	0.30	0	50	0	15	5	15	0.09	7.30	0.33	0.15	0.33	0.09
S722	0.9552	100.0	0.0	0.30	0.00	0.30	0	0	0	15	0	15	0.04	9.70	0.25	0.15	0.25	0.04
S723	0.0852	100.0	0.0	0.29	0.00	0.29	0	0	0	15	0	15	0.03	10.10	0.22	0.13	0.22	0.03
S724	1.1564	100.0	0.0	0.27	0.00	0.27	0	0	0	15	0	15	0.02	11.20	0.19	0.10	0.19	0.02
S725	1.1575	100.0	0.0	0.30	0.00	0.30	0	0	0	15	0	15	0.05	8.80	0.27	0.15	0.27	0.05
S726	0.3341	100.0	0.0	0.31	0.00	0.31	7	0	7	15	0	15	0.17	5.70	0.39	0.25	0.39	0.18
S727	0.3750	100.0	0.0	0.27	0.00	0.27	0	0	0	15	0	15	0.04	9.70	0.25	0.15	0.25	0.04
S728	0.2757	100.0	0.0	0.35	0.00	0.35	0	0	0	15	0	15	0.21	5.20	0.37	0.25	0.37	0.22

IA composite: (7) = [(5)*(3) + (6)*(4)]/100
RTIMP total: (10) = [(8) *(3)+ (9)*(4)]/100
Vegetation Cover composite: (13) = [(11)*(3) + (12)*(4)]/100
DTHETA composite: (18) = [(16)*(3) + (17)*(4)]/100
XKSAT Corrected: (19) = (14)*[(13)/100 * 1.111 + 0.889] where (13) > 10 and (14) < 1.2

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S100

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	5.2	310.2	51.7
Base RTIMP (Dev.)	...	80%	---	5%
Veg. Cover (Developed)	...	15%	---	29%
IA (Developed)	...	0.10	---	0.30

Natural Area	**=**	**84.49**	**%**
Developed Area	**=**	**15.51**	**%**
RTIMP (Dev.) avg.	**=**	**11.89**	**%**
Veg Cover (Dev.) avg.	**=**	**27.26**	**%**
IA (Dev.) avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.5737

S101

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	403.9
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.6312

S102

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	150.0	137.6
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**52.15**	**%**
Developed Area	**=**	**47.85**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.4495

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S103

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	252.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.3947

S104

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	75.2	426.0	74.9
Base RTIMP (Dev.)	...	80%	---	5%
Veg. Cover (Developed)	...	15%	---	29%
IA (Developed)	...	0.10	---	0.30

Natural Area	**=**	**73.94**	**%**
Developed Area	**=**	**26.06**	**%**
RTIMP (Dev.) avg.	**=**	**42.56**	**%**
Veg Cover (Dev.) avg.	**=**	**21.74**	**%**
IA (Dev.) avg.	**=**	**0.20**	

Total Sub Basin Area in sq. miles = 0.9002

S105

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	43.2	182.8	154.0
Base RTIMP (Dev.)	...	80%	---	5%
Veg. Cover (Developed)	...	75%	---	30%
IA (Developed)	...	0.10	---	0.30

Natural Area	**=**	**48.11**	**%**
Developed Area	**=**	**51.89**	**%**
RTIMP (Dev.) avg.	**=**	**21.42**	**%**
Veg Cover (Dev.) avg.	**=**	**39.85**	**%**
IA (Dev.) avg.	**=**	**0.26**	

Total Sub Basin Area in sq. miles = 0.5938

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S106

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	100.9	262.1
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**27.79**	**%**
Developed Area	**=**	**72.21**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.5672

S107

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	198.4	400.5
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**33.13**	**%**
Developed Area	**=**	**66.87**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.9359

S200

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	613.7
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.9588

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S201

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	224.1
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	**%**
Developed Area	=	**0.00**	**%**
RTIMP (Dev.) avg.	=	**0.00**	**%**
Veg Cover (Dev.) avg.	=	**0.00**	**%**
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.3501

S202

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	81.2
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	=	**100.00**	**%**
Developed Area	=	**0.00**	**%**
RTIMP (Dev.) avg.	=	**0.00**	**%**
Veg Cover (Dev.) avg.	=	**0.00**	**%**
IA (Dev.) avg.	=	**0.00**	

Total Sub Basin Area in sq. miles = 0.1268

S203

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	94.0	145.0
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	=	**39.33**	**%**
Developed Area	=	**60.67**	**%**
RTIMP (Dev.) avg.	=	**5.00**	**%**
Veg Cover (Dev.) avg.	=	**28.50**	**%**
IA (Dev.) avg.	=	**0.30**	

Total Sub Basin Area in sq. miles = 0.3734

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S204

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	594.3	14.1
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**97.68**	**%**
Developed Area	**=**	**2.32**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.9506

S205

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	50.1	157.6	56.7
Base RTIMP (Dev.)	...	80%	---	5%
Veg. Cover (Developed)	...	15%	---	29%
IA (Developed)	...	0.10	---	0.30

Natural Area	**=**	**59.61**	**%**
Developed Area	**=**	**40.39**	**%**
RTIMP (Dev.) avg.	**=**	**40.17**	**%**
Veg Cover (Dev.) avg.	**=**	**22.17**	**%**
IA (Dev.) avg.	**=**	**0.21**	

Total Sub Basin Area in sq. miles = 0.4132

S206

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	0.9	140.9	404.0
Base RTIMP (Dev.)	...	80%	---	5%
Veg. Cover (Developed)	...	15%	---	29%
IA (Developed)	...	0.10	---	0.30

Natural Area	**=**	**25.82**	**%**
Developed Area	**=**	**74.18**	**%**
RTIMP (Dev.) avg.	**=**	**5.17**	**%**
Veg Cover (Dev.) avg.	**=**	**28.47**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.8529

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S207

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	421.4	191.0
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**68.82**	**%**
Developed Area	**=**	**31.18**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.9569

S208

Land Use Class	...	MFR3	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	85.2	406.9	213.5
Base RTIMP (Dev.)	...	45%	---	5%
Veg. Cover (Developed)	...	28%	---	29%
IA (Developed)	...	0.25	---	0.30

Natural Area	**=**	**57.67**	**%**
Developed Area	**=**	**42.33**	**%**
RTIMP (Dev.) avg.	**=**	**16.41**	**%**
Veg Cover (Dev.) avg.	**=**	**28.21**	**%**
IA (Dev.) avg.	**=**	**0.29**	

Total Sub Basin Area in sq. miles = 1.1025

S209

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	350.0	66.3
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**84.07**	**%**
Developed Area	**=**	**15.93**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.6504

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S210

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	169.0	138.8
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**54.91**	**%**
Developed Area	**=**	**45.09**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.4809

S211

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	126.4	185.7
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**40.51**	**%**
Developed Area	**=**	**59.49**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.4876

S300

Land Use Class	...	LDR	MFR3	OPEN	VLDR
Natural or Developed	...	D	D	N	D
Sub-Area (acres)	...	119.2	24.9	101.2	148.4
Base RTIMP (Dev.)	...	15%	45%	---	5%
Veg. Cover (Developed)	...	43%	28%	---	29%
IA (Developed)	...	0.30	0.25	---	0.30

Natural Area	**=**	**25.70**	**%**
Developed Area	**=**	**74.30**	**%**
RTIMP (Dev.) avg.	**=**	**12.48**	**%**
Veg Cover (Dev.) avg.	**=**	**34.12**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.6151

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S301

Land Use Class ...	LDR	MFR3	OPEN	VLDR	
Natural or Developed ...	D	D	N	D	
Sub-Area (acres) ...	317.8	15.0	83.4	220.3	
Base RTIMP (Dev.) ...	15%	45%	---	5%	
Veg. Cover (Developed) ...	43%	28%	---	29%	
IA (Developed) ...	0.30	0.25	---	0.30	

Natural Area =	**13.11**	**%**
Developed Area =	**86.89**	**%**
RTIMP (Dev.) avg. =	**11.83**	**%**
Veg Cover (Dev.) avg. =	**36.52**	**%**
IA (Dev.) avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 0.9945

S302

Land Use Class ...	COMM	LDR	MFR3	OPEN	VLDR
Natural or Developed ...	D	D	D	N	D
Sub-Area (acres) ...	4.0	48.9	7.5	164.2	72.7
Base RTIMP (Dev.) ...	80%	15%	45%	---	5%
Veg. Cover (Developed) ...	15%	43%	28%	---	29%
IA (Developed) ...	0.10	0.30	0.25	---	0.30

Natural Area =	**55.24**	**%**
Developed Area =	**44.76**	**%**
RTIMP (Dev.) avg. =	**13.17**	**%**
Veg Cover (Dev.) avg. =	**33.18**	**%**
IA (Dev.) avg. =	**0.29**	

Total Sub Basin Area in sq. miles = 0.4645

S303

Land Use Class ...	OPEN	VLDR
Natural or Developed ...	N	D
Sub-Area (acres) ...	330.0	123.0
Base RTIMP (Dev.) ...	---	5%
Veg. Cover (Developed) ...	---	29%
IA (Developed) ...	---	0.30

Natural Area =	**72.85**	**%**
Developed Area =	**27.15**	**%**
RTIMP (Dev.) avg. =	**5.00**	**%**
Veg Cover (Dev.) avg. =	**28.50**	**%**
IA (Dev.) avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 0.7078

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S304

Land Use Class	...	H20	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	2.1	206.9	317.5
Base RTIMP (Dev.)	...	100%	---	5%
Veg. Cover (Developed)	...	0%	---	29%
IA (Developed)	...	0.00	---	0.30

Natural Area	**=**	**39.30**	**%**
Developed Area	**=**	**60.70**	**%**
RTIMP (Dev.) avg.	**=**	**5.62**	**%**
Veg Cover (Dev.) avg.	**=**	**28.32**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.8225

S400

Land Use Class	...	COMM	H20	LDR	MDR	MFR3	OPEN	VLDR
Natural or Developed	...	D	D	D	D	D	N	D
Sub-Area (acres)	...	81.0	4.1	1.5	9.3	184.8	268.4	121.5
Base RTIMP (Dev.)	...	80%	100%	15%	30%	45%	---	5%
Veg. Cover (Developed)	...	15%	0%	43%	35%	28%	---	29%
IA (Developed)	...	0.10	0.00	0.30	0.25	0.25	---	0.30

Natural Area	**=**	**40.02**	**%**
Developed Area	**=**	**59.98**	**%**
RTIMP (Dev.) avg.	**=**	**40.06**	**%**
Veg Cover (Dev.) avg.	**=**	**25.24**	**%**
IA (Dev.) avg.	**=**	**0.23**	

Total Sub Basin Area in sq. miles = 1.0480

S401

Land Use Class	...	H20	LDR	OPEN	VLDR
Natural or Developed	...	D	D	N	D
Sub-Area (acres)	...	7.4	20.4	60.9	324.9
Base RTIMP (Dev.)	...	100%	15%	---	5%
Veg. Cover (Developed)	...	0%	43%	---	29%
IA (Developed)	...	0.00	0.30	---	0.30

Natural Area	**=**	**14.72**	**%**
Developed Area	**=**	**85.28**	**%**
RTIMP (Dev.) avg.	**=**	**7.58**	**%**
Veg Cover (Dev.) avg.	**=**	**28.71**	**%**
IA (Dev.) avg.	**=**	**0.29**	

Total Sub Basin Area in sq. miles = 0.6462

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S402

Land Use Class ...	COMM	IND	LDR	MDR	MFR1	MFR2	MFR3	OPEN	VLDR
Natural or Developed ...	D	D	D	D	D	D	D	N	D
Sub-Area (acres) ...	23.4	81.1	36.1	21.1	44.3	14.9	91.3	107.3	54.1
Base RTIMP (Dev.) ...	80%	55%	15%	30%	45%	45%	45%	---	5%
Veg. Cover (Developed) ...	15%	27%	43%	35%	28%	28%	28%	---	29%
IA (Developed) ...	0.10	0.15	0.30	0.25	0.25	0.25	0.25	---	0.30

Natural Area = 22.65 %
Developed Area = 77.35 %
RTIMP (Dev.) avg. = 39.73 %
Veg Cover (Dev.) avg. = 28.65 %
IA (Dev.) avg. = 0.23

Total Sub Basin Area in sq. miles = 0.7399

S403

Land Use Class ...	H20	IND	LDR	MDR	MFR3	OPEN	VLDR
Natural or Developed ...	D	D	D	D	D	N	D
Sub-Area (acres) ...	0.0	145.8	109.7	18.6	69.7	12.0	2.0
Base RTIMP (Dev.) ...	100%	55%	15%	30%	45%	---	5%
Veg. Cover (Developed) ...	0%	27%	43%	35%	28%	---	29%
IA (Developed) ...	0.00	0.15	0.30	0.25	0.25	---	0.30

Natural Area = 3.35 %
Developed Area = 96.65 %
RTIMP (Dev.) avg. = 38.67 %
Veg Cover (Dev.) avg. = 32.45 %
IA (Dev.) avg. = 0.22

Total Sub Basin Area in sq. miles = 0.5591

S404

Land Use Class ...	H20	LDR	OPEN	VLDR
Natural or Developed ...	D	D	N	D
Sub-Area (acres) ...	12.0	7.2	129.0	20.3
Base RTIMP (Dev.) ...	100%	15%	---	5%
Veg. Cover (Developed) ...	0%	43%	---	29%
IA (Developed) ...	0.00	0.30	---	0.30

Natural Area = 76.59 %
Developed Area = 23.41 %
RTIMP (Dev.) avg. = 35.68 %
Veg Cover (Dev.) avg. = 22.39 %
IA (Dev.) avg. = 0.21

Total Sub Basin Area in sq. miles = 0.2632

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S500

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	20.4	240.7	413.7
Base RTIMP (Dev.)	...	80%	---	5%
Veg. Cover (Developed)	...	15%	---	29%
IA (Developed)	...	0.10	---	0.30

Natural Area	**=**	**35.67**	**%**
Developed Area	**=**	**64.33**	**%**
RTIMP (Dev.) avg.	**=**	**8.52**	**%**
Veg Cover (Dev.) avg.	**=**	**27.87**	**%**
IA (Dev.) avg.	**=**	**0.29**	

Total Sub Basin Area in sq. miles = 1.0543

S501

Land Use Class	...	LDR	MDR	OPEN	VLDR
Natural or Developed	...	D	D	N	D
Sub-Area (acres)	...	15.4	28.8	143.8	205.1
Base RTIMP (Dev.)	...	15%	30%	---	5%
Veg. Cover (Developed)	...	43%	35%	---	29%
IA (Developed)	...	0.30	0.25	---	0.30

Natural Area	**=**	**36.59**	**%**
Developed Area	**=**	**63.41**	**%**
RTIMP (Dev.) avg.	**=**	**8.50**	**%**
Veg Cover (Dev.) avg.	**=**	**30.12**	**%**
IA (Dev.) avg.	**=**	**0.29**	

Total Sub Basin Area in sq. miles = 0.6142

S502

Land Use Class	...	COMM	H20	LDR	OPEN	VLDR
Natural or Developed	...	D	D	D	N	D
Sub-Area (acres)	...	12.5	2.3	44.5	119.3	79.1
Base RTIMP (Dev.)	...	80%	100%	15%	---	5%
Veg. Cover (Developed)	...	15%	0%	43%	---	29%
IA (Developed)	...	0.10	0.00	0.30	---	0.30

Natural Area	**=**	**46.30**	**%**
Developed Area	**=**	**53.70**	**%**
RTIMP (Dev.) avg.	**=**	**16.55**	**%**
Veg Cover (Dev.) avg.	**=**	**31.32**	**%**
IA (Dev.) avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.4026

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S503

Land Use Class	...	H20	LDR	MDR	OPEN	PF	VLDR
Natural or Developed	...	D	D	D	N	D	D
Sub-Area (acres)	...	0.2	205.2	19.5	180.0	37.1	194.1
Base RTIMP (Dev.)	...	100%	15%	30%	---	50%	5%
Veg. Cover (Developed)	...	0%	43%	35%	---	0%	29%
IA (Developed)	...	0.00	0.30	0.25	---	0.00	0.30

Natural Area	**=**	**28.30**	**%**
Developed Area	**=**	**71.70**	**%**
RTIMP (Dev.) avg.	**=**	**14.27**	**%**
Veg Cover (Dev.) avg.	**=**	**32.75**	**%**
IA (Dev.) avg.	**=**	**0.27**	

Total Sub Basin Area in sq. miles = 0.9940

S504

Land Use Class	...	COMM	H20	IND	LDR	MDR	MFR1	MFR2	VLDR
Natural or Developed	...	D	D	D	D	D	D	D	D
Sub-Area (acres)	...	39.5	4.1	0.0	56.4	10.7	24.3	18.7	54.8
Base RTIMP (Dev.)	...	80%	100%	55%	15%	30%	45%	45%	5%
Veg. Cover (Developed)	...	15%	0%	27%	43%	35%	28%	28%	29%
IA (Developed)	...	0.10	0.00	0.15	0.30	0.25	0.25	0.25	0.30

Natural Area	**=**	**0.00**	**%**
Developed Area	**=**	**100.00**	**%**
RTIMP (Dev.) avg.	**=**	**33.33**	**%**
Veg Cover (Dev.) avg.	**=**	**29.29**	**%**
IA (Dev.) avg.	**=**	**0.24**	

Total Sub Basin Area in sq. miles = 0.3259

S505

Land Use Class	...	H20	OPEN	PF	VLDR
Natural or Developed	...	D	N	D	D
Sub-Area (acres)	...	3.6	73.0	4.0	10.9
Base RTIMP (Dev.)	...	100%	---	50%	5%
Veg. Cover (Developed)	...	0%	---	0%	29%
IA (Developed)	...	0.00	---	0.00	0.30

Natural Area	**=**	**79.78**	**%**
Developed Area	**=**	**20.22**	**%**
RTIMP (Dev.) avg.	**=**	**33.16**	**%**
Veg Cover (Dev.) avg.	**=**	**16.82**	**%**
IA (Dev.) avg.	**=**	**0.18**	

Total Sub Basin Area in sq. miles = 0.1430

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S506

Land Use Class ...	H20	MFR3	OPEN	PF	VLDR	
Natural or Developed ...	D	D	N	D	D	
Sub-Area (acres) ...	0.8	24.3	51.3	14.3	5.7	
Base RTIMP (Dev.) ...	100%	45%	---	50%	5%	
Veg. Cover (Developed) ...	0%	28%	---	0%	29%	
IA (Developed) ...	0.00	0.25	---	0.00	0.30	

Natural Area =	**53.16**	**%**
Developed Area =	**46.84**	**%**
RTIMP (Dev.) avg. =	**42.54**	**%**
Veg Cover (Dev.) avg. =	**18.40**	**%**
IA (Dev.) avg. =	**0.17**	

Total Sub Basin Area in sq. miles = 0.1507

S507

Land Use Class ...	H20	LDR	MDR	OPEN	PF	VLDR
Natural or Developed ...	D	D	D	N	D	D
Sub-Area (acres) ...	7.5	61.6	8.9	2.1	21.9	324.2
Base RTIMP (Dev.) ...	100%	15%	30%	---	50%	5%
Veg. Cover (Developed) ...	0%	43%	35%	---	0%	29%
IA (Developed) ...	0.00	0.30	0.25	---	0.00	0.30

Natural Area =	**0.49**	**%**
Developed Area =	**99.51**	**%**
RTIMP (Dev.) avg. =	**10.99**	**%**
Veg Cover (Dev.) avg. =	**28.69**	**%**
IA (Dev.) avg. =	**0.28**	

Total Sub Basin Area in sq. miles = 0.6659

S508

Land Use Class ...	LDR	MDR	MFR1	MFR2	OPEN	PF	VLDR
Natural or Developed ...	D	D	D	D	N	D	D
Sub-Area (acres) ...	69.8	24.4	21.6	21.6	20.6	5.1	25.6
Base RTIMP (Dev.) ...	15%	30%	45%	45%	---	50%	5%
Veg. Cover (Developed) ...	43%	35%	28%	28%	---	0%	29%
IA (Developed) ...	0.30	0.25	0.25	0.25	---	0.00	0.30

Natural Area =	**10.93**	**%**
Developed Area =	**89.07**	**%**
RTIMP (Dev.) avg. =	**24.42**	**%**
Veg Cover (Dev.) avg. =	**34.13**	**%**
IA (Dev.) avg. =	**0.27**	

Total Sub Basin Area in sq. miles = 0.2949

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S509

Land Use Class	...	H20	LDR	MDR	OPEN	VLDR
Natural or Developed	...	D	D	D	N	D
Sub-Area (acres)	...	1.0	13.8	28.3	15.3	50.0
Base RTIMP (Dev.)	...	100%	15%	30%	---	5%
Veg. Cover (Developed)	...	0%	43%	35%	---	29%
IA (Developed)	...	0.00	0.30	0.25	---	0.30

Natural Area	**=**	**14.09**	**%**
Developed Area	**=**	**85.91**	**%**
RTIMP (Dev.) avg.	**=**	**15.13**	**%**
Veg Cover (Dev.) avg.	**=**	**32.24**	**%**
IA (Dev.) avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.1695

S510

Land Use Class	...	H20	IND	LDR	MDR	MFR2
Natural or Developed	...	D	D	D	D	D
Sub-Area (acres)	...	2.8	10.5	16.9	10.1	40.9
Base RTIMP (Dev.)	...	100%	55%	15%	30%	45%
Veg. Cover (Developed)	...	0%	27%	43%	35%	28%
IA (Developed)	...	0.00	0.15	0.30	0.25	0.25

Natural Area	**=**	**0.00**	**%**
Developed Area	**=**	**100.00**	**%**
RTIMP (Dev.) avg.	**=**	**40.08**	**%**
Veg Cover (Dev.) avg.	**=**	**30.54**	**%**
IA (Dev.) avg.	**=**	**0.24**	

Total Sub Basin Area in sq. miles = 0.1267

S511

Land Use Class	...	H20	LDR	MDR	OPEN	VLDR
Natural or Developed	...	D	D	D	N	D
Sub-Area (acres)	...	2.3	131.3	22.7	47.2	42.9
Base RTIMP (Dev.)	...	100%	15%	30%	---	5%
Veg. Cover (Developed)	...	0%	43%	35%	---	29%
IA (Developed)	...	0.00	0.30	0.25	---	0.30

Natural Area	**=**	**19.15**	**%**
Developed Area	**=**	**80.85**	**%**
RTIMP (Dev.) avg.	**=**	**15.54**	**%**
Veg Cover (Dev.) avg.	**=**	**38.14**	**%**
IA (Dev.) avg.	**=**	**0.29**	

Total Sub Basin Area in sq. miles = 0.3849

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S512

Land Use Class	...	COMM	H20	IND	LDR	MDR	MFR2
Natural or Developed	...	D	D	D	D	D	D
Sub-Area (acres)	...	10.8	4.4	58.0	9.7	38.4	15.5
Base RTIMP (Dev.)	...	80%	100%	55%	15%	30%	45%
Veg. Cover (Developed)	...	15%	0%	27%	43%	35%	28%
IA (Developed)	...	0.10	0.00	0.15	0.30	0.25	0.25

Natural Area	**=**	**0.00**	**%**
Developed Area	**=**	**100.00**	**%**
RTIMP (Dev.) avg.	**=**	**47.43**	**%**
Veg Cover (Dev.) avg.	**=**	**28.59**	**%**
IA (Dev.) avg.	**=**	**0.19**	

Total Sub Basin Area in sq. miles = 0.2136

S513

Land Use Class	...	COMM	LDR	MDR	VLDR
Natural or Developed	...	D	D	D	D
Sub-Area (acres)	...	32.9	349.1	22.0	93.7
Base RTIMP (Dev.)	...	80%	15%	30%	5%
Veg. Cover (Developed)	...	15%	43%	35%	29%
IA (Developed)	...	0.10	0.30	0.25	0.30

Natural Area	**=**	**0.00**	**%**
Developed Area	**=**	**100.00**	**%**
RTIMP (Dev.) avg.	**=**	**18.08**	**%**
Veg Cover (Dev.) avg.	**=**	**37.72**	**%**
IA (Dev.) avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.7776

S514

Land Use Class	...	COMM	LDR	MDR	MFR1	MFR2	MFR3	OPEN	PF	VLDR
Natural or Developed	...	D	D	D	D	D	D	N	D	D
Sub-Area (acres)	...	13.9	135.4	40.0	17.9	54.0	61.2	31.9	49.0	12.3
Base RTIMP (Dev.)	...	80%	15%	30%	45%	45%	45%	---	50%	5%
Veg. Cover (Developed)	...	15%	43%	35%	28%	28%	28%	---	0%	29%
IA (Developed)	...	0.10	0.30	0.25	0.25	0.25	0.25	---	0.00	0.30

Natural Area	**=**	**7.67**	**%**
Developed Area	**=**	**92.33**	**%**
RTIMP (Dev.) avg.	**=**	**33.47**	**%**
Veg Cover (Dev.) avg.	**=**	**29.64**	**%**
IA (Dev.) avg.	**=**	**0.23**	

Total Sub Basin Area in sq. miles = 0.6495

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S515

Land Use Class	...	COMM	H20	IND	LDR	MDR	MFR2	MFR3	OPEN	PF
Natural or Developed	...	D	D	D	D	D	D	D	N	D
Sub-Area (acres)	...	39.3	0.1	4.6	240.1	228.9	30.1	80.0	54.2	27.5
Base RTIMP (Dev.)	...	80%	100%	55%	15%	30%	45%	45%	---	50%
Veg. Cover (Developed)	...	15%	0%	27%	43%	35%	28%	28%	---	0%
IA (Developed)	...	0.10	0.00	0.15	0.30	0.25	0.25	0.25	---	0.00

Natural Area	**=**	**7.69**	**%**
Developed Area	**=**	**92.31**	**%**
RTIMP (Dev.) avg.	**=**	**31.06**	**%**
Veg Cover (Dev.) avg.	**=**	**33.75**	**%**
IA (Dev.) avg.	**=**	**0.25**	

Total Sub Basin Area in sq. miles = 1.1015

S516

Land Use Class	...	COMM	H20	LDR	MDR	MFR2	MFR3	OPEN
Natural or Developed	...	D	D	D	D	D	D	N
Sub-Area (acres)	...	91.7	16.9	2.4	0.6	122.5	37.6	74.0
Base RTIMP (Dev.)	...	80%	100%	15%	30%	45%	45%	---
Veg. Cover (Developed)	...	15%	0%	43%	35%	28%	28%	---
IA (Developed)	...	0.10	0.00	0.30	0.25	0.25	0.25	---

Natural Area	**=**	**21.40**	**%**
Developed Area	**=**	**78.60**	**%**
RTIMP (Dev.) avg.	**=**	**59.94**	**%**
Veg Cover (Dev.) avg.	**=**	**21.72**	**%**
IA (Dev.) avg.	**=**	**0.18**	

Total Sub Basin Area in sq. miles = 0.5400

S600

Land Use Class	...	DESERT	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	903.2	379.4
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 2.0040

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S601

Land Use Class	...	DESERT	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	429.3	142.5
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.8935

S602

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	1205.3
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 1.8833

S603

Land Use Class	...	DESERT	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	66.9	354.0
Base RTIMP (Dev.)	...	---	---
Veg. Cover (Developed)	...	---	---
IA (Developed)	...	---	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.6576

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S604

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	1699.8
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 2.6560

S605

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	694.6
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 1.0853

S606

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	422.4
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.6600

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S607

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	474.4	51.4
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**90.23**	**%**
Developed Area	**=**	**9.77**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.8216

S608

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	239.0	86.3
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**73.46**	**%**
Developed Area	**=**	**26.54**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.5082

S609

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	261.1	97.6
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**72.80**	**%**
Developed Area	**=**	**27.20**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.5603

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S610

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	188.3	197.9
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**48.75**	**%**
Developed Area	**=**	**51.25**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.6034

S611

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	358.7	5.7
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**98.45**	**%**
Developed Area	**=**	**1.55**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.5693

S612

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	148.6	368.9
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**28.71**	**%**
Developed Area	**=**	**71.29**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.8085

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S613

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	509.5	640.3
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**44.31**	**%**
Developed Area	**=**	**55.69**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 1.7965

S614

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	457.4	233.3
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**66.23**	**%**
Developed Area	**=**	**33.77**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 1.0792

S615

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	675.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 1.0548

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S616

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	203.2	120.3
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**62.82**	**%**
Developed Area	**=**	**37.18**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.5054

S617

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	241.6	190.7
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**55.89**	**%**
Developed Area	**=**	**44.11**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.6754

S618

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	595.5	17.7
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**97.11**	**%**
Developed Area	**=**	**2.89**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.9581

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S619

Land Use Class	...	OPEN	
Natural or Developed	...	N	
Sub-Area (acres)	...	529.0	
Base RTIMP (Dev.)	...	---	
Veg. Cover (Developed)	...	---	
IA (Developed)	...	---	

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.8266

S620

Land Use Class	...	OPEN	
Natural or Developed	...	N	
Sub-Area (acres)	...	284.2	
Base RTIMP (Dev.)	...	---	
Veg. Cover (Developed)	...	---	
IA (Developed)	...	---	

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.4441

S621

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	359.4	231.3
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**60.84**	**%**
Developed Area	**=**	**39.16**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.9231

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S622

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	556.6	17.5
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**96.96**	**%**
Developed Area	**=**	**3.04**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.8971

S700

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	50.6	339.7
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**12.97**	**%**
Developed Area	**=**	**87.03**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.6099

S701

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	2.3	139.6	319.1
Base RTIMP (Dev.)	...	80%	---	5%
Veg. Cover (Developed)	...	15%	---	29%
IA (Developed)	...	0.10	---	0.30

Natural Area	**=**	**30.28**	**%**
Developed Area	**=**	**69.72**	**%**
RTIMP (Dev.) avg.	**=**	**5.53**	**%**
Veg Cover (Dev.) avg.	**=**	**28.40**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.7202

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S702

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	38.2	28.9	97.5
Base RTIMP (Dev.)	...	80%	---	5%
Veg. Cover (Developed)	...	15%	---	29%
IA (Developed)	...	0.10	---	0.30

Natural Area	**=**	**17.56**	**%**
Developed Area	**=**	**82.44**	**%**
RTIMP (Dev.) avg.	**=**	**26.11**	**%**
Veg Cover (Dev.) avg.	**=**	**24.70**	**%**
IA (Dev.) avg.	**=**	**0.24**	

Total Sub Basin Area in sq. miles = 0.2570

S703

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	115.7	48.9
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**70.28**	**%**
Developed Area	**=**	**29.72**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.2572

S704

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	104.6	156.6
Base RTIMP (Dev.)	...	---	5%
Veg. Cover (Developed)	...	---	29%
IA (Developed)	...	---	0.30

Natural Area	**=**	**40.03**	**%**
Developed Area	**=**	**59.97**	**%**
RTIMP (Dev.) avg.	**=**	**5.00**	**%**
Veg Cover (Dev.) avg.	**=**	**28.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.4081

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S705

Land Use Class	...	H20	MDR	MFR2	OPEN	VLDR
Natural or Developed	...	D	D	D	N	D
Sub-Area (acres)	...	22.9	181.3	118.7	13.6	146.2
Base RTIMP (Dev.)	...	100%	30%	45%	---	5%
Veg. Cover (Developed)	...	0%	35%	28%	---	29%
IA (Developed)	...	0.00	0.25	0.25	---	0.30

Natural Area	**=**	**2.83**	**%**
Developed Area	**=**	**97.17**	**%**
RTIMP (Dev.) avg.	**=**	**29.43**	**%**
Veg Cover (Dev.) avg.	**=**	**29.37**	**%**
IA (Dev.) avg.	**=**	**0.25**	

Total Sub Basin Area in sq. miles = 0.7542

S705AF

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	117.0
Base RTIMP (Dev.)	...	---
Veg. Cover (Developed)	...	---
IA (Developed)	...	---

Natural Area	**=**	**100.00**	**%**
Developed Area	**=**	**0.00**	**%**
RTIMP (Dev.) avg.	**=**	**0.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.1828

S706

Land Use Class	...	COMM	MDR	MFR2	MFR3	VLDR
Natural or Developed	...	D	D	D	D	D
Sub-Area (acres)	...	6.0	146.7	70.1	133.0	100.5
Base RTIMP (Dev.)	...	80%	30%	45%	45%	5%
Veg. Cover (Developed)	...	15%	35%	28%	28%	29%
IA (Developed)	...	0.10	0.25	0.25	0.25	0.30

Natural Area	**=**	**0.00**	**%**
Developed Area	**=**	**100.00**	**%**
RTIMP (Dev.) avg.	**=**	**31.82**	**%**
Veg Cover (Dev.) avg.	**=**	**29.97**	**%**
IA (Dev.) avg.	**=**	**0.26**	

Total Sub Basin Area in sq. miles = 0.7129

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S707

Land Use Class ...	COMM	IND	MDR	MFR3	OPEN	VLDR
Natural or Developed ...	D	D	D	D	N	D
Sub-Area (acres) ...	22.1	152.6	56.0	156.7	3.6	17.5
Base RTIMP (Dev.) ...	80%	55%	30%	45%	---	5%
Veg. Cover (Developed) ...	15%	27%	35%	28%	---	29%
IA (Developed) ...	0.10	0.15	0.25	0.25	---	0.30

Natural Area =	**0.89**	**%**
Developed Area =	**99.11**	**%**
RTIMP (Dev.) avg. =	**46.88**	**%**
Veg Cover (Dev.) avg. =	**27.71**	**%**
IA (Dev.) avg. =	**0.21**	

Total Sub Basin Area in sq. miles = 0.6383

S708

Land Use Class ...	H20	LDR	OPEN	VLDR
Natural or Developed ...	D	D	N	D
Sub-Area (acres) ...	0.3	129.7	55.3	266.8
Base RTIMP (Dev.) ...	100%	15%	---	5%
Veg. Cover (Developed) ...	0%	43%	---	29%
IA (Developed) ...	0.00	0.30	---	0.30

Natural Area =	**12.23**	**%**
Developed Area =	**87.77**	**%**
RTIMP (Dev.) avg. =	**8.33**	**%**
Veg Cover (Dev.) avg. =	**33.06**	**%**
IA (Dev.) avg. =	**0.30**	

Total Sub Basin Area in sq. miles = 0.7065

S709

Land Use Class ...	H20	LDR	OPEN	VLDR
Natural or Developed ...	D	D	N	D
Sub-Area (acres) ...	5.8	100.8	76.5	98.9
Base RTIMP (Dev.) ...	100%	15%	---	5%
Veg. Cover (Developed) ...	0%	43%	---	29%
IA (Developed) ...	0.00	0.30	---	0.30

Natural Area =	**27.14**	**%**
Developed Area =	**72.86**	**%**
RTIMP (Dev.) avg. =	**12.59**	**%**
Veg Cover (Dev.) avg. =	**34.56**	**%**
IA (Dev.) avg. =	**0.29**	

Total Sub Basin Area in sq. miles = 0.4406

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S710

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	D	D	N
Sub-Area (acres)	...	3.1	42.1	26.2
Base RTIMP (Dev.)	...	100%	15%	---
Veg. Cover (Developed)	...	0%	43%	---
IA (Developed)	...	0.00	0.30	---

Natural Area	**=**	**36.69**	**%**
Developed Area	**=**	**63.31**	**%**
RTIMP (Dev.) avg.	**=**	**20.80**	**%**
Veg Cover (Dev.) avg.	**=**	**39.60**	**%**
IA (Dev.) avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.1116

S711

Land Use Class	...	H20	LDR
Natural or Developed	...	D	D
Sub-Area (acres)	...	8.5	93.4
Base RTIMP (Dev.)	...	100%	15%
Veg. Cover (Developed)	...	0%	43%
IA (Developed)	...	0.00	0.30

Natural Area	**=**	**0.00**	**%**
Developed Area	**=**	**100.00**	**%**
RTIMP (Dev.) avg.	**=**	**22.07**	**%**
Veg Cover (Dev.) avg.	**=**	**38.97**	**%**
IA (Dev.) avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.1591

S712

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	D	D	N
Sub-Area (acres)	...	2.7	37.4	3.4
Base RTIMP (Dev.)	...	100%	15%	---
Veg. Cover (Developed)	...	0%	43%	---
IA (Developed)	...	0.00	0.30	---

Natural Area	**=**	**7.75**	**%**
Developed Area	**=**	**92.25**	**%**
RTIMP (Dev.) avg.	**=**	**20.78**	**%**
Veg Cover (Dev.) avg.	**=**	**39.61**	**%**
IA (Dev.) avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.0680

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S713

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	D	D	N
Sub-Area (acres)	...	4.1	25.5	39.1
Base RTIMP (Dev.)	...	100%	15%	---
Veg. Cover (Developed)	...	0%	43%	---
IA (Developed)	...	0.00	0.30	---

Natural Area	**=**	**56.96**	**%**
Developed Area	**=**	**43.04**	**%**
RTIMP (Dev.) avg.	**=**	**26.78**	**%**
Veg Cover (Dev.) avg.	**=**	**36.61**	**%**
IA (Dev.) avg.	**=**	**0.26**	

Total Sub Basin Area in sq. miles = 0.1073

S714

Land Use Class	...	H20	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	0.0	38.3
Base RTIMP (Dev.)	...	100%	---
Veg. Cover (Developed)	...	0%	---
IA (Developed)	...	0.00	---

Natural Area	**=**	**99.90**	**%**
Developed Area	**=**	**0.10**	**%**
RTIMP (Dev.) avg.	**=**	**100.00**	**%**
Veg Cover (Dev.) avg.	**=**	**0.00**	**%**
IA (Dev.) avg.	**=**	**0.00**	

Total Sub Basin Area in sq. miles = 0.0599

S715

Land Use Class	...	LDR	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	37.0	103.5
Base RTIMP (Dev.)	...	15%	---
Veg. Cover (Developed)	...	43%	---
IA (Developed)	...	0.30	---

Natural Area	**=**	**73.66**	**%**
Developed Area	**=**	**26.34**	**%**
RTIMP (Dev.) avg.	**=**	**15.00**	**%**
Veg Cover (Dev.) avg.	**=**	**42.50**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.2196

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S716

Land Use Class	...	COMM	H20	IND	LDR	MDR	MFR2	OPEN
Natural or Developed	...	D	D	D	D	D	D	N
Sub-Area (acres)	...	25.3	10.7	30.4	345.2	231.3	1.2	77.9
Base RTIMP (Dev.)	...	80%	100%	55%	15%	30%	45%	---
Veg. Cover (Developed)	...	15%	0%	27%	43%	35%	28%	---
IA (Developed)	...	0.10	0.00	0.15	0.30	0.25	0.25	---

Natural Area	**=**	**10.79**	**%**
Developed Area	**=**	**89.21**	**%**
RTIMP (Dev.) avg.	**=**	**26.30**	**%**
Veg Cover (Dev.) avg.	**=**	**37.26**	**%**
IA (Dev.) avg.	**=**	**0.26**	

Total Sub Basin Area in sq. miles = 1.1282

S717

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	D	D	N
Sub-Area (acres)	...	8.1	72.0	103.0
Base RTIMP (Dev.)	...	100%	15%	---
Veg. Cover (Developed)	...	0%	43%	---
IA (Developed)	...	0.00	0.30	---

Natural Area	**=**	**56.26**	**%**
Developed Area	**=**	**43.74**	**%**
RTIMP (Dev.) avg.	**=**	**23.56**	**%**
Veg Cover (Dev.) avg.	**=**	**38.22**	**%**
IA (Dev.) avg.	**=**	**0.27**	

Total Sub Basin Area in sq. miles = 0.2860

S718

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	D	D	N
Sub-Area (acres)	...	0.2	118.2	164.5
Base RTIMP (Dev.)	...	100%	15%	---
Veg. Cover (Developed)	...	0%	43%	---
IA (Developed)	...	0.00	0.30	---

Natural Area	**=**	**58.15**	**%**
Developed Area	**=**	**41.85**	**%**
RTIMP (Dev.) avg.	**=**	**15.17**	**%**
Veg Cover (Dev.) avg.	**=**	**42.42**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.4420

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S719

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	D	D	N
Sub-Area (acres)	...	0.1	76.9	21.4
Base RTIMP (Dev.)	...	100%	15%	---
Veg. Cover (Developed)	...	0%	43%	---
IA (Developed)	...	0.00	0.30	---

Natural Area	**=**	**21.77**	**%**
Developed Area	**=**	**78.23**	**%**
RTIMP (Dev.) avg.	**=**	**15.13**	**%**
Veg Cover (Dev.) avg.	**=**	**42.44**	**%**
IA (Dev.) avg.	**=**	**0.30**	

Total Sub Basin Area in sq. miles = 0.1538

S720

Land Use Class	...	H20	IND	LDR	OPEN
Natural or Developed	...	D	D	D	N
Sub-Area (acres)	...	12.2	4.9	199.9	19.6
Base RTIMP (Dev.)	...	100%	55%	15%	---
Veg. Cover (Developed)	...	0%	27%	43%	---
IA (Developed)	...	0.00	0.15	0.30	---

Natural Area	**=**	**8.27**	**%**
Developed Area	**=**	**91.73**	**%**
RTIMP (Dev.) avg.	**=**	**20.69**	**%**
Veg Cover (Dev.) avg.	**=**	**39.76**	**%**
IA (Dev.) avg.	**=**	**0.28**	

Total Sub Basin Area in sq. miles = 0.3697

S721

Land Use Class	...	COMM	H20	IND	MFR1	MFR2
Natural or Developed	...	D	D	D	D	D
Sub-Area (acres)	...	1.0	12.0	44.9	70.2	86.0
Base RTIMP (Dev.)	...	80%	100%	55%	45%	45%
Veg. Cover (Developed)	...	15%	0%	27%	28%	28%
IA (Developed)	...	0.10	0.00	0.15	0.25	0.25

Natural Area	**=**	**0.00**	**%**
Developed Area	**=**	**100.00**	**%**
RTIMP (Dev.) avg.	**=**	**50.35**	**%**
Veg Cover (Dev.) avg.	**=**	**25.79**	**%**
IA (Dev.) avg.	**=**	**0.21**	

Total Sub Basin Area in sq. miles = 0.3346

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S722

Land Use Class	...	H20	IND	LDR	OPEN
Natural or Developed	...	D	D	D	N
Sub-Area (acres)	...	14.4	124.9	379.5	92.6
Base RTIMP (Dev.)	...	100%	55%	15%	---
Veg. Cover (Developed)	...	0%	27%	43%	---
IA (Developed)	...	0.00	0.15	0.30	---

Natural Area	**=**	**15.15**	**%**
Developed Area	**=**	**84.85**	**%**
RTIMP (Dev.) avg.	**=**	**26.98**	**%**
Veg Cover (Dev.) avg.	**=**	**37.59**	**%**
IA (Dev.) avg.	**=**	**0.26**	

Total Sub Basin Area in sq. miles = 0.9552

S723

Land Use Class	...	IND	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	27.3	27.2
Base RTIMP (Dev.)	...	55%	---
Veg. Cover (Developed)	...	27%	---
IA (Developed)	...	0.15	---

Natural Area	**=**	**49.88**	**%**
Developed Area	**=**	**50.12**	**%**
RTIMP (Dev.) avg.	**=**	**55.00**	**%**
Veg Cover (Dev.) avg.	**=**	**27.00**	**%**
IA (Dev.) avg.	**=**	**0.15**	

Total Sub Basin Area in sq. miles = 0.0852

S724

Land Use Class	...	H20	IND	LDR	OPEN
Natural or Developed	...	D	D	D	N
Sub-Area (acres)	...	6.2	582.7	41.8	109.2
Base RTIMP (Dev.)	...	100%	55%	15%	---
Veg. Cover (Developed)	...	0%	27%	43%	---
IA (Developed)	...	0.00	0.15	0.30	---

Natural Area	**=**	**14.76**	**%**
Developed Area	**=**	**85.24**	**%**
RTIMP (Dev.) avg.	**=**	**52.79**	**%**
Veg Cover (Dev.) avg.	**=**	**27.76**	**%**
IA (Dev.) avg.	**=**	**0.16**	

Total Sub Basin Area in sq. miles = 1.1559

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S725

Land Use Class	...	COMM	IND	MFR2	MFR3	OPEN
Natural or Developed	...	D	D	D	D	N
Sub-Area (acres)	...	100.6	396.7	108.6	54.6	80.3
Base RTIMP (Dev.)	...	80%	55%	45%	45%	---
Veg. Cover (Developed)	...	15%	27%	28%	28%	—
IA (Developed)	...	0.10	0.15	0.25	0.25	---

Natural Area	**=**	**10.84**	**%**
Developed Area	**=**	**89.16**	**%**
RTIMP (Dev.) avg.	**=**	**56.34**	**%**
Veg Cover (Dev.) avg.	**=**	**25.30**	**%**
IA (Dev.) avg.	**=**	**0.17**	

Total Sub Basin Area in sq. miles = 1.1575

S726

Land Use Class	...	COMM	LDR	MFR2	OPEN
Natural or Developed	...	D	D	D	N
Sub-Area (acres)	...	23.6	103.8	37.9	48.5
Base RTIMP (Dev.)	...	80%	15%	45%	---
Veg. Cover (Developed)	...	15%	43%	28%	---
IA (Developed)	...	0.10	0.30	0.25	---

Natural Area	**=**	**22.67**	**%**
Developed Area	**=**	**77.33**	**%**
RTIMP (Dev.) avg.	**=**	**31.17**	**%**
Veg Cover (Dev.) avg.	**=**	**35.13**	**%**
IA (Dev.) avg.	**=**	**0.26**	

Total Sub Basin Area in sq. miles = 0.3341

S727

Land Use Class	...	COMM	LDR	MFR2	MFR3	OPEN
Natural or Developed	...	D	D	D	D	N
Sub-Area (acres)	...	123.9	41.1	45.7	10.4	18.9
Base RTIMP (Dev.)	...	80%	15%	45%	45%	---
Veg. Cover (Developed)	...	15%	43%	28%	28%	---
IA (Developed)	...	0.10	0.30	0.25	0.25	---

Natural Area	**=**	**7.87**	**%**
Developed Area	**=**	**92.13**	**%**
RTIMP (Dev.) avg.	**=**	**59.03**	**%**
Veg Cover (Dev.) avg.	**=**	**23.28**	**%**
IA (Dev.) avg.	**=**	**0.18**	

Total Sub Basin Area in sq. miles = 0.3750

Table A-5

Worksheet
Land use composition and corresponding rainfall loss characteristics for each subbasin
Future watershed conditions

S728					
Land Use Class ...	COMM	MDR	MFR3	OPEN
Natural or Developed ...	D	D	D	N
Sub-Area (acres) ...	96.2	4.7	6.3	68.4
Base RTIMP (Dev.) ...	80%	30%	45%	---
Veg. Cover (Developed) ...	15%	35%	28%	---
IA (Developed) ...	0.10	0.25	0.25	---

Natural Area =	**38.96**	**%**
Developed Area =	**61.04**	**%**
RTIMP (Dev.) avg. =	**75.78**	**%**
Veg Cover (Dev.) avg. =	**16.60**	**%**
IA (Dev.) avg. =	**0.12**	

Total Sub Basin Area in sq. miles = 0.2743

Table A-6

Green & Ampt rainfall loss parameters for each subbasin for future watershed conditions

Sub-basin ID (1)	Total sq. mi. (2)	Area Natural % (3)	Urban % (4)	IA, in inches Natural (5)	IA, in inches Urban (6)	IA, in inches Weighted (7)	RTIMP, in % Natural (8)	RTIMP, in % Urban (9)	RTIMP, in % Total (10)	Vegetation Cover, in % Natural (11)	Vegetation Cover, in % Urban (12)	Vegetation Cover, in % Weighted (13)	XKSAT Bare Ground in/hr (14)	PSIF inches (15)	DTHETA Natural dry (16)	DTHETA Urban normal (17)	DTHETA Weighted (18)	XKSAT Corrected for Veg. in/hr (19)
S100	0.5737	84.5	15.5	0.19	0.28	0.21	25	12	26	32	27	31	0.27	4.65	0.35	0.25	0.33	0.33
S101	0.6312	100.0	0.0	0.26	0.00	0.26	15	0	15	32	0	32	0.20	5.30	0.37	0.25	0.37	0.25
S102	0.4495	52.2	47.8	0.15	0.30	0.22	30	5	32	32	29	30	0.31	4.45	0.35	0.25	0.30	0.38
S103	0.3947	100.0	0.0	0.24	0.00	0.24	17	0	17	32	0	32	0.18	5.60	0.38	0.25	0.38	0.22
S104	0.9002	73.9	26.1	0.22	0.20	0.21	13	43	23	32	22	29	0.18	5.60	0.38	0.25	0.35	0.22
S105	0.5938	48.1	51.9	0.22	0.26	0.24	13	21	23	32	40	36	0.18	5.60	0.38	0.25	0.31	0.23
S106	0.5672	27.8	72.2	0.19	0.30	0.27	7	5	11	32	29	29	0.21	5.20	0.37	0.25	0.28	0.26
S107	0.9359	33.1	66.9	0.15	0.30	0.25	0	5	3	32	29	30	0.24	4.90	0.35	0.25	0.28	0.29
S200	0.9588	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S201	0.3501	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S202	0.1268	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.35	4.25	0.35	0.25	0.35	0.44
S203	0.3734	39.3	60.7	0.25	0.30	0.28	35	5	37	32	29	30	0.35	4.25	0.35	0.25	0.29	0.43
S204	0.9506	97.7	2.3	0.25	0.30	0.25	32	5	32	32	29	32	0.35	4.25	0.35	0.25	0.35	0.44
S205	0.4132	59.6	40.4	0.21	0.21	0.21	21	40	34	32	22	28	0.28	4.60	0.35	0.25	0.31	0.34
S206	0.8529	25.8	74.2	0.25	0.30	0.29	27	5	30	32	28	29	0.27	4.65	0.35	0.25	0.28	0.33
S207	0.9569	68.8	31.2	0.25	0.30	0.27	34	5	35	32	29	31	0.33	4.35	0.35	0.25	0.32	0.41
S208	1.1025	57.7	42.3	0.23	0.29	0.25	24	16	29	32	28	30	0.20	5.30	0.37	0.25	0.32	0.25
S209	0.6504	84.1	15.9	0.22	0.30	0.23	15	5	16	32	29	31	0.23	5.00	0.36	0.25	0.34	0.28
S210	0.4809	54.9	45.1	0.16	0.30	0.22	2	5	4	32	29	30	0.23	5.00	0.36	0.25	0.31	0.28
S211	0.4876	40.5	59.5	0.19	0.30	0.25	4	5	7	32	29	30	0.21	5.20	0.37	0.25	0.30	0.26
S300	0.6151	25.7	74.3	0.25	0.30	0.28	25	12	32	32	34	34	0.29	4.55	0.35	0.25	0.28	0.37
S301	0.9945	13.1	86.9	0.25	0.30	0.29	35	12	42	32	37	36	0.35	4.25	0.35	0.25	0.26	0.45
S302	0.4645	55.2	44.8	0.24	0.29	0.26	24	13	29	32	33	33	0.29	4.55	0.35	0.25	0.31	0.36
S303	0.7078	72.9	27.1	0.22	0.30	0.24	10	5	11	32	29	31	0.28	4.60	0.35	0.25	0.32	0.35
S304	0.8225	39.3	60.7	0.18	0.30	0.25	3	6	7	32	28	30	0.22	5.10	0.36	0.25	0.29	0.27
S400	1.0480	40.0	60.0	0.26	0.23	0.24	15	40	36	26	25	26	0.19	5.40	0.38	0.25	0.30	0.22
S401	0.6462	14.7	85.3	0.30	0.29	0.29	7	8	13	26	29	28	0.22	5.10	0.36	0.25	0.27	0.26
S402	0.7399	22.7	77.3	0.31	0.23	0.25	3	40	33	26	29	28	0.18	5.60	0.38	0.25	0.28	0.22
S403	0.5591	3.4	96.6	0.30	0.22	0.23	0	39	37	26	32	32	0.07	8.00	0.30	0.15	0.16	0.09
S404	0.2633	76.6	23.4	0.27	0.21	0.26	0	36	8	26	22	25	0.12	6.60	0.37	0.19	0.33	0.14
S500	1.0544	35.7	64.3	0.25	0.29	0.28	35	9	39	32	28	29	0.35	4.25	0.35	0.25	0.29	0.43
S501	0.6142	36.6	63.4	0.22	0.29	0.27	23	9	27	32	30	31	0.31	4.45	0.35	0.25	0.29	0.38

Table A-6

Green & Ampt rainfall loss parameters for each subbasin for future watershed conditions

Sub-basin ID (1)	Total sq. mi. (2)	Area Natural % (3)	Urban % (4)	IA, in inches Natural (5)	IA, in inches Urban (6)	IA, in inches Weighted (7)	RTIMP, in % Natural (8)	RTIMP, in % Urban (9)	RTIMP, in % Total (10)	Vegetation Cover, in % Natural (11)	Vegetation Cover, in % Urban (12)	Vegetation Cover, in % Weighted (13)	XKSAT Bare Ground in/hr (14)	PSIF inches (15)	DTHETA Natural dry (16)	DTHETA Urban normal (17)	DTHETA Weighted (18)	XKSAT Corrected for Veg. in/hr (19)
S502	0.4026	46.3	53.7	0.27	0.28	0.27	14	17	22	26	31	29	0.30	4.50	0.35	0.25	0.30	0.36
S503	0.9940	28.3	71.7	0.26	0.27	0.27	23	14	31	26	33	31	0.27	4.65	0.35	0.25	0.28	0.33
S504	0.3259	0.0	100.0	0.35	0.24	0.24	0	33	33	26	29	29	0.32	4.40	0.35	0.25	0.25	0.39
S505	0.1430	79.8	20.2	0.25	0.18	0.24	14	33	20	26	17	24	0.32	4.40	0.35	0.25	0.33	0.37
S506	0.1507	53.2	46.8	0.29	0.17	0.23	9	43	27	26	18	22	0.17	5.70	0.39	0.25	0.32	0.19
S507	0.6659	0.5	99.5	0.34	0.28	0.28	1	11	12	26	29	29	0.17	5.70	0.39	0.25	0.25	0.21
S508	0.2949	10.9	89.1	0.33	0.27	0.28	0	24	22	26	34	33	0.20	5.30	0.37	0.25	0.26	0.25
S509	0.1695	14.1	85.9	0.28	0.28	0.28	23	15	33	26	32	31	0.27	4.65	0.35	0.25	0.26	0.33
S510	0.1267	0.0	100.0	0.32	0.24	0.24	6	40	44	26	31	31	0.09	7.30	0.33	0.15	0.15	0.11
S511	0.3849	19.2	80.8	0.29	0.29	0.29	19	16	29	26	38	36	0.17	5.70	0.39	0.25	0.28	0.22
S512	0.2136	0.0	100.0	0.35	0.19	0.19	0	47	48	26	29	29	0.07	8.00	0.30	0.15	0.15	0.08
S513	0.7778	0.0	100.0	0.32	0.28	0.28	1	18	19	26	38	38	0.19	5.40	0.38	0.25	0.25	0.25
S514	0.6495	7.7	92.3	0.28	0.23	0.24	0	33	31	26	30	29	0.08	7.60	0.32	0.15	0.16	0.10
S515	1.1015	7.7	92.3	0.32	0.25	0.25	0	31	29	26	34	33	0.05	8.80	0.27	0.15	0.16	0.06
S516	0.5400	21.4	78.6	0.35	0.18	0.22	0	60	47	26	22	23	0.25	4.80	0.35	0.25	0.27	0.29
S600	2.0181	100.0	0.0	0.25	0.00	0.25	22	0	22	32	0	32	0.39	4.00	0.35	0.25	0.35	0.49
S601	0.9008	100.0	0.0	0.25	0.00	0.25	44	0	44	32	0	32	0.17	5.70	0.39	0.25	0.39	0.21
S602	1.8833	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.33	4.35	0.35	0.25	0.35	0.41
S603	0.6650	100.0	0.0	0.25	0.00	0.25	41	0	41	32	0	32	0.16	5.80	0.39	0.25	0.39	0.20
S604	2.6560	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.33	4.35	0.35	0.25	0.35	0.41
S605	1.0853	100.0	0.0	0.25	0.00	0.25	35	0	35	32	0	32	0.33	4.35	0.35	0.25	0.35	0.41
S606	0.6600	100.0	0.0	0.26	0.00	0.26	35	0	35	32	0	32	0.30	4.50	0.35	0.25	0.35	0.37
S607	0.8216	90.2	9.8	0.25	0.30	0.26	34	5	35	32	29	32	0.22	5.10	0.36	0.25	0.35	0.27
S608	0.5082	73.5	26.5	0.25	0.30	0.27	37	5	37	32	29	31	0.16	5.80	0.39	0.25	0.36	0.20
S609	0.5603	72.8	27.2	0.27	0.30	0.28	27	5	28	32	29	31	0.38	4.10	0.35	0.25	0.32	0.47
S610	0.6034	48.8	51.2	0.26	0.30	0.28	39	5	40	32	29	30	0.22	5.10	0.36	0.25	0.30	0.27
S611	0.5693	98.4	1.6	0.25	0.30	0.25	35	5	35	32	29	32	0.33	4.35	0.35	0.25	0.35	0.41
S612	0.8085	28.7	71.3	0.25	0.30	0.29	31	5	34	32	29	30	0.13	6.40	0.38	0.21	0.26	0.16
S613	1.7965	44.3	55.7	0.25	0.30	0.28	34	5	36	32	29	30	0.29	4.55	0.35	0.25	0.29	0.35
S614	1.0792	66.2	33.8	0.24	0.30	0.26	34	5	35	32	29	31	0.32	4.40	0.35	0.25	0.32	0.39
S615	1.0548	100.0	0.0	0.25	0.00	0.25	55	0	55	32	0	32	0.14	6.20	0.39	0.23	0.39	0.17
S616	0.5054	62.8	37.2	0.22	0.30	0.25	19	5	21	32	29	31	0.21	5.20	0.37	0.25	0.32	0.26

Table A-6

Green & Ampt rainfall loss parameters for each subbasin for future watershed conditions

Sub-basin ID	Total sq. mi.	Area Natural %	Urban %	IA, in inches			RTIMP, in %			Vegetation Cover, in %			XKSAT Bare Ground in/hr	PSIF inches	DTHETA			XKSAT Corrected for Veg. in/hr
				Natural	Urban	Weighted	Natural	Urban	Total	Natural	Urban	Weighted			Natural dry	Urban normal	Weighted	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
S617	0.6754	55.9	44.1	0.23	0.30	0.26	23	5	24	32	29	30	0.25	4.80	0.35	0.25	0.31	0.31
S618	0.9581	97.1	2.9	0.20	0.30	0.21	22	5	22	32	29	32	0.21	5.20	0.37	0.25	0.36	0.26
S619	0.8266	100.0	0.0	0.27	0.00	0.27	39	0	39	32	0	32	0.11	6.80	0.36	0.17	0.36	0.14
S620	0.4441	100.0	0.0	0.23	0.00	0.23	37	0	37	32	0	32	0.13	6.40	0.38	0.21	0.38	0.16
S621	0.9231	60.8	39.2	0.17	0.30	0.22	3	5	4	32	29	31	0.25	4.80	0.35	0.25	0.31	0.31
S622	0.8971	97.0	3.0	0.18	0.30	0.19	4	5	4	32	29	32	0.24	4.90	0.35	0.25	0.35	0.30
S700	0.6099	13.0	87.0	0.17	0.30	0.28	5	5	9	32	29	29	0.22	5.10	0.36	0.25	0.26	0.27
S701	0.7202	30.3	69.7	0.22	0.30	0.28	14	6	18	32	28	29	0.18	5.60	0.38	0.25	0.29	0.22
S702	0.2570	17.6	82.4	0.17	0.24	0.23	4	26	24	32	25	26	0.22	5.10	0.36	0.25	0.27	0.26
S703	0.2573	70.3	29.7	0.15	0.30	0.19	0	5	1	32	29	31	0.24	4.90	0.35	0.25	0.32	0.30
S704	0.4081	40.0	60.0	0.26	0.30	0.28	11	5	14	32	29	30	0.24	4.90	0.35	0.25	0.29	0.29
S705	0.7542	2.8	97.2	0.22	0.25	0.25	7	29	33	32	29	29	0.13	6.40	0.38	0.21	0.21	0.16
S705AF	0.1828	100.0	0.0	0.31	0.00	0.31	0	0	0	15	0	15	0.03	10.10	0.22	0.13	0.22	0.03
S706	0.7129	0.0	100.0	0.29	0.26	0.26	7	32	37	26	30	30	0.17	5.70	0.39	0.25	0.25	0.21
S707	0.6383	0.9	99.1	0.28	0.21	0.21	8	47	51	26	28	28	0.14	6.20	0.39	0.23	0.23	0.17
S708	0.7065	12.2	87.8	0.22	0.30	0.29	0	8	7	15	33	31	0.04	9.70	0.25	0.15	0.16	0.05
S709	0.4406	27.1	72.9	0.30	0.29	0.29	0	13	9	15	35	29	0.02	11.20	0.19	0.10	0.13	0.02
S710	0.1117	36.7	63.3	0.15	0.28	0.23	0	21	13	15	40	31	0.03	10.10	0.22	0.13	0.16	0.04
S711	0.1591	0.0	100.0	0.28	0.28	0.28	0	22	22	15	39	39	0.02	11.20	0.19	0.10	0.10	0.03
S712	0.0680	7.8	92.2	0.17	0.28	0.27	0	21	19	15	40	38	0.03	10.10	0.22	0.13	0.13	0.04
S713	0.1074	57.0	43.0	0.15	0.26	0.20	0	27	12	15	37	24	0.03	10.10	0.22	0.13	0.18	0.03
S714	0.0599	99.9	0.1	0.35	0.00	0.35	0	100	0	15	0	15	0.06	8.40	0.29	0.15	0.29	0.06
S715	0.2196	73.7	26.3	0.31	0.30	0.31	0	15	4	15	43	22	0.02	11.20	0.19	0.10	0.17	0.02
S716	1.1284	10.8	89.2	0.28	0.26	0.26	0	26	23	15	37	35	0.03	10.10	0.22	0.13	0.14	0.04
S717	0.2860	56.3	43.7	0.25	0.27	0.26	0	24	10	15	38	25	0.02	11.20	0.19	0.10	0.15	0.02
S718	0.4420	58.1	41.9	0.25	0.30	0.27	0	15	6	15	42	26	0.02	11.20	0.19	0.10	0.15	0.02
S719	0.1538	21.8	78.2	0.33	0.30	0.31	0	15	12	15	42	36	0.01	12.40	0.15	0.05	0.07	0.01
S720	0.3697	8.3	91.7	0.29	0.28	0.28	0	21	19	15	40	38	0.02	11.20	0.19	0.10	0.11	0.03
S721	0.3346	0.0	100.0	0.30	0.21	0.21	0	50	50	15	26	26	0.09	7.30	0.33	0.15	0.15	0.11
S722	0.9552	15.1	84.9	0.30	0.26	0.26	0	27	23	15	38	34	0.04	9.70	0.25	0.15	0.16	0.05
S723	0.0852	49.9	50.1	0.29	0.15	0.22	0	55	28	15	27	21	0.03	10.10	0.22	0.13	0.17	0.03
S724	1.1564	14.8	85.2	0.27	0.16	0.18	0	53	45	15	28	26	0.02	11.20	0.19	0.10	0.11	0.02

Table A-6

Green & Ampt rainfall loss parameters for each subbasin for future watershed conditions

Sub-basin ID	Total sq. mi.	Area Natural %	Urban %	IA, in inches			RTIMP, in %			Vegetation Cover, in %			XKSAT Bare Ground in/hr	PSIF inches	DTHETA			XKSAT Corrected for Veg. in/hr
				Natural	Urban	Weighted	Natural	Urban	Total	Natural	Urban	Weighted			Natural dry	Urban normal	Weighted	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
S725	1.1575	10.8	89.2	0.30	0.17	0.18	0	56	50	15	25	24	0.05	8.80	0.27	0.15	0.16	0.06
S726	0.3341	22.7	77.3	0.31	0.26	0.27	7	31	29	15	35	31	0.17	5.70	0.39	0.25	0.28	0.21
S727	0.3750	7.9	92.1	0.27	0.18	0.18	0	59	54	15	23	23	0.04	9.70	0.25	0.15	0.16	0.05
S728	0.2757	39.0	61.0	0.35	0.12	0.21	0	76	46	15	17	16	0.21	5.20	0.37	0.25	0.30	0.22

IA composite: (7) = [(5)*(3) + (6)*(4)]/100

RTIMP total: (10) = (8) + ((9) - ((9)*((8)/100)))*((4)/100)

Vegetation Cover composite: (13) = [(11)*(3) + (12)*(4)]/100

DTHETA composite: (18) = [(16)*(3) + (17)*(4)]/100

XKSAT Corrected: (19) = (14)*[(13)/100 * 1.111 + 0.889] where (13) > 10 and (14) < 1.2

RTIMP Old total: (10) = [((8)/100) + (4) *((2) - ((2)*((8)/100))) * ((9)/100)] * 100

Project: N. PEORIA ADMP		Project Number: 82000146	
Notes: Sample Calculations		Scale:	
		Page 1 of 6 Page(s)	
Computed By: MCC	Date:	Checked By:	Date:

The following is an example of the calculation procedures used in preparing the data in Tables A-2 through A-4. Sample calculations are performed for subbasin S503. It should be noted that some disparity between sample calculations and values in the tables can exist due to greater precision of the spreadsheet numerics.

Step 1: Calculate the log-average value of XKSAT. Refer to Table A-2, page 12

Log-Average XKSAT = 10^a, where

$$a = \left[\frac{(3.2)\log 0.94 + (81.0)\log 0.24 + (22.5)\log 0.16 + (1.5)\log 0.31 + (406.5)\log 0.35 + (120.8)\log 0.13}{3.2 + 81.0 + 22.5 + 1.5 + 406.5 + 120.8}\right]$$

$$a = \frac{-361.6}{636.1} = -0.568$$

Log-Average XKSAT = $10^{-0.568}$ = 0.27 IN/HR

This value is placed in Table A-2, row 6 of the calculation set for subbasin S503, and in Table A-4, column 15.

Step 2: Determine DTHETA and PSIF corresponding to Log-Average XKSAT. Use the Log-Average value of 0.27 IN/HR to look up the values for $DTHETA_{dry}$, $DTHETA_{normal}$ and PSIF in Table A-1.

$DTHETA_{DRY}$ = 0.350
$DTHETA_{NORMAL}$ = 0.250
PSIF = 4.650"

These values are placed in Table A-2, rows 8, 9 and 7, respectively, and in Table A-4, columns 16, 17 and 15, respectively.

Step 3: Calculate the weighted value of natural area RTIMP for the subbasin. Refer to Table A-2, page 12.

$$RTIMP_{weighted} = \left[\frac{(3.2)(0) + (81.0)(0) + (22.5)(30) + (1.8)(30) + (406.8)(35) + (120.8)(0)}{3.2 + 81.0 + 22.5 + 1.8 + 406.8 + 120.8} \right]$$

$$RTIMP_{weighted} = 23.17\ \%$$

This value is placed in Table A-2, row 10 of the calculation set for subbasin 5503, and in column 8 of Table A-4.

Step 4: Calculate the weighted value of surface retention, IA, for the subbasin. Refer to Table A-2, page 12.

$$IA_{weighted} = \left[\frac{(3.2)(0.35) + (81.0)(0.15) + (22.5)(0.25) + (1.8)(0.15) + (406.8)(0.25) + (120.8)(0.25)}{3.2 + 81.0 + 22.5 + 1.8 + 406.8 + 120.8} \right]$$

$$IA_{weighted} = 0.26^{IN}$$

This value is placed in Table A-2, row 12 of the calculation set for subbasin 5503, and in column 5 of Table A-4.

Stantec

Project:		Project Number:	
Notes:		Scale:	
		Page 3 of 6 Page(s)	
Computed By:	Date:	Checked By:	Date:

Step 5: Calculate the percentage of natural area in the subbasin. Refer to Table A-3, page 12. A land use is considered "natural" if the identifier in row 2 is "N".

$$\text{Natural Area} = \left[\frac{357.3}{278.9 + 357.3}\right] 100$$

Natural Area = 56.16 %

This value is placed in Table A-3, row 7 of the calculation set for subbasin 5503, and in Table A-4, column 3.

Step 6: Calculate the percentage of developed area in the subbasin. Refer to Table A-3, page 12. A land use is considered "developed" if the identifier in row 2 is "D".

$$\text{Developed Area} = \left[\frac{278.9}{278.9 + 357.3}\right] 100$$

Developed Area = 43.84 %

This value is placed in Table A-3, row 8 of the calculation set for subbasin 5503, and in Table A-4, column 4.

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Project:		Project Number:	
Notes:		Scale:	
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Computed By:	Date:	Checked By:	Date:

Step 7: Calculate the average developed area RTIMP for the subbasin. Refer to Table A-3, page 12. It should be noted that the average value is for the developed area only of the subbasin.

$$RTIMP_{dev}\text{-}avg = \frac{(10)(278.9)}{278.9} = 10\%$$

This value is placed in Table A-3, row 9 of the calculation set for subbasin S503, and in Table A-4, column 9.

Step 8: Calculate the average developed area vegetative cover density for the subbasin. Refer to Table A-3, page 12. It should be noted that the average value is for the developed area only of the subbasin.

$$Veg.\ Cover_{dev}\text{-}avg = \frac{(0)(278.9)}{278.9} = 0\%$$

This value is placed in Table A-3, row 10 of the calculation set for subbasin S503, and in Table A-4, column 12.

Step 9: Calculate the average developed area IA for the subbasin. Refer to Table A-3, page 12. It should be noted that the average value is for the developed area only of the subbasin.

$$IA_{dev}\text{-}avg = \frac{(0.15)(278.9)}{278.9} = 0.15$$

This value is placed in Table A-3, row 11 of the calculation set for subbasin S503, and in Table A-4, column 6.

Stantec

Project:	Project Number:
Notes:	Scale:
	Page 5 of 6 Page(s)
Computed By: Date:	Checked By: Date:

Step 10: Calculate the weighted IA for the subbasin. Refer to Table A-4, page 2.

Percent Natural Area = 56.2%
Percent Developed Area = 43.8%
Natural Area IA = 0.26 IN
Developed Area IA = 0.15 IN

$$\text{Weighted IA} = \left[\frac{(56.2)(0.26) + (43.8)(0.15)}{100}\right]$$

Weighted IA = 0.21 IN

This value is placed in Table A-4, column 7.

Step 11: Calculate the weighted RTIMP for the subbasin. Refer to Table A-4, page 2.

Natural Area RTIMP = 23%
Developed Area RTIMP = 10%

$$\text{Weighted RTIMP} = \left[\frac{(56.2)(23) + (43.8)(10)}{100}\right]$$

Weighted RTIMP = 17.9%

Step 12: Calculate the weighted vegetative cover density. Refer to Table A-4, page 2.

Natural Area Vegetative Cover = 26%
Developed Area Vegetative Cover = 0%

$$\text{Weighted Vegetative Cover} = \left[\frac{(56.2)(26) + (43.8)(0)}{100}\right]$$

Weighted Vegetative Cover = 14.6%

This value is placed in Table A-4, column 10.

Step 13: Calculate the weighted value of DTHETA for the subbasin. Refer to Table A-4, page 2.

$DTHETA_{Dry}$ - natural = 0.35
$DTHETA_{Normal}$ - developed = 0.25

$$\text{Weighted DTHETA} = \left[\frac{(56.2)(0.35) + (43.8)(0.25)}{100}\right]$$

Weighted DTHETA = 0.31

This value is placed in Table A-4, column 18.

Step 14: Adjust XKSAT to reflect effects of vegetative cover. Refer to Table A-4, page 2.

Weighted Vegetative Cover = 15%
Log-Avg XKSAT = 0.27 IN/HR

$$C_K = \frac{(15-10)}{90} + 1 = 1.06$$

$$XKSAT\ (\text{Adjusted}) = (0.27)(1.06) = 0.28\ \text{IN/HR}$$

This value is placed in Table A-4, column 7.

Stantec

Project: N. Peoria ADMP Project Number: 82000146

Notes: Vegetative Transects Scale:

Page 1 of 4 Page(s)

Computed By: MCG Date: 5 20 00 Checked By: Date:

Vegetative Transect # 1

- Location : S619 ; just west of Castle Hotsprings Rd.
- Photographs : VT1
- Typical vegetation types :
  - Palo Verde Trees
  - Creasote
  - Brittle Brush
  - Various species of cacti
- Vegetative cover = 28%

Vegetative Transect # 2

- Location : S607, near dirt road east of Morgan City Wash (WPT 55)
- Photographs : N/A
- Typical vegetation types :
  - Palo Verde Trees
  - Mesquite Trees
  - Creosote
  - Brittle Brush
  - Various species of cacti
- Vegetative cover = 35%

Stantec

Project: Project Number:

Notes: Scale:

Page 2 of 4 Page(s)

Computed By: Date: Checked By: Date:

Vegetative Transect # 3

- Location: S613; near unnamed tributary to Morgan City Wash
- Photograph: VT3
- Typical Vegetation types:
  - Palo Verde Trees
  - Mesquite Trees
  - Creosote
  - Brittle Brush
  - Various species of cacti
- Vegetative cover = 34%

Vegetative Transect # 4

- Location: S201; near upstream "Zone A" study limits of Unnamed Wash 2. (WPT 42)
- Photographs: VT4
- Typical Vegetative types:
  - Palo Verde Trees
  - Creosote
  - Brittle Brush
  - Various species of cacti
- Vegetative cover = 30%

Vegetative Transect # 5

- Location: S400; just north of Caterpillar Tanks Wash (WPT 56)
- Photograph: VT5
- Typical Vegetative types:
  - Creosote
  - Brittle Brush
  - Various species of cacti
- Vegetative Cover = 25%

Vegetative Transect # 6

- Location: S513; just west of Twin Buttes Wash (WPT 5
- Photograph: VT6
- Typical Vegetative types:
  - Creosote
  - Brittle Brush
  - Various species of cacti
- Vegetative Cover = 26%

Vegetative cover on a subbasin by subbasin basis is determined from the vegetative transects and inspection of circa 1999 aerial photography. Using these two data sets, three vegetative cover zones are identified. The boundaries of these zones can be generalized as the CAP Canal west of the Agua Fria River and the Agua Fria River.

The vegetative cover density for all subbasins east of the Agua Fria River is estimated, based on visual inspection, to be 15%. The vegetative cover density for all subbasins north of the CAP Canal, with the exception of subbasins S400, S502, S503, S505, S506, S509 and S511 is estimated to be 32%. The vegetative cover density for the remaining subbasin (primarily south of the CAP Canal) is estimated to be

Stantec

Project: Project Number:

Notes: Scale:

Page 4 of 4 Page(s)

Computed By: Date: Checked By: Date:

26%. The vegetative cover densities for the two zones west of the Agua Fria River are determined by averaging the vegetative transect results for those transects located in each of the two zones.

VT1

VT3

VT4

VT5

VT6

APPENDIX C: UNIT HYDROGRAPH PARAMETER CALCULATIONS

Table C-1

Summary of Clark unit hydrograph input parameters

Sub-basin ID	Area sq. mi.	Elevation, in feet		Flow Path Length		Slope ft/mile	Adjusted Slope ft/mile	Surface Roughness Type	Kb	Time-Area Relation
		Top	Bottom	feet	miles					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
S100	0.574	2040	1770	9560	1.811	149.13	149.13	C	0.09	Natural
S101	0.631	1920	1680	8154	1.544	155.42	155.42	C	0.08	Natural
S102	0.449	1940	1780	7849	1.487	107.63	107.63	C/D	0.11	Natural
S103	0.395	1780	1680	6977	1.321	75.68	75.68	C/D	0.11	Natural
S104	0.900	1760	1580	8574	1.624	110.84	110.84	C/D	0.10	Natural
S105	0.594	1770	1580	10434	1.976	96.15	96.15	C/D	0.10	Natural
S106	0.567	1720	1440	9345	1.770	158.20	158.20	C/D	0.10	Natural
S107	0.936	1890	1360	13689	2.593	204.43	204.43	C/D	0.10	Natural
S200	0.959	2260	1940	8790	1.665	192.21	192.21	C/D	0.10	Natural
S201	0.350	2080	1850	6241	1.182	194.59	194.59	C/D	0.11	Natural
S202	0.127	2060	1840	3639	0.689	319.25	270.63	C/D	0.12	Natural
S203	0.373	2060	1800	8887	1.683	154.47	154.47	C/D	0.11	Natural
S204	0.951	2140	1800	10342	1.959	173.58	173.58	C/D	0.10	Natural
S205	0.413	2040	1780	7840	1.485	175.11	175.11	C/D	0.11	Natural
S206	0.853	1980	1710	12122	2.296	117.61	117.61	C/D	0.10	Natural
S207	0.957	1980	1710	12221	2.315	116.65	116.65	C/D	0.10	Natural
S208	1.103	1840	1635	11644	2.205	92.96	92.96	C/D	0.10	Natural
S209	0.650	1660	1480	7170	1.358	132.55	132.55	D	0.12	Natural
S210	0.481	1710	1480	6726	1.274	180.56	180.56	C/D	0.11	Natural
S211	0.488	1580	1360	7176	1.359	161.87	161.87	D	0.13	Natural
S300	0.615	1850	1620	9378	1.776	129.49	129.49	C/D	0.10	Natural
S301	0.994	2000	1620	10564	2.001	189.93	189.93	C/D	0.10	Natural
S302	0.465	1700	1550	5781	1.095	137.00	137.00	D	0.13	Natural
S303	0.708	1770	1480	8124	1.539	188.47	188.47	D	0.12	Natural
S304	0.823	1770	1340	12219	2.314	185.81	185.81	C/D	0.10	Natural
S400	1.048	1730	1525	9840	1.864	110.00	110.00	C/D	0.10	Natural
S401	0.646	1550	1450	7125	1.349	74.10	74.10	C/D	0.10	Natural
S402	0.740	1470	1360	7753	1.468	74.91	74.91	C	0.08	Natural

Table C-1

Summary of Clark unit hydrograph input parameters

Sub-basin ID	Area sq. mi.	Elevation, in feet		Flow Path Length		Slope ft/mile	Adjusted Slope ft/mile	Surface Roughness Type	Kb	Time-Area Relation
		Top	Bottom	feet	miles					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
S403	0.559	1415	1330	8650	1.638	51.88	51.88	C	0.09	Natural
S404	0.263	1400	1260	4080	0.773	181.17	181.17	C	0.09	Natural
S500	1.054	1940	1660	12666	2.399	116.72	116.72	C/D	0.10	Natural
S501	0.614	1780	1580	7846	1.486	134.59	134.59	C/D	0.10	Natural
S502	0.403	1720	1500	5558	1.053	208.99	208.99	D	0.13	Natural
S503	0.994	1720	1500	9985	1.891	116.33	116.33	C	0.08	Natural
S504	0.326	1520	1420	8295	1.571	63.65	63.65	C	0.09	Natural
S505	0.143	2120	1525	2494	0.472	1259.43	364.69	D	0.14	Natural
S506	0.151	1880	1520	3835	0.726	495.69	307.29	D	0.14	Natural
S507	0.666	1520	1420	7745	1.467	68.17	68.17	C	0.08	Natural
S508	0.295	1480	1380	5713	1.082	92.41	92.41	C	0.09	Natural
S509	0.170	1860	1520	3809	0.721	471.27	304.18	C	0.10	Natural
S510	0.127	1520	1460	4238	0.803	74.74	74.74	C	0.10	Natural
S511	0.385	1940	1520	6962	1.319	318.54	270.33	C	0.09	Natural
S512	0.214	1520	1460	5141	0.974	61.62	61.62	C	0.10	Natural
S513	0.778	1500	1380	12149	2.301	52.15	52.15	C	0.08	Natural
S514	0.650	1500	1360	11339	2.147	65.19	65.19	C	0.08	Natural
S515	1.102	1420	1315	10283	1.948	53.91	53.91	C	0.08	Natural
S516	0.540	1355	1240	9226	1.747	65.81	65.81	C	0.09	Natural
S600	2.018	3450	2555	14762	2.796	320.12	270.99	C/D	0.09	Natural
S601	0.901	2880	2440	9717	1.840	239.10	231.94	C/D	0.10	Natural
S602	1.883	3160	2280	16023	3.035	289.98	257.76	C/D	0.09	Natural
S603	0.665	3200	2280	7268	1.377	668.36	325.69	C/D	0.10	Natural
S604	2.656	3000	2150	21673	4.105	207.08	207.08	C/D	0.09	Natural
S605	1.085	2695	2150	12262	2.322	234.68	229.45	C/D	0.10	Natural
S606	0.660	3080	2150	11149	2.111	440.45	300.02	C/D	0.10	Natural
S607	0.822	2740	2000	13552	2.567	288.30	256.98	C/D	0.10	Natural
S608	0.508	2320	1990	7383	1.398	236.02	230.21	C/D	0.11	Natural

Table C-1

Summary of Clark unit hydrograph input parameters

Sub-basin ID	Area sq. mi.	Elevation, in feet		Flow Path Length		Slope ft/mile	Adjusted Slope ft/mile	Surface Roughness Type	Kb	Time-Area Relation
		Top	Bottom	feet	miles					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
S609	0.560	2480	2000	11821	2.239	214.40	214.40	C/D	0.10	Natural
S610	0.603	2100	1880	9866	1.869	117.74	117.74	C/D	0.10	Natural
S611	0.569	2540	2130	6793	1.286	318.70	270.40	D	0.12	Natural
S612	0.808	2475	1880	13362	2.531	235.11	229.69	C/D	0.10	Natural
S613	1.797	2190	1860	13334	2.525	130.67	130.67	D	0.11	Natural
S614	1.079	2120	1780	12065	2.285	148.80	148.80	D	0.11	Natural
S615	1.055	2120	1840	10870	2.059	136.01	136.01	D	0.12	Natural
S616	0.505	1840	1760	9176	1.738	46.04	46.04	C/D	0.11	Natural
S617	0.675	1870	1760	7191	1.362	80.77	80.77	C/D	0.10	Natural
S618	0.958	2060	1590	12481	2.364	198.84	198.84	C/D	0.10	Natural
S619	0.827	2000	1880	6398	1.212	99.03	99.03	D	0.12	Natural
S620	0.444	2000	1590	9307	1.763	232.61	228.26	D	0.13	Natural
S621	0.923	1780	1530	7760	1.470	170.09	170.09	C/D	0.10	Natural
S622	0.897	1720	1415	10579	2.004	152.22	152.22	D	0.12	Natural
S700	0.610	1760	1405	10153	1.923	184.61	184.61	C/D	0.10	Natural
S701	0.720	1780	1395	14897	2.821	136.46	136.46	C/D	0.10	Natural
S702	0.257	1700	1400	7364	1.395	215.09	215.09	C/D	0.11	Natural
S703	0.257	1600	1370	5944	1.126	204.32	204.32	C/D	0.11	Natural
S704	0.408	2040	1480	6686	1.266	442.21	300.27	C/D	0.11	Natural
S705	0.754	1940	1340	11328	2.145	279.66	252.91	C/D	0.10	Natural
S705AF	0.183	1351	1320	4926	0.933	33.61	33.61	B	0.05	Natural
S706	0.713	1715	1340	10674	2.022	185.49	185.49	C/D	0.10	Natural
S707	0.638	1790	1300	11910	2.256	217.22	217.22	C/D	0.10	Natural
S708	0.706	1770	1460	8416	1.594	194.49	194.49	C/D	0.10	Natural
S709	0.441	1710	1490	7484	1.417	155.21	155.21	C	0.09	Natural
S710	0.112	1545	1420	3340	0.633	197.59	197.59	C	0.10	Natural
S711	0.159	1570	1490	2746	0.520	153.85	153.85	C	0.10	Natural
S712	0.068	1520	1420	1645	0.312	320.89	271.31	B/C	0.08	Natural

Table C-1

Summary of Clark unit hydrograph input parameters

Sub-basin ID (1)	Area sq. mi. (2)	Elevation, in feet Top (3)	Elevation, in feet Bottom (4)	Flow Path Length feet (5)	Flow Path Length miles (6)	Slope ft/mile (7)	Adjusted Slope ft/mile (8)	Surface Roughness Type (9)	Kb (10)	Time-Area Relation (11)
S713	0.107	1540	1420	2880	0.545	220.00	220.00	B/C	0.08	Natural
S714	0.060	1440	1385	2259	0.428	128.56	128.56	B/C	0.08	Natural
S715	0.220	1420	1360	5062	0.959	62.59	62.59	B/C	0.07	Natural
S716	1.128	1700	1495	12424	2.353	87.12	87.12	B/C	0.06	Natural
S717	0.286	1515	1420	3839	0.727	130.66	130.66	B/C	0.07	Natural
S718	0.442	1440	1345	11106	2.103	45.17	45.17	B/C	0.07	Natural
S719	0.154	1440	1340	6444	1.221	81.93	81.93	B/C	0.08	Natural
S720	0.370	1470	1340	8007	1.516	85.73	85.73	B/C	0.07	Natural
S721	0.335	1575	1480	4394	0.832	114.15	114.15	B/C	0.07	Natural
S722	0.955	1515	1330	12326	2.334	79.25	79.25	B/C	0.06	Natural
S723	0.085	1425	1325	2968	0.562	177.89	177.89	C	0.11	Natural
S724	1.156	1535	1310	12242	2.319	97.05	97.05	B/C	0.06	Natural
S725	1.158	1505	1290	16039	3.038	70.78	70.78	B/C	0.06	Natural
S726	0.334	1818	1395	5469	1.036	408.35	295.36	B/C	0.07	Natural
S727	0.375	1435	1280	9583	1.815	85.40	85.40	B/C	0.07	Natural
S728	0.276	1340	1220	8182	1.550	77.44	77.44	B/C	0.07	Natural

Table C-2

Time of concentration and duration of rainfall excess for existing conditions, 100-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.43	0.43	0.43	0.14	0.10	0.09	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.00	38.75	0.65	0.50
S101	0.42	0.41	0.41	0.13	0.10	0.09	0.05	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.86	31.25	0.52	0.33
S102	0.45	0.45	0.44	0.13	0.10	0.09	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.07	44.75	0.75	0.58
S103	0.46	0.45	0.45	0.14	0.10	0.09	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.97	47.75	0.80	0.61
S104	0.37	0.37	0.36	0.14	0.12	0.11	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	1.81	45.25	0.75	0.42
S105	0.43	0.43	0.42	0.14	0.10	0.09	0.05	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.88	55.00	0.92	0.78
S106	0.43	0.42	0.42	0.13	0.09	0.08	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.76	40.75	0.68	0.53
S107	0.35	0.35	0.34	0.13	0.10	0.09	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.52	51.50	0.86	0.70
S200	0.36	0.35	0.35	0.14	0.11	0.10	0.06	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.00	37.25	0.62	0.34
S201	0.45	0.45	0.44	0.13	0.09	0.08	0.04	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.10	29.00	0.48	0.34
S202	0.45	0.45	0.44	0.13	0.09	0.08	0.04	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.11	18.50	0.31	0.24
S203	0.45	0.45	0.44	0.13	0.09	0.08	0.04	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.10	41.75	0.70	0.66
S204	0.36	0.35	0.35	0.14	0.11	0.09	0.06	0.06	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.94	43.75	0.73	0.46
S205	0.45	0.44	0.44	0.13	0.09	0.08	0.03	0.03	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.93	36.25	0.60	0.48
S206	0.38	0.37	0.37	0.14	0.11	0.10	0.06	0.06	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.95	57.25	0.95	0.75
S207	0.36	0.36	0.35	0.14	0.11	0.10	0.06	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.00	58.00	0.97	0.72
S208	0.35	0.34	0.34	0.15	0.13	0.12	0.08	0.07	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.93	62.00	1.03	0.68
S209	0.41	0.41	0.40	0.13	0.10	0.09	0.05	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.83	42.00	0.70	0.41
S210	0.44	0.44	0.43	0.12	0.08	0.07	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	32.25	0.54	0.34
S211	0.45	0.44	0.44	0.12	0.09	0.08	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.73	40.25	0.67	0.46
S300	0.42	0.42	0.41	0.13	0.10	0.08	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.95	44.75	0.75	0.56
S301	0.35	0.35	0.35	0.14	0.11	0.10	0.06	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.99	42.50	0.71	0.44
S302	0.45	0.44	0.44	0.13	0.09	0.08	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.96	36.75	0.61	0.36
S303	0.39	0.39	0.38	0.12	0.09	0.08	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.67	40.75	0.68	0.41
S304	0.38	0.37	0.37	0.13	0.10	0.09	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.62	47.75	0.80	0.63
S400	0.36	0.35	0.35	0.15	0.13	0.12	0.08	0.07	0.07	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.85	50.00	0.83	0.48
S401	0.41	0.40	0.40	0.13	0.09	0.08	0.04	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.70	48.25	0.80	0.47
S402	0.39	0.39	0.38	0.13	0.10	0.08	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.65	43.00	0.72	0.41
S403	0.46	0.45	0.45	0.16	0.13	0.12	0.06	0.06	0.06	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.01	54.50	0.91	0.69
S404	0.46	0.46	0.45	0.14	0.11	0.10	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.84	19.00	0.32	0.18
S500	0.35	0.34	0.34	0.14	0.12	0.10	0.07	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	1.98	60.25	1.00	0.73
S501	0.42	0.41	0.41	0.13	0.09	0.08	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.89	39.00	0.65	0.42
S502	0.44	0.44	0.43	0.12	0.08	0.06	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.79	30.00	0.50	0.30
S503	0.36	0.36	0.35	0.15	0.13	0.12	0.07	0.07	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.87	42.00	0.70	0.42
S504	0.43	0.42	0.41	0.10	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.46	57.75	0.96	0.96
S505	0.44	0.44	0.43	0.12	0.08	0.06	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.77	14.50	0.24	0.13
S506	0.46	0.45	0.45	0.13	0.10	0.08	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.86	20.25	0.34	0.25
S507	0.41	0.40	0.40	0.13	0.09	0.07	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63	44.75	0.75	0.46

Table C-2

Time of concentration and duration of rainfall excess for existing conditions, 100-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.44	0.44	0.43	0.12	0.08	0.06	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64	33.75	0.56	0.42
S509	0.46	0.45	0.44	0.13	0.09	0.08	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.99	16.00	0.27	0.18
S510	0.47	0.47	0.46	0.15	0.12	0.11	0.05	0.05	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	2.00	30.00	0.50	0.47
S511	0.46	0.45	0.45	0.14	0.10	0.09	0.04	0.04	0.04	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	2.01	23.25	0.39	0.28
S512	0.48	0.47	0.47	0.16	0.12	0.12	0.06	0.05	0.05	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.01	37.00	0.62	0.51
S513	0.38	0.38	0.37	0.13	0.10	0.08	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	74.75	1.25	1.06
S514	0.44	0.43	0.43	0.16	0.13	0.12	0.07	0.06	0.06	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	55.75	0.93	0.80
S515	0.37	0.36	0.36	0.18	0.16	0.15	0.09	0.09	0.09	0.05	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	2.05	56.50	0.94	0.56
S516	0.43	0.42	0.41	0.11	0.07	0.05	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.57	59.25	0.99	0.81
S600	0.24	0.24	0.23	0.13	0.12	0.10	0.08	0.08	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.57	47.75	0.80	0.44
S601	0.39	0.39	0.38	0.17	0.14	0.13	0.08	0.08	0.08	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	2.34	34.50	0.58	0.35
S602	0.27	0.26	0.26	0.15	0.14	0.13	0.09	0.09	0.09	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	1.93	48.00	0.80	0.49
S603	0.43	0.43	0.43	0.16	0.13	0.12	0.07	0.07	0.06	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.34	24.00	0.40	0.22
S604	0.22	0.22	0.21	0.16	0.15	0.14	0.11	0.10	0.10	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.87	67.25	1.12	0.75
S605	0.34	0.34	0.34	0.14	0.12	0.11	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	2.01	43.50	0.73	0.49
S606	0.42	0.41	0.41	0.14	0.11	0.09	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.11	34.50	0.58	0.46
S607	0.39	0.39	0.39	0.15	0.13	0.12	0.07	0.07	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.14	42.00	0.70	0.59
S608	0.47	0.46	0.46	0.15	0.12	0.11	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.31	29.00	0.48	0.32
S609	0.43	0.42	0.41	0.12	0.08	0.06	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.89	43.25	0.72	0.68
S610	0.44	0.44	0.43	0.15	0.12	0.11	0.06	0.06	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.27	45.75	0.76	0.60
S611	0.44	0.43	0.43	0.13	0.10	0.08	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.10	28.75	0.48	0.28
S612	0.40	0.40	0.40	0.16	0.14	0.13	0.07	0.07	0.07	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.19	42.75	0.71	0.60
S613	0.28	0.27	0.27	0.15	0.14	0.13	0.09	0.09	0.09	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.95	65.25	1.09	0.61
S614	0.35	0.34	0.34	0.14	0.12	0.11	0.07	0.07	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.00	55.75	0.93	0.63
S615	0.38	0.38	0.37	0.18	0.16	0.15	0.10	0.09	0.09	0.05	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	2.54	52.00	0.87	0.55
S616	0.45	0.45	0.44	0.14	0.10	0.09	0.04	0.04	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.97	75.50	1.26	1.10
S617	0.41	0.41	0.40	0.14	0.11	0.09	0.05	0.05	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.95	45.25	0.75	0.43
S618	0.37	0.36	0.36	0.15	0.12	0.11	0.07	0.07	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	45.75	0.76	0.56
S619	0.41	0.40	0.40	0.17	0.15	0.14	0.08	0.08	0.08	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.35	41.25	0.69	0.32
S620	0.48	0.47	0.47	0.16	0.13	0.12	0.06	0.06	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.37	38.50	0.64	0.57
S621	0.36	0.35	0.35	0.13	0.10	0.09	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	36.75	0.61	0.31
S622	0.36	0.36	0.35	0.13	0.10	0.09	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.59	55.75	0.93	0.63
S700	0.42	0.41	0.41	0.13	0.10	0.09	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72	40.50	0.68	0.54
S701	0.40	0.40	0.40	0.14	0.11	0.10	0.06	0.05	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.86	61.75	1.03	1.06
S702	0.45	0.44	0.44	0.13	0.09	0.08	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.75	31.50	0.53	0.51
S703	0.44	0.44	0.43	0.12	0.08	0.07	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	28.00	0.47	0.38
S704	0.45	0.44	0.44	0.12	0.08	0.07	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.79	25.50	0.43	0.29
S705	0.40	0.40	0.39	0.15	0.12	0.11	0.06	0.06	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.83	37.50	0.63	0.48

Table C-2

Time of concentration and duration of rainfall excess for existing conditions, 100-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.49	0.49	0.49	0.18	0.15	0.14	0.07	0.07	0.07	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.01	0.00	2.36	27.25	0.45	0.38
S706	0.40	0.40	0.39	0.14	0.10	0.09	0.05	0.05	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.75	42.00	0.70	0.53
S707	0.43	0.42	0.42	0.14	0.11	0.10	0.05	0.05	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.85	41.00	0.68	0.60
S708	0.44	0.44	0.44	0.18	0.15	0.15	0.08	0.08	0.08	0.06	0.06	0.05	0.02	0.01	0.01	0.01	0.01	0.01	2.28	31.75	0.53	0.32
S709	0.50	0.49	0.49	0.18	0.15	0.15	0.07	0.07	0.07	0.07	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.48	28.75	0.48	0.35
S710	0.50	0.49	0.49	0.18	0.15	0.15	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.46	16.50	0.28	0.21
S711	0.50	0.49	0.49	0.19	0.15	0.15	0.08	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.50	16.00	0.27	0.14
S712	0.50	0.49	0.49	0.18	0.15	0.15	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.45	9.25	0.15	0.09
S713	0.50	0.49	0.49	0.18	0.15	0.15	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.46	13.00	0.22	0.15
S714	0.48	0.48	0.48	0.17	0.13	0.12	0.06	0.06	0.06	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	13.75	0.23	0.18
S715	0.50	0.49	0.49	0.18	0.15	0.15	0.07	0.07	0.07	0.07	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.48	27.00	0.45	0.35
S716	0.38	0.37	0.37	0.19	0.17	0.17	0.11	0.10	0.10	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	2.34	41.50	0.69	0.46
S717	0.50	0.49	0.49	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.52	16.75	0.28	0.14
S718	0.50	0.49	0.49	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.56	52.75	0.88	0.93
S719	0.51	0.50	0.50	0.19	0.16	0.16	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.02	0.02	0.02	0.02	0.01	2.79	30.50	0.51	0.60
S720	0.50	0.49	0.49	0.19	0.15	0.15	0.08	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.51	32.00	0.53	0.45
S721	0.47	0.47	0.47	0.16	0.12	0.11	0.05	0.05	0.05	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	20.00	0.33	0.18
S722	0.39	0.39	0.39	0.18	0.16	0.16	0.09	0.09	0.09	0.06	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	2.21	43.00	0.72	0.52
S723	0.49	0.49	0.49	0.18	0.15	0.14	0.07	0.07	0.07	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.01	0.00	2.38	17.00	0.28	0.24
S724	0.38	0.37	0.37	0.20	0.18	0.18	0.11	0.11	0.11	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	2.46	39.00	0.65	0.41
S725	0.36	0.36	0.36	0.18	0.16	0.16	0.10	0.10	0.10	0.05	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.01	2.13	55.00	0.92	0.75
S726	0.46	0.45	0.45	0.13	0.10	0.08	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.85	16.00	0.27	0.16
S727	0.49	0.48	0.48	0.17	0.14	0.14	0.07	0.07	0.06	0.05	0.05	0.04	0.01	0.01	0.00	0.00	0.00	0.00	2.28	37.25	0.62	0.61
S728	0.45	0.44	0.44	0.12	0.08	0.06	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.68	38.75	0.65	0.67

Table C-3

Time of concentration and duration of rainfall excess for existing conditions, 50-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.38	0.38	0.37	0.11	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.70	42.25	0.70	0.55
S101	0.37	0.36	0.36	0.11	0.08	0.06	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.58	34.25	0.57	0.37
S102	0.40	0.39	0.39	0.11	0.08	0.06	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.78	49.00	0.82	0.64
S103	0.40	0.40	0.39	0.11	0.08	0.06	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.68	52.50	0.88	0.68
S104	0.33	0.32	0.32	0.12	0.09	0.08	0.05	0.05	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.53	50.00	0.83	0.47
S105	0.38	0.37	0.37	0.11	0.08	0.07	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.60	60.50	1.01	0.87
S106	0.38	0.37	0.37	0.10	0.07	0.06	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.48	44.75	0.75	0.58
S107	0.31	0.30	0.30	0.10	0.08	0.07	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	57.50	0.96	0.79
S200	0.31	0.31	0.31	0.11	0.09	0.07	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.70	40.75	0.68	0.37
S201	0.40	0.39	0.39	0.11	0.07	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.81	31.50	0.53	0.38
S202	0.40	0.39	0.39	0.11	0.07	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.81	19.75	0.33	0.26
S203	0.40	0.39	0.39	0.11	0.07	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.80	45.75	0.76	0.73
S204	0.31	0.31	0.30	0.11	0.08	0.07	0.05	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.65	48.00	0.80	0.51
S205	0.39	0.39	0.38	0.10	0.07	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.64	39.75	0.66	0.53
S206	0.33	0.33	0.32	0.12	0.09	0.07	0.05	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.66	63.00	1.05	0.83
S207	0.32	0.31	0.31	0.12	0.09	0.07	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.71	63.75	1.06	0.79
S208	0.30	0.30	0.30	0.13	0.10	0.09	0.06	0.06	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.65	68.00	1.13	0.76
S209	0.36	0.36	0.35	0.11	0.08	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.55	46.25	0.77	0.45
S210	0.39	0.38	0.38	0.10	0.06	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	35.75	0.60	0.38
S211	0.39	0.38	0.38	0.10	0.06	0.05	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	44.50	0.74	0.51
S300	0.37	0.36	0.36	0.11	0.07	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.65	49.25	0.82	0.62
S301	0.31	0.31	0.30	0.11	0.09	0.07	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.70	46.50	0.78	0.49
S302	0.40	0.39	0.38	0.10	0.07	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.67	40.50	0.68	0.40
S303	0.34	0.34	0.33	0.10	0.07	0.05	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.39	45.25	0.75	0.47
S304	0.33	0.32	0.32	0.11	0.08	0.07	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35	53.50	0.89	0.71
S400	0.31	0.31	0.31	0.13	0.11	0.10	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.58	55.00	0.92	0.54
S401	0.36	0.35	0.35	0.10	0.07	0.05	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.42	53.75	0.90	0.53
S402	0.34	0.34	0.33	0.10	0.07	0.05	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	47.75	0.80	0.46
S403	0.41	0.40	0.40	0.14	0.11	0.10	0.05	0.05	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72	59.75	1.00	0.76
S404	0.41	0.40	0.40	0.12	0.08	0.07	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.56	20.50	0.34	0.20
S500	0.30	0.30	0.29	0.12	0.09	0.07	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.69	66.25	1.10	0.81
S501	0.37	0.36	0.35	0.10	0.07	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.60	43.00	0.72	0.46
S502	0.39	0.38	0.38	0.09	0.06	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.50	33.00	0.55	0.33
S503	0.32	0.31	0.31	0.12	0.10	0.09	0.06	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	1.60	45.50	0.76	0.46
S504	0.37	0.36	0.36	0.07	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	65.50	1.09	1.11
S505	0.39	0.38	0.37	0.09	0.05	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.49	15.25	0.25	0.13
S506	0.40	0.39	0.39	0.11	0.07	0.05	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.57	21.75	0.36	0.27
S507	0.36	0.35	0.34	0.10	0.07	0.04	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	50.25	0.84	0.52

Table C-3

Time of concentration and duration of rainfall excess for existing conditions, 50-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.39	0.38	0.37	0.09	0.05	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	37.25	0.62	0.47
S509	0.40	0.39	0.39	0.11	0.07	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.69	17.00	0.28	0.19
S510	0.42	0.41	0.41	0.13	0.09	0.08	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	32.50	0.54	0.51
S511	0.41	0.40	0.39	0.11	0.08	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.72	25.00	0.42	0.30
S512	0.42	0.42	0.41	0.13	0.10	0.09	0.05	0.04	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.72	40.25	0.67	0.56
S513	0.34	0.33	0.32	0.10	0.07	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	83.75	1.40	1.20
S514	0.38	0.38	0.38	0.14	0.11	0.10	0.05	0.05	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66	61.25	1.02	0.89
S515	0.33	0.32	0.32	0.15	0.13	0.13	0.08	0.08	0.08	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	1.74	61.50	1.03	0.61
S516	0.37	0.37	0.36	0.09	0.05	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	67.00	1.12	0.93
S600	0.21	0.20	0.20	0.10	0.09	0.07	0.06	0.06	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.30	53.50	0.89	0.50
S601	0.35	0.34	0.34	0.14	0.12	0.11	0.07	0.07	0.06	0.04	0.04	0.04	0.02	0.02	0.01	0.01	0.01	0.01	2.04	37.00	0.62	0.37
S602	0.23	0.23	0.22	0.13	0.11	0.10	0.08	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.64	52.50	0.88	0.54
S603	0.38	0.38	0.38	0.14	0.11	0.10	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.04	25.75	0.43	0.24
S604	0.19	0.19	0.18	0.13	0.12	0.11	0.09	0.09	0.09	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	1.60	73.75	1.23	0.83
S605	0.30	0.30	0.29	0.12	0.09	0.08	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.71	47.50	0.79	0.54
S606	0.37	0.36	0.36	0.12	0.08	0.07	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.81	37.50	0.63	0.51
S607	0.35	0.34	0.34	0.13	0.10	0.09	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.85	45.75	0.76	0.65
S608	0.41	0.41	0.41	0.13	0.10	0.08	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.00	31.50	0.53	0.35
S609	0.37	0.37	0.36	0.09	0.06	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.61	47.50	0.79	0.76
S610	0.39	0.38	0.38	0.13	0.10	0.08	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.97	50.00	0.83	0.67
S611	0.38	0.38	0.37	0.11	0.08	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.80	31.25	0.52	0.30
S612	0.36	0.35	0.35	0.14	0.11	0.10	0.06	0.06	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	46.00	0.77	0.65
S613	0.24	0.24	0.23	0.13	0.11	0.10	0.08	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.67	71.25	1.19	0.67
S614	0.30	0.30	0.29	0.12	0.10	0.08	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.71	61.00	1.02	0.70
S615	0.34	0.33	0.33	0.16	0.14	0.13	0.08	0.08	0.08	0.05	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.24	55.75	0.93	0.59
S616	0.40	0.39	0.39	0.11	0.08	0.06	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.68	83.25	1.39	1.22
S617	0.36	0.36	0.35	0.11	0.08	0.07	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.66	50.00	0.83	0.48
S618	0.32	0.32	0.31	0.12	0.10	0.09	0.06	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.64	50.25	0.84	0.62
S619	0.36	0.36	0.35	0.15	0.12	0.11	0.07	0.07	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.05	44.25	0.74	0.34
S620	0.42	0.42	0.41	0.14	0.11	0.10	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.06	41.50	0.69	0.61
S621	0.31	0.30	0.30	0.10	0.08	0.06	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	40.50	0.68	0.34
S622	0.31	0.31	0.30	0.10	0.08	0.06	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	62.25	1.04	0.72
S700	0.37	0.36	0.36	0.10	0.07	0.06	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	44.75	0.75	0.60
S701	0.36	0.35	0.35	0.12	0.09	0.07	0.04	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.59	68.25	1.14	1.18
S702	0.39	0.39	0.38	0.10	0.07	0.05	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47	34.50	0.58	0.57
S703	0.39	0.38	0.38	0.10	0.06	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	30.50	0.51	0.42
S704	0.39	0.38	0.38	0.10	0.06	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.51	27.75	0.46	0.32
S705	0.35	0.35	0.35	0.12	0.10	0.08	0.05	0.05	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.56	40.75	0.68	0.52

Table C-3

Time of concentration and duration of rainfall excess for existing conditions, 50-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.44	0.43	0.43	0.16	0.13	0.12	0.06	0.06	0.06	0.05	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	2.04	29.00	0.48	0.41
S706	0.35	0.35	0.34	0.11	0.08	0.06	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.47	46.25	0.77	0.59
S707	0.37	0.37	0.36	0.12	0.09	0.07	0.04	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.57	45.00	0.75	0.67
S708	0.39	0.39	0.39	0.16	0.13	0.13	0.07	0.07	0.07	0.05	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.00	1.97	34.00	0.57	0.35
S709	0.44	0.44	0.44	0.16	0.13	0.13	0.06	0.06	0.06	0.06	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.15	30.50	0.51	0.37
S710	0.44	0.44	0.44	0.16	0.13	0.13	0.06	0.06	0.06	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.00	0.00	2.14	17.50	0.29	0.23
S711	0.44	0.44	0.44	0.16	0.14	0.13	0.07	0.06	0.06	0.06	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.17	17.00	0.28	0.15
S712	0.44	0.44	0.44	0.16	0.13	0.13	0.06	0.06	0.06	0.06	0.06	0.05	0.01	0.01	0.01	0.00	0.00	0.00	2.13	9.50	0.16	0.09
S713	0.44	0.44	0.44	0.16	0.13	0.13	0.06	0.06	0.06	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.00	0.00	2.14	13.50	0.23	0.16
S714	0.43	0.42	0.42	0.14	0.11	0.10	0.05	0.05	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	14.50	0.24	0.19
S715	0.44	0.44	0.44	0.16	0.13	0.13	0.06	0.06	0.06	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.15	28.75	0.48	0.38
S716	0.33	0.33	0.33	0.17	0.15	0.15	0.09	0.09	0.09	0.06	0.05	0.05	0.03	0.03	0.02	0.02	0.01	0.01	2.02	44.00	0.73	0.49
S717	0.44	0.44	0.44	0.16	0.14	0.13	0.07	0.07	0.06	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.19	17.75	0.30	0.15
S718	0.44	0.44	0.44	0.17	0.14	0.13	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.23	56.25	0.94	0.99
S719	0.45	0.45	0.45	0.17	0.15	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.02	0.02	0.02	0.01	0.01	0.01	2.45	32.50	0.54	0.64
S720	0.44	0.44	0.44	0.16	0.14	0.13	0.07	0.06	0.06	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.18	34.25	0.57	0.49
S721	0.42	0.41	0.41	0.13	0.10	0.09	0.04	0.04	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.70	21.25	0.35	0.19
S722	0.35	0.35	0.35	0.16	0.14	0.13	0.08	0.08	0.08	0.04	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	1.90	45.75	0.76	0.55
S723	0.44	0.44	0.43	0.16	0.13	0.12	0.06	0.06	0.06	0.05	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	2.06	18.00	0.30	0.25
S724	0.34	0.33	0.33	0.17	0.16	0.15	0.10	0.09	0.09	0.06	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.02	2.13	41.50	0.69	0.44
S725	0.32	0.32	0.32	0.16	0.14	0.13	0.09	0.08	0.08	0.04	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	1.82	92.75	1.55	1.34
S726	0.40	0.40	0.39	0.11	0.07	0.05	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.57	17.00	0.28	0.18
S727	0.43	0.43	0.43	0.15	0.12	0.12	0.06	0.06	0.05	0.04	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.96	40.00	0.67	0.67
S728	0.39	0.39	0.38	0.10	0.06	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	43.00	0.72	0.76

Table C-4

Time of concentration and duration of rainfall excess for existing conditions, 25-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.33	0.32	0.32	0.09	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	1.41	47.50	0.79	0.63
S101	0.32	0.31	0.30	0.08	0.05	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.28	38.50	0.64	0.42
S102	0.34	0.34	0.33	0.08	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.49	54.25	0.90	0.72
S103	0.35	0.34	0.34	0.09	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.38	59.00	0.98	0.77
S104	0.28	0.27	0.27	0.09	0.07	0.05	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.25	56.75	0.95	0.54
S105	0.32	0.32	0.31	0.09	0.06	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.30	92.00	1.53	1.38
S106	0.32	0.32	0.31	0.08	0.04	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	51.25	0.85	0.68
S107	0.26	0.25	0.25	0.08	0.05	0.03	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	66.75	1.11	0.93
S200	0.27	0.26	0.26	0.09	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.41	45.50	0.76	0.42
S201	0.34	0.33	0.33	0.08	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.53	35.00	0.58	0.42
S202	0.34	0.34	0.33	0.08	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.53	21.75	0.36	0.29
S203	0.34	0.33	0.33	0.08	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.53	50.50	0.84	0.81
S204	0.27	0.26	0.26	0.08	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.35	54.00	0.90	0.58
S205	0.34	0.33	0.33	0.08	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.35	44.75	0.75	0.61
S206	0.28	0.28	0.27	0.09	0.06	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.36	71.00	1.18	0.95
S207	0.27	0.26	0.26	0.09	0.06	0.05	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.41	71.75	1.20	0.91
S208	0.26	0.26	0.25	0.10	0.08	0.06	0.05	0.05	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.36	76.50	1.28	0.86
S209	0.31	0.30	0.30	0.08	0.05	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.25	52.50	0.88	0.52
S210	0.33	0.32	0.32	0.07	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	40.75	0.68	0.44
S211	0.33	0.33	0.32	0.07	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	51.00	0.85	0.59
S300	0.32	0.31	0.30	0.08	0.05	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.36	93.00	1.55	1.26
S301	0.26	0.26	0.25	0.09	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.40	52.25	0.87	0.56
S302	0.34	0.33	0.33	0.08	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.39	45.25	0.75	0.45
S303	0.29	0.28	0.28	0.07	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.10	52.00	0.87	0.54
S304	0.28	0.27	0.27	0.08	0.05	0.03	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	61.50	1.03	0.83
S400	0.27	0.26	0.26	0.10	0.08	0.07	0.05	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.30	62.00	1.03	0.62
S401	0.31	0.30	0.29	0.07	0.04	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	61.75	1.03	0.62
S402	0.29	0.29	0.28	0.08	0.04	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	55.25	0.92	0.55
S403	0.35	0.35	0.34	0.11	0.08	0.07	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42	67.00	1.12	0.87
S404	0.35	0.34	0.34	0.09	0.06	0.04	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	22.25	0.37	0.21
S500	0.26	0.25	0.25	0.09	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.39	74.50	1.24	0.92
S501	0.31	0.31	0.30	0.08	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	1.31	48.50	0.81	0.53
S502	0.33	0.32	0.32	0.07	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.23	37.25	0.62	0.38
S503	0.27	0.27	0.26	0.10	0.08	0.06	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.31	51.25	0.85	0.52
S504	0.31	0.30	0.29	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	75.25	1.25	1.29
S505	0.33	0.32	0.32	0.06	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.22	16.75	0.28	0.15
S506	0.34	0.34	0.33	0.08	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.27	23.75	0.40	0.30
S507	0.30	0.30	0.29	0.07	0.04	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	58.25	0.97	0.61

Table C-4

Time of concentration and duration of rainfall excess for existing conditions, 25-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.33	0.32	0.32	0.06	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07	43.00	0.72	0.55
S509	0.34	0.34	0.33	0.08	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.40	18.50	0.31	0.21
S510	0.36	0.35	0.35	0.10	0.07	0.05	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42	36.00	0.60	0.57
S511	0.35	0.34	0.34	0.09	0.05	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.41	27.50	0.46	0.34
S512	0.36	0.36	0.35	0.11	0.08	0.06	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42	44.25	0.74	0.62
S513	0.28	0.28	0.27	0.07	0.04	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	90.00	1.50	1.30
S514	0.33	0.33	0.32	0.11	0.08	0.07	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	69.00	1.15	1.02
S515	0.28	0.28	0.28	0.13	0.11	0.10	0.07	0.07	0.06	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	1.43	68.75	1.15	0.69
S516	0.32	0.31	0.30	0.06	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	78.00	1.30	1.10
S600	0.17	0.17	0.16	0.08	0.06	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.03	61.75	1.03	0.58
S601	0.30	0.29	0.29	0.12	0.09	0.08	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.73	40.50	0.68	0.41
S602	0.20	0.19	0.19	0.10	0.08	0.06	0.06	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.35	59.00	0.98	0.62
S603	0.33	0.33	0.32	0.11	0.08	0.07	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.72	28.00	0.47	0.26
S604	0.16	0.15	0.15	0.10	0.09	0.07	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.31	82.75	1.38	0.94
S605	0.26	0.25	0.25	0.09	0.07	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.41	53.25	0.89	0.61
S606	0.32	0.31	0.30	0.09	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.51	41.75	0.70	0.57
S607	0.30	0.29	0.29	0.10	0.08	0.06	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.54	50.75	0.85	0.73
S608	0.36	0.35	0.35	0.11	0.07	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.69	34.50	0.58	0.39
S609	0.32	0.31	0.30	0.06	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.35	52.75	0.88	0.85
S610	0.34	0.33	0.33	0.10	0.07	0.06	0.04	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.65	55.25	0.92	0.74
S611	0.33	0.32	0.32	0.08	0.05	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.51	34.75	0.58	0.34
S612	0.31	0.30	0.30	0.11	0.09	0.07	0.05	0.05	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.60	51.00	0.85	0.73
S613	0.20	0.20	0.20	0.10	0.09	0.07	0.06	0.06	0.06	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	1.38	80.00	1.33	0.77
S614	0.26	0.25	0.25	0.09	0.07	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.41	68.50	1.14	0.80
S615	0.29	0.29	0.29	0.13	0.11	0.10	0.07	0.07	0.07	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	1.92	60.75	1.01	0.65
S616	0.34	0.34	0.33	0.08	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.38	90.00	1.50	1.33
S617	0.31	0.30	0.30	0.09	0.06	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	1.36	56.00	0.93	0.55
S618	0.27	0.27	0.26	0.10	0.07	0.06	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.35	56.25	0.94	0.70
S619	0.31	0.31	0.31	0.12	0.10	0.09	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.74	48.50	0.81	0.38
S620	0.37	0.36	0.36	0.11	0.08	0.07	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.75	45.50	0.76	0.68
S621	0.26	0.26	0.25	0.08	0.05	0.03	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	46.25	0.77	0.40
S622	0.27	0.26	0.26	0.08	0.05	0.03	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	72.00	1.20	0.84
S700	0.31	0.31	0.30	0.08	0.05	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	51.25	0.85	0.70
S701	0.30	0.30	0.29	0.09	0.06	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.29	77.25	1.29	1.35
S702	0.34	0.33	0.32	0.07	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	39.25	0.65	0.65
S703	0.33	0.32	0.32	0.07	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	34.75	0.58	0.48
S704	0.33	0.33	0.32	0.07	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.22	31.25	0.52	0.36
S705	0.30	0.30	0.29	0.10	0.07	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	45.50	0.76	0.59

Table C-4

Time of concentration and duration of rainfall excess for existing conditions, 25-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.38	0.38	0.38	0.13	0.11	0.10	0.05	0.05	0.05	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	31.25	0.52	0.45
S706	0.30	0.29	0.29	0.08	0.05	0.03	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	53.00	0.88	0.69
S707	0.32	0.31	0.31	0.09	0.06	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.28	51.00	0.85	0.77
S708	0.34	0.34	0.34	0.13	0.11	0.11	0.06	0.06	0.06	0.03	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	1.65	36.75	0.61	0.38
S709	0.39	0.38	0.38	0.14	0.11	0.11	0.05	0.05	0.05	0.04	0.04	0.02	0.01	0.01	0.01	0.00	0.00	0.00	1.81	32.75	0.55	0.40
S710	0.39	0.38	0.38	0.14	0.11	0.11	0.05	0.05	0.05	0.05	0.04	0.04	0.01	0.00	0.00	0.00	0.00	0.00	1.82	18.75	0.31	0.25
S711	0.39	0.38	0.38	0.14	0.11	0.11	0.06	0.05	0.05	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	1.83	18.25	0.30	0.17
S712	0.39	0.38	0.38	0.14	0.11	0.11	0.05	0.05	0.05	0.04	0.04	0.04	0.01	0.00	0.00	0.00	0.00	0.00	1.81	10.00	0.17	0.09
S713	0.39	0.38	0.38	0.14	0.11	0.11	0.05	0.05	0.05	0.05	0.04	0.04	0.01	0.00	0.00	0.00	0.00	0.00	1.82	14.25	0.24	0.17
S714	0.37	0.37	0.36	0.12	0.09	0.08	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	15.25	0.25	0.20
S715	0.39	0.38	0.38	0.14	0.11	0.11	0.06	0.05	0.05	0.04	0.04	0.02	0.01	0.01	0.01	0.00	0.00	0.00	1.81	30.75	0.51	0.40
S716	0.29	0.29	0.29	0.14	0.13	0.12	0.08	0.08	0.08	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.70	47.50	0.79	0.53
S717	0.39	0.38	0.38	0.14	0.12	0.11	0.06	0.06	0.05	0.05	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	1.85	19.00	0.32	0.16
S718	0.39	0.39	0.38	0.14	0.12	0.11	0.06	0.06	0.05	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.00	1.89	61.00	1.02	1.09
S719	0.40	0.39	0.39	0.15	0.13	0.12	0.06	0.06	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.10	35.00	0.58	0.69
S720	0.39	0.38	0.38	0.14	0.12	0.11	0.06	0.05	0.05	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	1.84	37.00	0.62	0.53
S721	0.36	0.36	0.35	0.11	0.08	0.06	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41	23.25	0.39	0.21
S722	0.30	0.30	0.30	0.13	0.12	0.11	0.07	0.07	0.07	0.03	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.57	49.75	0.83	0.61
S723	0.38	0.38	0.38	0.13	0.11	0.10	0.05	0.05	0.05	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.73	19.50	0.33	0.27
S724	0.29	0.29	0.29	0.15	0.13	0.13	0.08	0.08	0.08	0.05	0.05	0.04	0.02	0.02	0.02	0.02	0.01	0.01	1.79	44.50	0.74	0.48
S725	0.28	0.28	0.28	0.13	0.12	0.11	0.07	0.07	0.07	0.03	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.50	65.75	1.10	0.92
S726	0.34	0.34	0.33	0.08	0.05	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	18.50	0.31	0.19
S727	0.38	0.37	0.37	0.13	0.10	0.10	0.05	0.05	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.64	43.25	0.72	0.73
S728	0.34	0.33	0.32	0.07	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	49.75	0.83	0.89

Table C-5

Time of concentration and duration of rainfall excess for existing conditions, 10-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.26	0.25	0.24	0.05	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.07	55.75	0.93	0.75
S101	0.25	0.24	0.23	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.93	46.75	0.78	0.52
S102	0.27	0.26	0.26	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.15	63.25	1.05	0.85
S103	0.27	0.27	0.26	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.02	71.00	1.18	0.95
S104	0.22	0.21	0.20	0.06	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.88	70.25	1.17	0.69
S105	0.25	0.25	0.24	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.94	84.00	1.40	1.25
S106	0.25	0.24	0.24	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	63.00	1.05	0.85
S107	0.20	0.19	0.19	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	87.00	1.45	1.24
S200	0.21	0.20	0.19	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.07	53.25	0.89	0.50
S201	0.27	0.26	0.25	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.19	40.75	0.68	0.50
S202	0.27	0.26	0.25	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.19	25.25	0.42	0.34
S203	0.27	0.26	0.25	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.19	58.25	0.97	0.95
S204	0.20	0.20	0.19	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.02	63.50	1.06	0.69
S205	0.26	0.26	0.25	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.03	52.75	0.88	0.73
S206	0.22	0.21	0.21	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.01	90.50	1.51	1.24
S207	0.21	0.20	0.20	0.05	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.07	84.75	1.41	1.09
S208	0.20	0.20	0.19	0.06	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.99	90.00	1.50	1.03
S209	0.24	0.23	0.23	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.91	63.75	1.06	0.65
S210	0.26	0.25	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	50.00	0.83	0.56
S211	0.26	0.25	0.25	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	62.50	1.04	0.75
S300	0.25	0.24	0.23	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.03	65.50	1.09	0.85
S301	0.20	0.20	0.19	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.07	61.00	1.02	0.66
S302	0.26	0.26	0.25	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.06	53.00	0.88	0.54
S303	0.22	0.21	0.21	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.79	64.00	1.07	0.68
S304	0.21	0.21	0.20	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	78.50	1.31	1.09
S400	0.21	0.20	0.20	0.07	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.93	76.00	1.27	0.77
S401	0.24	0.23	0.22	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	77.00	1.28	0.80
S402	0.23	0.22	0.21	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	70.25	1.17	0.71
S403	0.28	0.28	0.27	0.08	0.05	0.03	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	81.00	1.35	1.07
S404	0.28	0.27	0.26	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	26.25	0.44	0.26
S500	0.20	0.19	0.18	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	88.00	1.47	1.11
S501	0.24	0.23	0.23	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.99	57.25	0.95	0.64
S502	0.26	0.25	0.24	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.91	44.75	0.75	0.47
S503	0.21	0.21	0.20	0.06	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.95	62.50	1.04	0.65
S504	0.23	0.22	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	90.00	1.50	1.58
S505	0.25	0.25	0.24	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.90	19.75	0.33	0.18
S506	0.27	0.26	0.25	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	28.50	0.48	0.37
S507	0.23	0.23	0.22	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	74.25	1.24	0.80

Table C-5

Time of concentration and duration of rainfall excess for existing conditions, 10-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.26	0.25	0.23	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	53.25	0.89	0.69
S509	0.27	0.26	0.25	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.06	21.75	0.36	0.25
S510	0.29	0.28	0.27	0.07	0.03	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03	43.00	0.72	0.70
S511	0.27	0.27	0.26	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.05	32.75	0.55	0.41
S512	0.29	0.29	0.28	0.07	0.04	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	53.75	0.90	0.77
S513	0.22	0.21	0.20	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	90.00	1.50	1.30
S514	0.26	0.26	0.25	0.08	0.05	0.03	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01	83.50	1.39	1.26
S515	0.22	0.22	0.22	0.09	0.07	0.06	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	83.25	1.39	0.86
S516	0.24	0.23	0.22	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	90.00	1.50	1.29
S600	0.12	0.12	0.11	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.70	78.25	1.30	0.76
S601	0.24	0.23	0.23	0.08	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.33	46.75	0.78	0.49
S602	0.15	0.14	0.14	0.06	0.05	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.99	71.00	1.18	0.76
S603	0.26	0.26	0.26	0.08	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.32	32.25	0.54	0.30
S604	0.12	0.11	0.11	0.06	0.05	0.05	0.05	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.95	90.00	1.50	1.03
S605	0.20	0.19	0.19	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	62.75	1.05	0.73
S606	0.25	0.24	0.23	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.16	48.50	0.81	0.67
S607	0.24	0.23	0.22	0.07	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.16	59.75	1.00	0.88
S608	0.29	0.28	0.28	0.07	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.30	40.25	0.67	0.46
S609	0.24	0.23	0.22	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.03	61.75	1.03	1.01
S610	0.27	0.26	0.26	0.07	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.28	64.00	1.07	0.88
S611	0.26	0.25	0.24	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.17	40.25	0.67	0.40
S612	0.25	0.24	0.24	0.08	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.21	60.00	1.00	0.88
S613	0.16	0.15	0.15	0.07	0.05	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.01	90.00	1.50	0.87
S614	0.20	0.19	0.19	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.05	81.50	1.36	0.96
S615	0.23	0.23	0.23	0.10	0.08	0.07	0.05	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	1.51	69.75	1.16	0.76
S616	0.27	0.26	0.26	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.03	90.00	1.50	1.33
S617	0.24	0.24	0.23	0.05	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.01	67.00	1.12	0.67
S618	0.21	0.21	0.20	0.06	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.98	68.50	1.14	0.87
S619	0.25	0.25	0.24	0.09	0.07	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.34	56.50	0.94	0.45
S620	0.29	0.29	0.28	0.08	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.35	53.00	0.88	0.81
S621	0.20	0.19	0.19	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	59.75	1.00	0.53
S622	0.20	0.20	0.19	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	90.00	1.50	1.08
S700	0.24	0.24	0.23	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	63.75	1.06	0.89
S701	0.24	0.23	0.23	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.92	90.00	1.50	1.60
S702	0.26	0.25	0.25	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	48.00	0.80	0.82
S703	0.26	0.25	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	42.75	0.71	0.61
S704	0.26	0.25	0.24	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.90	37.75	0.63	0.45
S705	0.24	0.23	0.23	0.06	0.03	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	56.00	0.93	0.74

Table C-5

Time of concentration and duration of rainfall excess for existing conditions, 10-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.31	0.31	0.31	0.10	0.08	0.07	0.04	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	35.50	0.59	0.52
S706	0.23	0.23	0.22	0.04	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	66.50	1.11	0.88
S707	0.25	0.25	0.24	0.05	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	62.75	1.05	0.96
S708	0.28	0.27	0.27	0.10	0.08	0.08	0.04	0.04	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	41.50	0.69	0.44
S709	0.32	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	36.75	0.61	0.45
S710	0.31	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.41	20.75	0.35	0.28
S711	0.32	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41	20.25	0.34	0.19
S712	0.31	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.40	11.00	0.18	0.10
S713	0.31	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.41	15.50	0.26	0.18
S714	0.30	0.29	0.29	0.08	0.05	0.03	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	17.00	0.28	0.23
S715	0.32	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	34.75	0.58	0.46
S716	0.24	0.23	0.23	0.11	0.10	0.09	0.06	0.06	0.06	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	1.29	54.25	0.90	0.61
S717	0.32	0.31	0.31	0.11	0.09	0.09	0.04	0.04	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.43	21.00	0.35	0.18
S718	0.32	0.31	0.31	0.11	0.09	0.09	0.04	0.04	0.04	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.47	70.25	1.17	1.27
S719	0.33	0.32	0.32	0.12	0.10	0.10	0.05	0.05	0.05	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	1.66	39.00	0.65	0.78
S720	0.32	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42	41.50	0.69	0.60
S721	0.29	0.28	0.28	0.07	0.04	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03	26.75	0.45	0.24
S722	0.25	0.24	0.24	0.10	0.09	0.08	0.05	0.05	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	58.25	0.97	0.72
S723	0.31	0.31	0.31	0.10	0.08	0.07	0.04	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	21.50	0.36	0.30
S724	0.24	0.24	0.24	0.12	0.10	0.10	0.07	0.06	0.06	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	1.37	50.00	0.83	0.55
S725	0.22	0.22	0.22	0.10	0.08	0.08	0.05	0.05	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	78.75	1.31	1.12
S726	0.27	0.26	0.25	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	21.75	0.36	0.23
S727	0.31	0.30	0.30	0.10	0.07	0.07	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	49.75	0.83	0.85
S728	0.26	0.25	0.24	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	62.00	1.03	1.14

Table C-6

Time of concentration and duration of rainfall excess for existing conditions, 5-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.20	0.20	0.19	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.84	64.25	1.07	0.88
S101	0.19	0.19	0.17	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.71	55.00	0.92	0.62
S102	0.21	0.21	0.20	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.92	72.50	1.21	0.99
S103	0.22	0.21	0.20	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.80	82.75	1.38	1.12
S104	0.17	0.16	0.16	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.65	85.00	1.42	0.85
S105	0.20	0.19	0.19	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.72	90.00	1.50	1.35
S106	0.20	0.19	0.18	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	75.00	1.25	1.03
S107	0.15	0.15	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	90.00	1.50	1.29
S200	0.16	0.15	0.14	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.85	60.50	1.01	0.58
S201	0.21	0.20	0.19	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.95	46.50	0.78	0.58
S202	0.21	0.20	0.19	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.95	28.75	0.48	0.39
S203	0.21	0.20	0.19	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.95	66.50	1.11	1.10
S204	0.16	0.15	0.14	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.81	73.25	1.22	0.81
S205	0.21	0.20	0.19	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.81	60.75	1.01	0.85
S206	0.17	0.16	0.15	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.79	90.00	1.50	1.24
S207	0.16	0.15	0.14	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.85	90.00	1.50	1.17
S208	0.16	0.15	0.15	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.75	90.00	1.50	1.03
S209	0.19	0.18	0.17	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.70	75.25	1.25	0.78
S210	0.20	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	59.75	1.00	0.68
S211	0.20	0.20	0.19	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	74.75	1.25	0.91
S300	0.19	0.18	0.17	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.81	75.75	1.26	1.00
S301	0.16	0.15	0.14	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.85	70.00	1.17	0.77
S302	0.21	0.20	0.19	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	61.00	1.02	0.63
S303	0.17	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	76.25	1.27	0.83
S304	0.17	0.16	0.15	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	90.00	1.50	1.27
S400	0.17	0.16	0.15	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.68	90.00	1.50	0.93
S401	0.18	0.17	0.16	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	90.00	1.50	0.95
S402	0.18	0.17	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	86.25	1.44	0.89
S403	0.23	0.22	0.22	0.05	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	90.00	1.50	1.20
S404	0.22	0.21	0.20	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	31.50	0.53	0.32
S500	0.15	0.15	0.13	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.84	90.00	1.50	1.13
S501	0.19	0.18	0.17	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.78	66.25	1.10	0.75
S502	0.20	0.19	0.17	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.70	52.50	0.88	0.56
S503	0.17	0.16	0.16	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.70	75.25	1.25	0.80
S504	0.18	0.16	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	90.00	1.50	1.58
S505	0.20	0.19	0.17	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.70	23.25	0.39	0.22
S506	0.21	0.20	0.19	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	33.75	0.56	0.44
S507	0.18	0.17	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	90.00	1.50	0.99

Table C-6

Time of concentration and duration of rainfall excess for existing conditions, 5-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.20	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	64.50	1.08	0.86
S509	0.21	0.20	0.19	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	25.25	0.42	0.30
S510	0.23	0.22	0.22	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	51.50	0.86	0.85
S511	0.22	0.21	0.20	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	38.00	0.63	0.48
S512	0.24	0.23	0.22	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	64.75	1.08	0.95
S513	0.17	0.16	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	90.00	1.50	1.30
S514	0.22	0.21	0.20	0.05	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	90.00	1.50	1.37
S515	0.18	0.18	0.18	0.07	0.05	0.04	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	90.00	1.50	0.94
S516	0.19	0.17	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	90.00	1.50	1.29
S600	0.09	0.08	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.52	90.00	1.50	0.89
S601	0.19	0.19	0.18	0.05	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	53.25	0.89	0.56
S602	0.11	0.11	0.10	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.77	82.50	1.38	0.89
S603	0.22	0.21	0.20	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.07	36.50	0.61	0.35
S604	0.09	0.08	0.07	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.72	90.00	1.50	1.03
S605	0.15	0.15	0.14	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.85	71.75	1.20	0.85
S606	0.20	0.19	0.18	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.93	55.00	0.92	0.77
S607	0.19	0.18	0.17	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.92	68.75	1.15	1.02
S608	0.23	0.23	0.22	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.05	45.75	0.76	0.53
S609	0.19	0.18	0.16	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.80	71.75	1.20	1.20
S610	0.22	0.21	0.20	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.03	73.00	1.22	1.01
S611	0.20	0.19	0.18	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.94	46.00	0.77	0.47
S612	0.20	0.19	0.19	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.94	70.00	1.17	1.04
S613	0.12	0.11	0.11	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.78	90.00	1.50	0.87
S614	0.16	0.15	0.14	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.84	90.00	1.50	1.08
S615	0.19	0.19	0.18	0.07	0.06	0.06	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.22	79.00	1.32	0.87
S616	0.21	0.21	0.20	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.81	90.00	1.50	1.33
S617	0.19	0.18	0.17	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.79	78.00	1.30	0.79
S618	0.17	0.16	0.16	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.74	81.00	1.35	1.05
S619	0.21	0.20	0.20	0.06	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	64.75	1.08	0.52
S620	0.24	0.23	0.23	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.08	60.00	1.00	0.93
S621	0.15	0.15	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	74.00	1.23	0.67
S622	0.16	0.15	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	90.00	1.50	1.08
S700	0.19	0.18	0.17	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	76.25	1.27	1.08
S701	0.19	0.18	0.17	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.70	90.00	1.50	1.60
S702	0.21	0.20	0.19	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	57.25	0.95	0.99
S703	0.20	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	51.50	0.86	0.75
S704	0.20	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.69	44.50	0.74	0.54
S705	0.19	0.18	0.18	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	92.00	1.53	1.29

Table C-6

Time of concentration and duration of rainfall excess for existing conditions, 5-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.26	0.26	0.25	0.08	0.06	0.04	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	40.25	0.67	0.59
S706	0.18	0.17	0.16	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	80.50	1.34	1.09
S707	0.20	0.19	0.18	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	75.75	1.26	1.19
S708	0.23	0.23	0.22	0.08	0.06	0.05	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	46.75	0.78	0.50
S709	0.26	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	41.25	0.69	0.51
S710	0.26	0.26	0.26	0.09	0.07	0.07	0.03	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	22.75	0.38	0.31
S711	0.27	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	22.25	0.37	0.21
S712	0.26	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	11.75	0.20	0.11
S713	0.26	0.26	0.26	0.09	0.07	0.07	0.03	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	17.00	0.28	0.20
S714	0.25	0.24	0.23	0.06	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	19.00	0.32	0.26
S715	0.26	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	38.75	0.65	0.52
S716	0.20	0.19	0.19	0.09	0.08	0.07	0.05	0.05	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.00	62.00	1.03	0.71
S717	0.27	0.26	0.26	0.09	0.07	0.07	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	23.00	0.38	0.20
S718	0.27	0.26	0.26	0.09	0.07	0.07	0.03	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	80.50	1.34	1.48
S719	0.27	0.27	0.27	0.10	0.08	0.08	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	1.34	42.75	0.71	0.87
S720	0.27	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	46.25	0.77	0.68
S721	0.24	0.23	0.22	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	31.25	0.52	0.29
S722	0.20	0.20	0.20	0.08	0.06	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	68.50	1.14	0.87
S723	0.26	0.26	0.25	0.08	0.06	0.05	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	24.00	0.40	0.34
S724	0.20	0.20	0.20	0.10	0.08	0.08	0.05	0.05	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.08	56.25	0.94	0.62
S725	0.18	0.18	0.18	0.07	0.06	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	90.00	1.50	1.30
S726	0.22	0.21	0.19	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	26.00	0.43	0.28
S727	0.25	0.25	0.25	0.07	0.05	0.04	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	92.75	1.55	1.69
S728	0.20	0.19	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	75.00	1.25	1.40

Table C-7

Time of concentration and duration of rainfall excess for existing conditions, 2-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.12	0.11	0.09	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.51	87.50	1.46	1.24
S101	0.11	0.10	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.40	78.50	1.31	0.92
S102	0.13	0.12	0.10	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.57	90.00	1.50	1.26
S103	0.13	0.12	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.47	90.00	1.50	1.23
S104	0.10	0.09	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	90.00	1.50	0.91
S105	0.12	0.11	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	90.00	1.50	1.35
S106	0.11	0.10	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	90.00	1.50	1.27
S107	0.08	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	90.00	1.50	1.29
S200	0.09	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.52	81.50	1.36	0.80
S201	0.13	0.11	0.08	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	61.75	1.03	0.79
S202	0.13	0.11	0.08	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.59	39.00	0.65	0.55
S203	0.13	0.11	0.08	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	90.00	1.50	1.54
S204	0.09	0.07	0.06	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.48	90.00	1.50	1.02
S205	0.12	0.11	0.08	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.47	84.75	1.41	1.23
S206	0.10	0.09	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.47	90.00	1.50	1.24
S207	0.09	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.52	90.00	1.50	1.17
S208	0.09	0.08	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.44	90.00	1.50	1.03
S209	0.11	0.10	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.39	90.00	1.50	0.95
S210	0.12	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	89.75	1.50	1.07
S211	0.12	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	90.00	1.50	1.12
S300	0.11	0.10	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.47	90.00	1.50	1.21
S301	0.09	0.07	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.52	90.00	1.50	1.01
S302	0.12	0.11	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.49	85.00	1.42	0.91
S303	0.09	0.08	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	90.00	1.50	1.00
S304	0.09	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	90.00	1.50	1.27
S400	0.10	0.09	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.38	90.00	1.50	0.93
S401	0.10	0.08	0.05	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	90.00	1.50	0.95
S402	0.10	0.08	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	90.00	1.50	0.94
S403	0.15	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	90.00	1.50	1.20
S404	0.13	0.12	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	46.00	0.77	0.48
S500	0.09	0.07	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.51	90.00	1.50	1.13
S501	0.11	0.09	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.45	90.00	1.50	1.05
S502	0.11	0.10	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	77.50	1.29	0.86
S503	0.10	0.09	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.41	90.00	1.50	0.97
S504	0.09	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	60.00	1.00	1.01
S505	0.11	0.09	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	35.00	0.58	0.34
S506	0.13	0.11	0.07	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	49.50	0.83	0.68
S507	0.10	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	90.00	1.50	0.99

Table C-7

Time of concentration and duration of rainfall excess for existing conditions, 2-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.11	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	90.00	1.50	1.24
S509	0.13	0.11	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.49	35.25	0.59	0.43
S510	0.15	0.13	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	72.75	1.21	1.25
S511	0.13	0.12	0.09	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.48	52.50	0.88	0.69
S512	0.15	0.14	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	90.00	1.50	1.37
S513	0.09	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	60.00	1.00	0.83
S514	0.14	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	90.00	1.50	1.37
S515	0.12	0.11	0.11	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	90.00	1.50	0.94
S516	0.10	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	10.00	0.17	0.11
S600	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.29	90.00	1.50	0.89
S601	0.12	0.12	0.10	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.70	67.50	1.13	0.73
S602	0.06	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.48	90.00	1.50	0.98
S603	0.14	0.13	0.11	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.70	46.75	0.78	0.46
S604	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.47	90.00	1.50	1.03
S605	0.09	0.07	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.52	90.00	1.50	1.09
S606	0.12	0.11	0.08	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	73.50	1.23	1.07
S607	0.12	0.10	0.08	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.58	90.00	1.50	1.38
S608	0.15	0.14	0.12	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.68	58.50	0.98	0.69
S609	0.11	0.09	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.46	90.00	1.50	1.54
S610	0.14	0.13	0.10	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.67	90.00	1.50	1.28
S611	0.12	0.11	0.08	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	60.75	1.01	0.63
S612	0.13	0.12	0.10	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	90.00	1.50	1.38
S613	0.06	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.48	90.00	1.50	0.87
S614	0.09	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.51	90.00	1.50	1.08
S615	0.13	0.12	0.11	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.83	90.00	1.50	1.00
S616	0.13	0.12	0.09	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.48	90.00	1.50	1.33
S617	0.11	0.10	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.47	90.00	1.50	0.93
S618	0.10	0.09	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.44	90.00	1.50	1.18
S619	0.13	0.13	0.11	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.69	83.75	1.40	0.70
S620	0.16	0.15	0.14	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.72	77.25	1.29	1.23
S621	0.08	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	90.00	1.50	0.83
S622	0.08	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	90.00	1.50	1.08
S700	0.11	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	90.00	1.50	1.30
S701	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.40	90.00	1.50	1.60
S702	0.12	0.11	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	83.50	1.39	1.51
S703	0.11	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	77.75	1.30	1.18
S704	0.12	0.10	0.07	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	65.50	1.09	0.82
S705	0.11	0.10	0.09	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	90.00	1.50	1.26

Table C-7

Time of concentration and duration of rainfall excess for existing conditions, 2-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.18	0.18	0.17	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	54.50	0.91	0.83
S706	0.10	0.09	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	90.00	1.50	1.24
S707	0.12	0.11	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	90.00	1.50	1.44
S708	0.16	0.15	0.15	0.04	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	64.50	1.08	0.71
S709	0.19	0.18	0.18	0.05	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	54.50	0.91	0.70
S710	0.19	0.18	0.18	0.05	0.04	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	27.75	0.46	0.38
S711	0.19	0.18	0.18	0.05	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	27.25	0.45	0.26
S712	0.19	0.18	0.18	0.05	0.04	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	13.50	0.23	0.13
S713	0.19	0.18	0.18	0.05	0.04	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	20.50	0.34	0.25
S714	0.16	0.15	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	26.25	0.44	0.37
S715	0.19	0.18	0.18	0.05	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	51.00	0.85	0.71
S716	0.14	0.13	0.13	0.05	0.03	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	86.00	1.43	1.02
S717	0.19	0.19	0.18	0.05	0.04	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	28.50	0.48	0.26
S718	0.19	0.19	0.18	0.06	0.04	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	90.00	1.50	1.68
S719	0.20	0.20	0.20	0.07	0.05	0.05	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	52.25	0.87	1.08
S720	0.19	0.18	0.18	0.05	0.03	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	61.25	1.02	0.93
S721	0.15	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	45.00	0.75	0.43
S722	0.14	0.13	0.13	0.03	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	90.00	1.50	1.17
S723	0.18	0.18	0.17	0.04	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	30.50	0.51	0.45
S724	0.14	0.14	0.13	0.06	0.04	0.03	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	75.00	1.25	0.86
S725	0.12	0.12	0.11	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	90.00	1.50	1.30
S726	0.13	0.11	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	38.25	0.64	0.43
S727	0.18	0.17	0.17	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	80.50	1.34	1.45
S728	0.12	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	90.00	1.50	1.72

Table C-8

Time of concentration and duration of rainfall excess for existing conditions, 100-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.25	0.25	0.25	0.25	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.95	41.50	0.69	0.54
S101	0.25	0.25	0.25	0.25	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.70	32.50	0.54	0.35
S102	0.25	0.25	0.25	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.07	48.75	0.81	0.64
S103	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.79	52.25	0.87	0.67
S104	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.68	47.50	0.79	0.45
S105	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.68	59.25	0.99	0.85
S106	0.25	0.24	0.24	0.24	0.24	0.24	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.46	43.75	0.73	0.57
S107	0.24	0.24	0.24	0.24	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	53.75	0.90	0.73
S200	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	37.75	0.63	0.34
S201	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	31.00	0.52	0.37
S202	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	22.00	0.37	0.29
S203	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	45.50	0.76	0.72
S204	0.25	0.24	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.09	45.00	0.75	0.47
S205	0.25	0.24	0.24	0.24	0.24	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.82	39.25	0.65	0.53
S206	0.25	0.25	0.25	0.25	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.00	60.50	1.01	0.80
S207	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.17	61.00	1.02	0.76
S208	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.97	64.75	1.08	0.72
S209	0.25	0.25	0.24	0.24	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.67	44.75	0.75	0.44
S210	0.24	0.24	0.24	0.24	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.29	34.75	0.58	0.37
S211	0.25	0.24	0.24	0.24	0.24	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	43.75	0.73	0.50
S300	0.25	0.25	0.24	0.24	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.92	48.00	0.80	0.60
S301	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	43.50	0.73	0.45
S302	0.25	0.24	0.24	0.24	0.24	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.90	39.75	0.66	0.39
S303	0.24	0.24	0.23	0.23	0.23	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.48	42.75	0.71	0.44
S304	0.25	0.24	0.24	0.24	0.24	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34	50.50	0.84	0.67
S400	0.26	0.26	0.26	0.25	0.25	0.25	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.77	52.00	0.87	0.51
S401	0.25	0.24	0.24	0.24	0.24	0.23	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.45	51.50	0.86	0.51
S402	0.25	0.25	0.24	0.24	0.24	0.24	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39	45.00	0.75	0.43
S403	0.28	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.71	58.25	0.97	0.74
S404	0.26	0.26	0.26	0.26	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.46	22.25	0.37	0.21
S500	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	62.75	1.05	0.76
S501	0.24	0.24	0.24	0.24	0.24	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.85	41.50	0.69	0.45
S502	0.24	0.24	0.24	0.24	0.23	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.60	32.00	0.53	0.32
S503	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.79	43.25	0.72	0.43
S504	0.23	0.22	0.22	0.22	0.22	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	61.50	1.03	1.03
S505	0.24	0.24	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.58	18.25	0.30	0.16
S506	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.58	23.50	0.39	0.30
S507	0.25	0.25	0.24	0.24	0.24	0.24	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34	47.25	0.79	0.49

Table C-8

Time of concentration and duration of rainfall excess for existing conditions, 100-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.24	0.24	0.24	0.24	0.24	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	35.75	0.60	0.45
S509	0.25	0.25	0.25	0.24	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.89	19.75	0.33	0.23
S510	0.27	0.27	0.27	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.70	31.74	0.53	0.50
S511	0.26	0.26	0.25	0.25	0.25	0.25	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.87	26.00	0.43	0.31
S512	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.69	40.00	0.67	0.56
S513	0.25	0.24	0.24	0.24	0.24	0.23	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	78.00	1.30	1.11
S514	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.00	0.00	0.00	0.00	1.65	59.00	0.98	0.86
S515	0.28	0.28	0.28	0.28	0.28	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.87	58.50	0.98	0.58
S516	0.24	0.24	0.23	0.23	0.23	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21	63.50	1.06	0.88
S600	0.23	0.23	0.23	0.23	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.75	45.75	0.76	0.42
S601	0.27	0.27	0.27	0.27	0.26	0.26	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.58	35.25	0.59	0.35
S602	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	47.25	0.79	0.48
S603	0.27	0.27	0.27	0.26	0.26	0.26	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.50	26.00	0.43	0.24
S604	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	66.00	1.10	0.73
S605	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	44.50	0.74	0.50
S606	0.25	0.25	0.25	0.25	0.25	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.22	36.00	0.60	0.48
S607	0.26	0.26	0.26	0.26	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.25	44.25	0.74	0.63
S608	0.27	0.26	0.26	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.39	31.00	0.52	0.34
S609	0.24	0.24	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.92	46.00	0.77	0.73
S610	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.39	49.75	0.83	0.66
S611	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	30.25	0.50	0.29
S612	0.27	0.27	0.27	0.26	0.26	0.26	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.27	45.00	0.75	0.64
S613	0.25	0.25	0.25	0.25	0.25	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	65.75	1.10	0.62
S614	0.25	0.25	0.25	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	57.75	0.96	0.66
S615	0.28	0.28	0.28	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.93	54.75	0.91	0.58
S616	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.81	82.50	1.38	1.21
S617	0.25	0.25	0.25	0.25	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.90	48.50	0.81	0.47
S618	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.90	47.75	0.80	0.59
S619	0.28	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.53	43.25	0.72	0.33
S620	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.44	41.75	0.70	0.62
S621	0.24	0.24	0.24	0.24	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	37.25	0.62	0.31
S622	0.24	0.24	0.24	0.24	0.24	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35	58.25	0.97	0.66
S700	0.25	0.24	0.24	0.24	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	43.50	0.73	0.58
S701	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.71	66.00	1.10	1.14
S702	0.25	0.24	0.24	0.24	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	33.75	0.56	0.55
S703	0.24	0.24	0.24	0.24	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	29.75	0.50	0.41
S704	0.25	0.24	0.24	0.24	0.24	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.54	27.75	0.46	0.32
S705	0.26	0.26	0.26	0.26	0.25	0.25	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.61	39.00	0.65	0.50

Table C-8

Time of concentration and duration of rainfall excess for existing conditions, 100-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.36	29.25	0.49	0.42
S706	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.52	44.25	0.74	0.56
S707	0.26	0.26	0.26	0.25	0.25	0.25	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.63	43.50	0.73	0.64
S708	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.17	33.00	0.55	0.34
S709	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.63	30.50	0.51	0.37
S710	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.44	20.00	0.33	0.26
S711	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.64	19.50	0.33	0.18
S712	0.29	0.29	0.29	0.29	0.29	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.43	11.25	0.19	0.11
S713	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.44	16.00	0.27	0.19
S714	0.28	0.28	0.28	0.28	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.85	17.00	0.28	0.23
S715	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.62	29.00	0.48	0.38
S716	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.40	42.50	0.71	0.47
S717	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.66	20.00	0.33	0.17
S718	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.72	58.25	0.97	1.03
S719	0.30	0.30	0.29	0.29	0.29	0.29	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03	3.23	33.25	0.55	0.66
S720	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.66	34.75	0.58	0.50
S721	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.00	0.00	0.00	0.00	0.00	1.64	23.00	0.38	0.21
S722	0.29	0.28	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.14	44.50	0.74	0.54
S723	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.38	20.50	0.34	0.29
S724	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.64	39.75	0.66	0.42
S725	0.28	0.28	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.00	57.00	0.95	0.78
S726	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.56	19.75	0.33	0.21
S727	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.15	40.25	0.67	0.67
S728	0.25	0.25	0.24	0.24	0.24	0.24	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	41.75	0.70	0.73

Table C-9

Time of concentration and duration of rainfall excess for existing conditions, 50-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.22	0.22	0.22	0.21	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.69	45.00	0.75	0.59
S101	0.22	0.22	0.22	0.21	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.46	35.50	0.59	0.38
S102	0.22	0.22	0.21	0.21	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.80	52.75	0.88	0.70
S103	0.23	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.54	56.75	0.95	0.74
S104	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.43	51.75	0.86	0.49
S105	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.43	64.75	1.08	0.93
S106	0.22	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	47.75	0.80	0.63
S107	0.21	0.21	0.20	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	58.75	0.98	0.80
S200	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	40.75	0.68	0.37
S201	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	33.50	0.56	0.40
S202	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	23.25	0.39	0.31
S203	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	49.00	0.82	0.79
S204	0.22	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.82	48.75	0.81	0.52
S205	0.22	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.57	42.50	0.71	0.57
S206	0.22	0.22	0.22	0.21	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.74	65.50	1.09	0.87
S207	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.89	65.75	1.10	0.82
S208	0.23	0.22	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.71	70.00	1.17	0.78
S209	0.22	0.22	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.44	48.50	0.81	0.48
S210	0.21	0.21	0.21	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	38.00	0.63	0.41
S211	0.22	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	47.75	0.80	0.55
S300	0.22	0.22	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.67	52.00	0.87	0.66
S301	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	47.00	0.78	0.49
S302	0.22	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.64	43.00	0.72	0.43
S303	0.21	0.21	0.20	0.20	0.20	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	46.75	0.78	0.48
S304	0.21	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.14	55.25	0.92	0.74
S400	0.23	0.23	0.23	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.51	56.50	0.94	0.56
S401	0.22	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	56.25	0.94	0.56
S402	0.22	0.22	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	49.50	0.83	0.48
S403	0.25	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	1.43	62.75	1.05	0.80
S404	0.23	0.23	0.23	0.23	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.23	23.50	0.39	0.23
S500	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	67.75	1.13	0.83
S501	0.21	0.21	0.21	0.21	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.60	45.00	0.75	0.49
S502	0.21	0.21	0.20	0.20	0.20	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.37	35.00	0.58	0.36
S503	0.23	0.22	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.54	47.00	0.78	0.47
S504	0.19	0.19	0.19	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	92.00	1.53	1.62
S505	0.21	0.21	0.20	0.20	0.20	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.35	19.25	0.32	0.17
S506	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33	24.50	0.41	0.31
S507	0.22	0.22	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	52.00	0.87	0.54

Table C-9

Time of concentration and duration of rainfall excess for existing conditions, 50-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.21	0.21	0.21	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	39.25	0.65	0.49
S509	0.22	0.22	0.21	0.21	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.64	20.75	0.35	0.24
S510	0.24	0.24	0.24	0.23	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.45	34.25	0.57	0.54
S511	0.23	0.23	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.60	27.25	0.45	0.33
S512	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.41	42.75	0.71	0.60
S513	0.22	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10	86.00	1.43	1.24
S514	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.38	63.75	1.06	0.93
S515	0.25	0.25	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.57	62.75	1.05	0.63
S516	0.21	0.21	0.20	0.20	0.20	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	69.75	1.16	0.97
S600	0.20	0.20	0.20	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.50	50.00	0.83	0.46
S601	0.24	0.24	0.24	0.24	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.26	37.75	0.63	0.38
S602	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	51.25	0.85	0.53
S603	0.24	0.24	0.24	0.24	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.19	94.50	1.58	1.00
S604	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	71.25	1.19	0.79
S605	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	48.00	0.80	0.54
S606	0.22	0.22	0.22	0.22	0.22	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.94	39.00	0.65	0.53
S607	0.23	0.23	0.23	0.23	0.22	0.22	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.97	47.50	0.79	0.68
S608	0.24	0.24	0.23	0.23	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.08	33.25	0.55	0.37
S609	0.21	0.21	0.20	0.20	0.20	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.65	50.25	0.84	0.81
S610	0.23	0.23	0.23	0.23	0.23	0.22	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.10	53.25	0.89	0.71
S611	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	32.50	0.54	0.32
S612	0.24	0.24	0.24	0.23	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.98	48.25	0.80	0.69
S613	0.22	0.22	0.22	0.22	0.22	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	71.00	1.18	0.67
S614	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	62.50	1.04	0.72
S615	0.25	0.25	0.25	0.24	0.24	0.24	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.59	58.50	0.98	0.62
S616	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.57	89.75	1.50	1.33
S617	0.22	0.22	0.22	0.22	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.65	52.50	0.88	0.51
S618	0.23	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.65	51.75	0.86	0.64
S619	0.25	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.21	46.50	0.78	0.36
S620	0.24	0.24	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.14	45.00	0.75	0.67
S621	0.21	0.21	0.20	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	40.50	0.68	0.34
S622	0.21	0.21	0.21	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15	63.75	1.06	0.73
S700	0.22	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	47.50	0.79	0.64
S701	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.46	72.00	1.20	1.25
S702	0.22	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	36.75	0.61	0.61
S703	0.21	0.21	0.20	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	32.25	0.54	0.44
S704	0.21	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	29.50	0.49	0.34
S705	0.23	0.23	0.23	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.36	42.25	0.70	0.54

Table C-9

Time of concentration and duration of rainfall excess for existing conditions, 50-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.98	30.75	0.51	0.44
S706	0.22	0.22	0.22	0.22	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	48.25	0.80	0.62
S707	0.23	0.23	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.38	47.25	0.79	0.70
S708	0.26	0.26	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.82	35.00	0.58	0.36
S709	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.24	32.25	0.54	0.39
S710	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.07	20.75	0.35	0.28
S711	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.25	20.25	0.34	0.19
S712	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.06	11.75	0.20	0.11
S713	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.07	16.50	0.28	0.19
S714	0.25	0.25	0.25	0.25	0.25	0.24	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.54	17.75	0.30	0.24
S715	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.23	30.25	0.50	0.40
S716	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.02	45.00	0.75	0.50
S717	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.27	21.00	0.35	0.18
S718	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.33	61.50	1.03	1.10
S719	0.27	0.27	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.81	35.25	0.59	0.70
S720	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.27	36.75	0.61	0.53
S721	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.38	24.00	0.40	0.22
S722	0.26	0.26	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.78	47.25	0.79	0.57
S723	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.99	21.25	0.35	0.30
S724	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.25	42.00	0.70	0.45
S725	0.25	0.25	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.67	60.75	1.01	0.84
S726	0.23	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	20.75	0.35	0.22
S727	0.26	0.26	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	1.80	42.75	0.71	0.72
S728	0.22	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	45.75	0.76	0.81

Table C-10

Time of concentration and duration of rainfall excess for existing conditions, 25-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.43	49.25	0.82	0.66
S101	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.22	39.00	0.65	0.42
S102	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.53	57.75	0.96	0.77
S103	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.29	62.50	1.04	0.82
S104	0.19	0.19	0.19	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.20	57.00	0.95	0.55
S105	0.19	0.19	0.19	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.20	71.25	1.19	1.04
S106	0.18	0.18	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03	52.75	0.88	0.70
S107	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	65.50	1.09	0.91
S200	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	45.00	0.75	0.41
S201	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	37.00	0.62	0.45
S202	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	24.75	0.41	0.33
S203	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	54.00	0.90	0.88
S204	0.18	0.18	0.18	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.53	53.75	0.90	0.58
S205	0.18	0.18	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.32	47.00	0.78	0.64
S206	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.47	72.00	1.20	0.96
S207	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.60	72.25	1.20	0.91
S208	0.20	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.45	76.75	1.28	0.87
S209	0.19	0.18	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.20	53.75	0.90	0.54
S210	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	42.25	0.70	0.46
S211	0.18	0.18	0.18	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	53.25	0.89	0.62
S300	0.19	0.18	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.40	57.25	0.95	0.73
S301	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	51.75	0.86	0.55
S302	0.19	0.18	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.38	47.50	0.79	0.48
S303	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	52.00	0.87	0.54
S304	0.18	0.18	0.18	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	61.25	1.02	0.83
S400	0.20	0.20	0.19	0.19	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.26	62.25	1.04	0.62
S401	0.18	0.18	0.18	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	62.50	1.04	0.63
S402	0.19	0.18	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	55.00	0.92	0.54
S403	0.21	0.21	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.18	69.25	1.15	0.90
S404	0.20	0.20	0.19	0.19	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	25.00	0.42	0.24
S500	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	74.50	1.24	0.92
S501	0.18	0.18	0.18	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.34	49.75	0.83	0.55
S502	0.18	0.18	0.17	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.13	38.75	0.65	0.40
S503	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.31	51.50	0.86	0.52
S504	0.16	0.16	0.15	0.15	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	77.50	1.29	1.34
S505	0.18	0.17	0.17	0.17	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.11	20.75	0.35	0.19
S506	0.19	0.19	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	26.25	0.44	0.34
S507	0.18	0.18	0.18	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	58.00	0.97	0.61

Table C-10

Time of concentration and duration of rainfall excess for existing conditions, 25-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	44.00	0.73	0.56
S509	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.38	22.00	0.37	0.26
S510	0.21	0.20	0.20	0.20	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.20	37.50	0.63	0.60
S511	0.20	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.35	29.00	0.48	0.36
S512	0.21	0.21	0.21	0.21	0.21	0.21	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.16	46.75	0.78	0.66
S513	0.18	0.18	0.18	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	90.00	1.50	1.30
S514	0.21	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.14	70.75	1.18	1.05
S515	0.22	0.22	0.22	0.22	0.22	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	1.27	92.00	1.53	0.96
S516	0.17	0.17	0.17	0.16	0.16	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	78.50	1.31	1.11
S600	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	55.50	0.93	0.52
S601	0.21	0.21	0.20	0.20	0.20	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.95	41.00	0.68	0.42
S602	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	56.00	0.93	0.58
S603	0.21	0.21	0.20	0.20	0.20	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.89	28.75	0.48	0.27
S604	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	78.00	1.30	0.88
S605	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	52.50	0.88	0.60
S606	0.19	0.19	0.19	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.65	42.75	0.71	0.59
S607	0.20	0.20	0.19	0.19	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.68	93.25	1.55	1.44
S608	0.21	0.20	0.20	0.20	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.79	36.25	0.60	0.41
S609	0.18	0.18	0.17	0.17	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.38	55.50	0.93	0.90
S610	0.20	0.20	0.20	0.20	0.20	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.80	58.00	0.97	0.78
S611	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	36.00	0.60	0.35
S612	0.21	0.21	0.20	0.20	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.68	52.75	0.88	0.76
S613	0.19	0.19	0.19	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	77.75	1.30	0.74
S614	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	68.50	1.14	0.80
S615	0.22	0.22	0.22	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.24	63.25	1.05	0.68
S616	0.19	0.19	0.19	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.32	90.00	1.50	1.33
S617	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.39	57.75	0.96	0.57
S618	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.40	56.75	0.95	0.71
S619	0.21	0.21	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.89	50.50	0.84	0.40
S620	0.21	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.82	48.75	0.81	0.74
S621	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	45.25	0.75	0.39
S622	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	70.75	1.18	0.82
S700	0.18	0.18	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	52.50	0.88	0.71
S701	0.19	0.19	0.19	0.19	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.23	79.25	1.32	1.39
S702	0.18	0.18	0.18	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	41.00	0.68	0.69
S703	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	36.00	0.60	0.50
S704	0.18	0.18	0.18	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	32.25	0.54	0.37
S705	0.20	0.20	0.19	0.19	0.19	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	46.75	0.78	0.61

Table C-10

Time of concentration and duration of rainfall excess for existing conditions, 25-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.61	32.75	0.55	0.47
S706	0.19	0.19	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	53.50	0.89	0.69
S707	0.20	0.20	0.19	0.19	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	52.50	0.88	0.79
S708	0.23	0.23	0.22	0.22	0.22	0.22	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.48	37.50	0.63	0.39
S709	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.84	34.75	0.58	0.43
S710	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	1.69	21.75	0.36	0.29
S711	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.86	21.25	0.35	0.20
S712	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.69	12.25	0.20	0.12
S713	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	1.69	17.25	0.29	0.20
S714	0.22	0.22	0.22	0.22	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.25	18.50	0.31	0.25
S715	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.84	32.50	0.54	0.43
S716	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.65	48.25	0.80	0.54
S717	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.87	22.00	0.37	0.19
S718	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.94	66.00	1.10	1.19
S719	0.24	0.24	0.23	0.23	0.23	0.23	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.37	37.50	0.63	0.75
S720	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.88	39.25	0.65	0.57
S721	0.21	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.14	25.50	0.43	0.23
S722	0.23	0.23	0.22	0.22	0.22	0.22	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.45	51.00	0.85	0.63
S723	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.63	22.25	0.37	0.32
S724	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.86	45.00	0.75	0.49
S725	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	1.35	66.00	1.10	0.92
S726	0.19	0.19	0.19	0.18	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	22.00	0.37	0.23
S727	0.23	0.23	0.22	0.22	0.22	0.22	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.46	46.00	0.77	0.78
S728	0.18	0.18	0.18	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	51.25	0.85	0.92

Table C-11

Time of concentration and duration of rainfall excess for existing conditions, 10-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.08	57.50	0.96	0.78
S101	0.15	0.15	0.14	0.14	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	46.25	0.77	0.51
S102	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.17	67.25	1.12	0.91
S103	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.97	73.00	1.22	0.98
S104	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	66.75	1.11	0.65
S105	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	83.50	1.39	1.24
S106	0.14	0.14	0.14	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	62.75	1.05	0.85
S107	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	78.50	1.31	1.11
S200	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	52.25	0.87	0.49
S201	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	43.25	0.72	0.54
S202	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	27.50	0.46	0.38
S203	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	62.75	1.05	1.04
S204	0.14	0.14	0.14	0.13	0.13	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.16	63.00	1.05	0.69
S205	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.98	55.25	0.92	0.77
S206	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.11	84.00	1.40	1.14
S207	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.22	84.00	1.40	1.08
S208	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.10	89.00	1.48	1.02
S209	0.14	0.14	0.14	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	63.25	1.05	0.64
S210	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	50.50	0.84	0.56
S211	0.14	0.14	0.13	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	63.25	1.05	0.76
S300	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.05	67.25	1.12	0.88
S301	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	60.25	1.00	0.65
S302	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.03	56.00	0.93	0.57
S303	0.14	0.13	0.13	0.12	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	62.25	1.04	0.66
S304	0.14	0.14	0.13	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	73.00	1.22	1.01
S400	0.16	0.16	0.15	0.15	0.15	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	72.50	1.21	0.73
S401	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72	74.75	1.25	0.77
S402	0.14	0.14	0.14	0.13	0.13	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	66.00	1.10	0.66
S403	0.17	0.17	0.17	0.17	0.17	0.16	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	81.25	1.35	1.07
S404	0.16	0.15	0.15	0.15	0.15	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	27.50	0.46	0.27
S500	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	86.75	1.45	1.09
S501	0.14	0.14	0.13	0.13	0.13	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.99	58.75	0.98	0.66
S502	0.14	0.14	0.13	0.12	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	46.50	0.78	0.49
S503	0.15	0.15	0.15	0.15	0.14	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.99	60.00	1.00	0.62
S504	0.12	0.12	0.11	0.10	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	90.00	1.50	1.58
S505	0.13	0.13	0.13	0.12	0.12	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	23.00	0.38	0.21
S506	0.15	0.15	0.14	0.14	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	29.25	0.49	0.38
S507	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	70.25	1.17	0.76

Table C-11

Time of concentration and duration of rainfall excess for existing conditions, 10-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.14	0.14	0.13	0.12	0.12	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	53.50	0.89	0.70
S509	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.03	24.50	0.41	0.29
S510	0.17	0.16	0.16	0.16	0.16	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	43.75	0.73	0.71
S511	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.02	33.00	0.55	0.41
S512	0.17	0.17	0.17	0.16	0.16	0.16	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	54.25	0.90	0.78
S513	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	90.00	1.50	1.30
S514	0.17	0.17	0.17	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	83.50	1.39	1.26
S515	0.18	0.18	0.18	0.18	0.17	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.94	79.75	1.33	0.82
S516	0.13	0.13	0.12	0.12	0.11	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	90.00	1.50	1.29
S600	0.13	0.13	0.12	0.12	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.90	66.75	1.11	0.64
S601	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.54	46.50	0.78	0.48
S602	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	65.25	1.09	0.69
S603	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.49	32.00	0.53	0.30
S604	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	90.00	1.50	1.03
S605	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	61.00	1.02	0.71
S606	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.27	49.50	0.83	0.69
S607	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.31	59.75	1.00	0.88
S608	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.40	41.50	0.69	0.47
S609	0.14	0.14	0.13	0.12	0.12	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.02	66.00	1.10	1.09
S610	0.16	0.16	0.16	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.41	66.50	1.11	0.91
S611	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	42.00	0.70	0.42
S612	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.31	60.25	1.00	0.88
S613	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.25	90.00	1.50	0.87
S614	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	79.75	1.33	0.94
S615	0.18	0.18	0.18	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.80	71.00	1.18	0.77
S616	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.99	90.00	1.50	1.33
S617	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.05	67.50	1.13	0.68
S618	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.06	92.25	1.54	1.22
S619	0.17	0.17	0.17	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.50	57.25	0.95	0.46
S620	0.17	0.17	0.17	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.44	55.50	0.93	0.85
S621	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	54.25	0.90	0.47
S622	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	84.75	1.41	1.01
S700	0.14	0.14	0.14	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	62.50	1.04	0.87
S701	0.15	0.15	0.15	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	90.00	1.50	1.60
S702	0.14	0.14	0.14	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	48.75	0.81	0.83
S703	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	43.25	0.72	0.61
S704	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	38.50	0.64	0.46
S705	0.16	0.16	0.15	0.15	0.15	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	93.00	1.55	1.30

Table C-11

Time of concentration and duration of rainfall excess for existing conditions, 10-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.17	36.75	0.61	0.54
S706	0.15	0.15	0.14	0.14	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	63.50	1.06	0.84
S707	0.15	0.15	0.15	0.15	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	61.75	1.03	0.95
S708	0.19	0.19	0.19	0.19	0.18	0.18	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	1.08	42.00	0.70	0.44
S709	0.20	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.35	38.25	0.64	0.47
S710	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.24	23.25	0.39	0.31
S711	0.20	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.36	22.75	0.38	0.21
S712	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.23	13.25	0.22	0.13
S713	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.24	18.50	0.31	0.22
S714	0.18	0.18	0.17	0.17	0.17	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.92	20.25	0.34	0.28
S715	0.20	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.34	36.00	0.60	0.48
S716	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.21	53.75	0.90	0.61
S717	0.20	0.20	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.38	23.50	0.39	0.21
S718	0.20	0.20	0.19	0.19	0.19	0.19	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.44	73.50	1.23	1.34
S719	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.82	41.25	0.69	0.83
S720	0.20	0.20	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.38	43.50	0.73	0.64
S721	0.17	0.17	0.17	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	27.75	0.46	0.25
S722	0.19	0.19	0.18	0.18	0.18	0.18	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.05	57.25	0.95	0.71
S723	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.18	24.00	0.40	0.34
S724	0.20	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.37	50.00	0.83	0.55
S725	0.18	0.18	0.18	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.99	76.00	1.27	1.08
S726	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	24.25	0.40	0.26
S727	0.19	0.19	0.19	0.18	0.18	0.18	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.06	51.50	0.86	0.88
S728	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	61.75	1.03	1.13

Table C-12

Time of concentration and duration of rainfall excess for existing conditions, 5-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.12	0.12	0.11	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	66.50	1.11	0.92
S101	0.12	0.12	0.11	0.10	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	54.25	0.90	0.61
S102	0.12	0.12	0.11	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.91	77.25	1.29	1.06
S103	0.12	0.12	0.12	0.11	0.11	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	84.50	1.41	1.15
S104	0.12	0.12	0.11	0.11	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	77.75	1.30	0.77
S105	0.12	0.12	0.11	0.11	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	90.00	1.50	1.35
S106	0.11	0.11	0.11	0.10	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	74.00	1.23	1.02
S107	0.11	0.11	0.10	0.09	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	90.00	1.50	1.29
S200	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	60.50	1.01	0.58
S201	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	50.25	0.84	0.63
S202	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	30.75	0.51	0.42
S203	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	72.50	1.21	1.22
S204	0.12	0.11	0.11	0.10	0.09	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.89	73.00	1.22	0.81
S205	0.11	0.11	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.74	64.50	1.08	0.91
S206	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.85	90.00	1.50	1.24
S207	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	90.00	1.50	1.17
S208	0.13	0.12	0.12	0.11	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	90.00	1.50	1.03
S209	0.12	0.11	0.11	0.10	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	74.50	1.24	0.77
S210	0.11	0.11	0.10	0.09	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	60.50	1.01	0.69
S211	0.11	0.11	0.10	0.10	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	75.25	1.25	0.92
S300	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.79	78.25	1.30	1.04
S301	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	92.00	1.53	1.04
S302	0.12	0.11	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.78	65.25	1.09	0.68
S303	0.11	0.10	0.10	0.09	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	74.75	1.25	0.81
S304	0.11	0.11	0.10	0.10	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	87.00	1.45	1.22
S400	0.13	0.13	0.12	0.12	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	83.25	1.39	0.85
S401	0.11	0.11	0.10	0.10	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	89.75	1.50	0.94
S402	0.11	0.11	0.10	0.10	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	79.00	1.32	0.81
S403	0.14	0.14	0.14	0.14	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	90.00	1.50	1.20
S404	0.13	0.12	0.12	0.11	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	30.50	0.51	0.30
S500	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	90.00	1.50	1.13
S501	0.11	0.11	0.10	0.10	0.09	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.74	69.00	1.15	0.78
S502	0.11	0.11	0.10	0.09	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	55.50	0.93	0.59
S503	0.12	0.12	0.12	0.11	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	92.00	1.53	0.99
S504	0.09	0.09	0.08	0.07	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	90.00	1.50	1.58
S505	0.11	0.10	0.10	0.09	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	26.00	0.43	0.24
S506	0.12	0.12	0.11	0.10	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	34.00	0.57	0.45
S507	0.11	0.11	0.10	0.09	0.09	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	85.00	1.42	0.93

Table C-12

Time of concentration and duration of rainfall excess for existing conditions, 5-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.11	0.11	0.10	0.09	0.08	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	65.50	1.09	0.87
S509	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.78	27.00	0.45	0.32
S510	0.13	0.13	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	50.25	0.84	0.83
S511	0.13	0.12	0.12	0.11	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.77	38.50	0.64	0.49
S512	0.14	0.14	0.14	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	63.00	1.05	0.92
S513	0.11	0.11	0.10	0.09	0.09	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	90.00	1.50	1.30
S514	0.14	0.14	0.13	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	90.00	1.50	1.37
S515	0.15	0.15	0.15	0.14	0.14	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	90.00	1.50	0.94
S516	0.10	0.10	0.09	0.08	0.07	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	90.00	1.50	1.29
S600	0.10	0.10	0.09	0.08	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.65	79.50	1.33	0.77
S601	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.25	52.25	0.87	0.55
S602	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	75.00	1.25	0.80
S603	0.14	0.14	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.20	36.00	0.60	0.34
S604	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	90.00	1.50	1.03
S605	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	70.50	1.18	0.83
S606	0.12	0.12	0.12	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.99	57.00	0.95	0.81
S607	0.13	0.13	0.12	0.12	0.12	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.03	68.00	1.13	1.01
S608	0.14	0.14	0.13	0.13	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.12	47.00	0.78	0.54
S609	0.11	0.11	0.10	0.09	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.76	77.50	1.29	1.30
S610	0.13	0.13	0.13	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.13	75.25	1.25	1.05
S611	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	48.50	0.81	0.49
S612	0.14	0.14	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.05	68.25	1.14	1.01
S613	0.12	0.12	0.12	0.11	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.98	90.00	1.50	0.87
S614	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.96	90.00	1.50	1.08
S615	0.15	0.15	0.15	0.14	0.14	0.14	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.48	78.75	1.31	0.87
S616	0.12	0.12	0.11	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.75	90.00	1.50	1.33
S617	0.12	0.12	0.11	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.80	78.00	1.30	0.79
S618	0.12	0.12	0.12	0.11	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	76.00	1.27	0.98
S619	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.22	64.00	1.07	0.52
S620	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.17	62.25	1.04	0.96
S621	0.11	0.11	0.10	0.09	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	65.00	1.08	0.58
S622	0.11	0.11	0.10	0.09	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	90.00	1.50	1.08
S700	0.11	0.11	0.11	0.10	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	74.00	1.23	1.04
S701	0.12	0.12	0.11	0.11	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	90.00	1.50	1.60
S702	0.11	0.11	0.10	0.10	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	57.75	0.96	1.00
S703	0.11	0.11	0.10	0.09	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	52.00	0.87	0.75
S704	0.11	0.11	0.10	0.10	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	46.00	0.77	0.56
S705	0.13	0.13	0.12	0.12	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	63.25	1.05	0.85

Table C-12

Time of concentration and duration of rainfall excess for existing conditions, 5-year, 24-hour

Subbasin ID	Excess Rainfall Values By Decreasing Rank																		Total Excess inches	Tc min.	Tc hours	R hours
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.89	40.25	0.67	0.59
S706	0.12	0.12	0.11	0.10	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	75.25	1.25	1.01
S707	0.12	0.12	0.12	0.11	0.11	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	71.75	1.20	1.12
S708	0.16	0.16	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	46.50	0.78	0.49
S709	0.17	0.17	0.17	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.02	42.00	0.70	0.53
S710	0.17	0.16	0.16	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.95	24.75	0.41	0.33
S711	0.17	0.17	0.17	0.17	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.03	24.00	0.40	0.23
S712	0.17	0.16	0.16	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.95	14.00	0.23	0.13
S713	0.17	0.16	0.16	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.95	19.75	0.33	0.24
S714	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	21.75	0.36	0.30
S715	0.17	0.17	0.17	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.02	39.25	0.65	0.53
S716	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.92	59.25	0.99	0.68
S717	0.17	0.17	0.17	0.17	0.17	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.05	24.75	0.41	0.22
S718	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.10	81.00	1.35	1.49
S719	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.45	44.50	0.74	0.91
S720	0.17	0.17	0.17	0.17	0.17	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.05	47.50	0.79	0.70
S721	0.14	0.14	0.13	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	30.25	0.50	0.28
S722	0.16	0.16	0.15	0.15	0.15	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.81	64.50	1.08	0.81
S723	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.89	25.50	0.43	0.37
S724	0.17	0.17	0.17	0.17	0.17	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.04	54.50	0.91	0.60
S725	0.15	0.15	0.15	0.15	0.15	0.15	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	86.75	1.45	1.25
S726	0.12	0.12	0.11	0.11	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	26.75	0.45	0.29
S727	0.16	0.16	0.16	0.16	0.15	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	57.50	0.96	0.99
S728	0.11	0.11	0.10	0.09	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	75.00	1.25	1.40

Table C-13

Time of concentration and duration of rainfall excess for existing conditions, 2-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.46	89.25	1.49	1.27
S101	0.07	0.07	0.06	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	76.75	1.28	0.90
S102	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.53	90.00	1.50	1.26
S103	0.08	0.08	0.07	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	90.00	1.50	1.23
S104	0.08	0.07	0.07	0.06	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	90.00	1.50	0.91
S105	0.08	0.07	0.07	0.06	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	90.00	1.50	1.35
S106	0.07	0.07	0.06	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	90.00	1.50	1.27
S107	0.06	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	90.00	1.50	1.29
S200	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	76.50	1.28	0.75
S201	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	63.50	1.06	0.82
S202	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	39.25	0.65	0.56
S203	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	90.00	1.50	1.54
S204	0.07	0.06	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.55	90.00	1.50	1.02
S205	0.07	0.07	0.06	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	88.25	1.47	1.29
S206	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.49	90.00	1.50	1.24
S207	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.59	90.00	1.50	1.17
S208	0.08	0.08	0.07	0.06	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	90.00	1.50	1.03
S209	0.07	0.07	0.06	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	90.00	1.50	0.95
S210	0.06	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	90.00	1.50	1.07
S211	0.07	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	90.00	1.50	1.12
S300	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.45	90.00	1.50	1.21
S301	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	88.00	1.47	0.99
S302	0.07	0.07	0.06	0.06	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	87.75	1.46	0.94
S303	0.06	0.05	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	90.00	1.50	1.00
S304	0.07	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	90.00	1.50	1.27
S400	0.08	0.08	0.07	0.07	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	90.00	1.50	0.93
S401	0.07	0.06	0.05	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	90.00	1.50	0.95
S402	0.07	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	90.00	1.50	0.94
S403	0.10	0.10	0.09	0.08	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	90.00	1.50	1.20
S404	0.08	0.08	0.07	0.06	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	44.75	0.75	0.47
S500	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	90.00	1.50	1.13
S501	0.07	0.06	0.06	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	90.00	1.50	1.05
S502	0.06	0.06	0.05	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	79.00	1.32	0.88
S503	0.08	0.08	0.07	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	90.00	1.50	0.97
S504	0.04	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	90.00	1.50	1.58
S505	0.06	0.05	0.05	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	35.50	0.59	0.34
S506	0.07	0.07	0.06	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	50.00	0.83	0.69
S507	0.07	0.06	0.05	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	90.00	1.50	0.99

Table C-13

Time of concentration and duration of rainfall excess for existing conditions, 2-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.06	0.05	0.04	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	90.00	1.50	1.24
S509	0.07	0.07	0.06	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	35.75	0.60	0.44
S510	0.09	0.09	0.08	0.07	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	70.25	1.17	1.20
S511	0.08	0.08	0.07	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	53.50	0.89	0.70
S512	0.10	0.09	0.09	0.08	0.07	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	87.00	1.45	1.32
S513	0.06	0.06	0.05	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	60.00	1.00	0.83
S514	0.09	0.09	0.09	0.08	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	90.00	1.50	1.37
S515	0.10	0.10	0.10	0.09	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	90.00	1.50	0.94
S516	0.05	0.05	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	90.00	1.50	1.29
S600	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	90.00	1.50	0.89
S601	0.10	0.10	0.09	0.08	0.08	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.81	65.75	1.10	0.71
S602	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	90.00	1.50	0.98
S603	0.10	0.10	0.09	0.08	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.76	46.25	0.77	0.45
S604	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	90.00	1.50	1.03
S605	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	89.50	1.49	1.08
S606	0.08	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.61	73.25	1.22	1.06
S607	0.09	0.08	0.08	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.63	88.25	1.47	1.35
S608	0.09	0.09	0.09	0.08	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.70	60.50	1.01	0.72
S609	0.06	0.06	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.46	90.00	1.50	1.54
S610	0.09	0.09	0.08	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.71	90.00	1.50	1.28
S611	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	61.75	1.03	0.64
S612	0.10	0.09	0.09	0.08	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.64	88.25	1.47	1.35
S613	0.08	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	90.00	1.50	0.87
S614	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.59	90.00	1.50	1.08
S615	0.11	0.11	0.10	0.10	0.09	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.00	90.00	1.50	1.00
S616	0.08	0.07	0.07	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	90.00	1.50	1.33
S617	0.08	0.07	0.06	0.06	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	90.00	1.50	0.93
S618	0.08	0.08	0.07	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	90.00	1.50	1.18
S619	0.10	0.10	0.10	0.09	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.78	81.00	1.35	0.67
S620	0.10	0.10	0.09	0.09	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.74	79.25	1.32	1.26
S621	0.06	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	90.00	1.50	0.83
S622	0.06	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	90.00	1.50	1.08
S700	0.07	0.06	0.06	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	90.00	1.50	1.30
S701	0.08	0.07	0.07	0.06	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	90.00	1.50	1.60
S702	0.07	0.06	0.06	0.05	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	87.25	1.45	1.59
S703	0.06	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	82.00	1.37	1.25
S704	0.07	0.06	0.05	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	67.25	1.12	0.85
S705	0.08	0.08	0.07	0.06	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	89.50	1.49	1.25

Table C-13

Time of concentration and duration of rainfall excess for existing conditions, 2-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.12	0.12	0.11	0.11	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	50.50	0.84	0.76
S706	0.07	0.07	0.06	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	90.00	1.50	1.24
S707	0.08	0.08	0.07	0.06	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	90.00	1.50	1.44
S708	0.11	0.11	0.11	0.11	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	59.00	0.98	0.64
S709	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.59	50.75	0.85	0.65
S710	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	27.75	0.46	0.38
S711	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	27.00	0.45	0.26
S712	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	15.75	0.26	0.15
S713	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	22.00	0.37	0.27
S714	0.10	0.10	0.10	0.09	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	25.50	0.43	0.36
S715	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.59	47.50	0.79	0.65
S716	0.12	0.12	0.12	0.11	0.11	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	75.25	1.25	0.88
S717	0.13	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.62	27.75	0.46	0.25
S718	0.13	0.13	0.13	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.66	90.00	1.50	1.68
S719	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.90	52.00	0.87	1.08
S720	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.62	57.50	0.96	0.87
S721	0.09	0.09	0.09	0.08	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	41.50	0.69	0.40
S722	0.11	0.11	0.11	0.10	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	84.75	1.41	1.10
S723	0.12	0.12	0.11	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	29.00	0.48	0.42
S724	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.61	66.50	1.11	0.75
S725	0.11	0.11	0.10	0.10	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42	90.00	1.50	1.30
S726	0.08	0.07	0.06	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	37.75	0.63	0.43
S727	0.11	0.11	0.11	0.11	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	74.75	1.25	1.33
S728	0.06	0.06	0.05	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	90.00	1.50	1.72

Table C-14

Summary of Clark unit hydrograph input parameters for future watershed conditions

Sub-basin ID	Area sq. mi.	Elevation, in feet		Flow Path Length		Slope ft/mile	Adjusted Slope ft/mile	Surface Roughness Type	Kb	Time-Area Relation
		Top	Bottom	feet	miles					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
S100	0.574	2040	1770	9560	1.811	149.13	149.13	C	0.09	Natural
S101	0.631	1920	1680	8154	1.544	155.42	155.42	C	0.08	Natural
S102	0.449	1940	1780	7849	1.487	107.63	107.63	B/C	0.07	Urban
S103	0.395	1780	1680	6977	1.321	75.68	75.68	C	0.09	Natural
S104	0.900	1760	1580	8574	1.624	110.84	110.84	C	0.08	Natural
S105	0.594	1770	1580	10434	1.976	96.15	96.15	B/C	0.07	Urban
S106	0.567	1720	1440	9345	1.770	158.20	158.20	B/C	0.07	Urban
S107	0.936	1890	1360	13689	2.593	204.43	204.43	B/C	0.06	Natural
S200	0.959	2260	1940	8790	1.665	192.21	192.21	C/D	0.10	Natural
S201	0.350	2080	1850	6241	1.182	194.59	194.59	C/D	0.11	Natural
S202	0.127	2060	1840	3639	0.689	319.25	270.63	C/D	0.12	Natural
S203	0.373	2060	1800	8887	1.683	154.47	154.47	C	0.09	Urban
S204	0.951	2140	1800	10342	1.959	173.58	173.58	C/D	0.10	Natural
S205	0.413	2040	1780	7840	1.485	175.11	175.11	B/C	0.07	Natural
S206	0.853	1980	1710	12122	2.296	117.61	117.61	C	0.08	Urban
S207	0.957	1980	1710	12221	2.315	116.65	116.65	C	0.08	Natural
S208	1.103	1840	1635	11644	2.205	92.96	92.96	C/D	0.10	Natural
S209	0.650	1660	1480	7170	1.358	132.55	132.55	C/D	0.10	Natural
S210	0.481	1710	1480	6726	1.274	180.56	180.56	C	0.09	Urban
S211	0.488	1580	1360	7176	1.359	161.87	161.87	C	0.09	Urban
S300	0.615	1850	1620	9378	1.776	129.49	129.49	B	0.04	Urban
S301	0.994	2000	1620	10564	2.001	189.93	189.93	B	0.04	Urban
S302	0.465	1700	1550	5781	1.095	137.00	137.00	C	0.09	Natural
S303	0.708	1770	1480	8124	1.539	188.47	188.47	C/D	0.10	Natural
S304	0.823	1770	1340	12219	2.314	185.81	185.81	B/C	0.06	Urban
S400	1.048	1730	1525	9840	1.864	110.00	110.00	B	0.04	Natural
S401	0.646	1550	1450	7125	1.349	74.10	74.10	B	0.04	Urban
S402	0.740	1470	1360	7753	1.468	74.91	74.91	A/B	0.03	Urban

Table C-14

Summary of Clark unit hydrograph input parameters for future watershed conditions

Sub-basin ID	Area sq. mi.	Elevation, in feet		Flow Path Length		Slope ft/mile	Adjusted Slope ft/mile	Surface Roughness Type	Kb	Time-Area Relation
		Top	Bottom	feet	miles					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
S403	0.559	1415	1330	8650	1.638	51.88	51.88	A	0.02	Urban
S404	0.263	1400	1260	4080	0.773	181.17	181.17	C	0.09	Natural
S500	1.054	1940	1660	12666	2.399	116.72	116.72	B/C	0.06	Urban
S501	0.614	1780	1580	7846	1.486	134.59	134.59	B/C	0.06	Urban
S502	0.403	1720	1500	5558	1.053	208.99	208.99	C/D	0.11	Natural
S503	0.994	1720	1500	9985	1.891	116.33	116.33	B/C	0.06	Urban
S504	0.326	1520	1420	8295	1.571	63.65	63.65	A/B	0.04	Urban
S505	0.143	2120	1525	2494	0.472	1259.43	364.69	D	0.14	Natural
S506	0.151	1880	1520	3835	0.726	495.69	307.29	C	0.10	Natural
S507	0.666	1520	1420	7745	1.467	68.17	68.17	A/B	0.03	Urban
S508	0.295	1480	1380	5713	1.082	92.41	92.41	A	0.03	Urban
S509	0.170	1860	1520	3809	0.721	471.27	304.18	B	0.05	Urban
S510	0.127	1520	1460	4238	0.803	74.74	74.74	A/B	0.04	Urban
S511	0.385	1940	1520	6962	1.319	318.54	270.33	B	0.05	Urban
S512	0.214	1520	1460	5141	0.974	61.62	61.62	A/B	0.04	Urban
S513	0.778	1500	1380	12149	2.301	52.15	52.15	A	0.02	Urban
S514	0.650	1500	1360	11339	2.147	65.19	65.19	A	0.02	Urban
S515	1.102	1420	1315	10283	1.948	53.91	53.91	A	0.02	Urban
S516	0.540	1355	1240	9226	1.747	65.81	65.81	A/B	0.03	Urban
S600	2.018	3450	2555	14762	2.796	320.12	270.99	C/D	0.09	Natural
S601	0.901	2880	2440	9717	1.840	239.10	231.94	C/D	0.10	Natural
S602	1.883	3160	2280	16023	3.035	289.98	257.76	C/D	0.09	Natural
S603	0.665	3200	2280	7268	1.377	668.36	325.69	C/D	0.10	Natural
S604	2.656	3000	2150	21673	4.105	207.08	207.08	C/D	0.09	Natural
S605	1.085	2695	2150	12262	2.322	234.68	229.45	C/D	0.10	Natural
S606	0.660	3080	2150	11149	2.111	440.45	300.02	C/D	0.10	Natural
S607	0.822	2740	2000	13552	2.567	288.30	256.98	C/D	0.10	Natural
S608	0.508	2320	1990	7383	1.398	236.02	230.21	C	0.09	Natural

Table C-14

Summary of Clark unit hydrograph input parameters for future watershed conditions

Sub-basin ID	Area sq. mi.	Elevation, in feet		Flow Path Length		Slope ft/mile	Adjusted Slope ft/mile	Surface Roughness Type	Kb	Time-Area Relation
		Top	Bottom	feet	miles					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
S609	0.560	2480	2000	11821	2.239	214.40	214.40	C	0.09	Natural
S610	0.603	2100	1880	9866	1.869	117.74	117.74	B/C	0.06	Urban
S611	0.569	2540	2130	6793	1.286	318.70	270.40	D	0.12	Natural
S612	0.808	2475	1880	13362	2.531	235.11	229.69	C	0.08	Urban
S613	1.797	2190	1860	13334	2.525	130.67	130.67	C/D	0.09	Natural
S614	1.079	2120	1780	12065	2.285	148.80	148.80	C/D	0.10	Natural
S615	1.055	2120	1840	10870	2.059	136.01	136.01	D	0.12	Natural
S616	0.505	2030	1660	9176	1.738	212.91	212.91	C	0.09	Natural
S617	0.675	1870	1660	7221	1.368	153.55	153.55	C	0.08	Urban
S618	0.958	2060	1590	12481	2.364	198.84	198.84	C/D	0.10	Natural
S619	0.827	2000	1880	6398	1.212	99.03	99.03	D	0.12	Natural
S620	0.444	2000	1590	9307	1.763	232.61	228.26	D	0.13	Natural
S621	0.923	1780	1530	7760	1.470	170.09	170.09	C	0.08	Natural
S622	0.897	1720	1415	10579	2.004	152.22	152.22	D	0.12	Natural
S700	0.610	1760	1405	10153	1.923	184.61	184.61	B	0.04	Urban
S701	0.720	1780	1395	14897	2.821	136.46	136.46	B/C	0.06	Urban
S702	0.257	1700	1400	7364	1.395	215.09	215.09	B	0.05	Urban
S703	0.257	1600	1370	5944	1.126	204.32	204.32	C	0.09	Natural
S704	0.408	2040	1480	6686	1.266	442.21	300.27	B/C	0.07	Urban
S705	0.754	1940	1340	11328	2.145	279.66	252.91	B	0.04	Urban
S705AF	0.183	1351	1320	4926	0.933	33.61	33.61	B	0.05	Natural
S706	0.713	1715	1340	10674	2.022	185.49	185.49	A/B	0.03	Urban
S707	0.638	1790	1300	11910	2.256	217.22	217.22	A/B	0.03	Urban
S708	0.706	1770	1460	8416	1.594	194.49	194.49	B	0.04	Urban
S709	0.441	1710	1490	7484	1.417	155.21	155.21	B	0.05	Urban
S710	0.112	1545	1420	3340	0.633	197.59	197.59	A	0.03	Urban
S711	0.159	1570	1490	2746	0.520	153.85	153.85	A	0.03	Urban
S712	0.068	1520	1420	1645	0.312	320.89	271.31	A	0.03	Urban

Table C-14

Summary of Clark unit hydrograph input parameters for future watershed conditions

Sub-basin ID	Area	Elevation, in feet		Flow Path Length		Slope	Adjusted Slope	Surface Roughness		Time-Area
	sq. mi.	Top	Bottom	feet	miles	ft/mile	ft/mile	Type	Kb	Relation
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
S713	0.107	1540	1420	2880	0.545	220.00	220.00	A	0.03	Urban
S714	0.060	1440	1385	2259	0.428	128.56	128.56	A/B	0.04	Urban
S715	0.220	1420	1360	5062	0.959	62.59	62.59	B	0.05	Urban
S716	1.128	1700	1495	12424	2.353	87.12	87.12	A/B	0.03	Urban
S717	0.286	1515	1420	3839	0.727	130.66	130.66	B	0.05	Natural
S718	0.442	1440	1345	11106	2.103	45.17	45.17	B	0.05	Natural
S719	0.154	1440	1340	6444	1.221	81.93	81.93	A/B	0.04	Urban
S720	0.370	1470	1340	8007	1.516	85.73	85.73	A	0.03	Urban
S721	0.335	1575	1480	4394	0.832	114.15	114.15	A	0.03	Urban
S722	0.955	1515	1330	12326	2.334	79.25	79.25	A/B	0.03	Urban
S723	0.085	1425	1325	2968	0.562	177.89	177.89	A/B	0.04	Urban
S724	1.156	1535	1310	12242	2.319	97.05	97.05	A/B	0.03	Urban
S725	1.158	1505	1290	16039	3.038	70.78	70.78	A/B	0.03	Urban
S726	0.334	1818	1395	5469	1.036	408.35	295.36	A/B	0.04	Urban
S727	0.375	1435	1280	9583	1.815	85.40	85.40	A/B	0.04	Urban
S728	0.276	1340	1220	8182	1.550	77.44	77.44	A/B	0.04	Urban

Table C-15

Time of concentration and duration of rainfall excess for future conditions, 100-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.44	0.43	0.43	0.14	0.11	0.09	0.05	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.04	38.25	0.64	0.50
S101	0.42	0.41	0.41	0.13	0.10	0.09	0.05	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.86	31.25	0.52	0.33
S102	0.46	0.45	0.45	0.14	0.10	0.09	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.14	31.25	0.52	0.39
S103	0.46	0.45	0.45	0.14	0.10	0.09	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.97	40.75	0.68	0.51
S104	0.38	0.38	0.37	0.15	0.13	0.12	0.07	0.07	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.00	37.75	0.63	0.35
S105	0.44	0.44	0.43	0.15	0.12	0.11	0.05	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.08	40.25	0.67	0.55
S106	0.44	0.43	0.43	0.14	0.10	0.09	0.04	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.88	30.25	0.50	0.38
S107	0.36	0.36	0.35	0.14	0.11	0.10	0.06	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.62	34.25	0.57	0.44
S200	0.36	0.35	0.35	0.14	0.11	0.10	0.06	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.00	37.25	0.62	0.34
S201	0.45	0.45	0.44	0.13	0.09	0.08	0.04	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.10	29.00	0.48	0.34
S202	0.45	0.45	0.44	0.13	0.09	0.08	0.04	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.11	18.50	0.31	0.24
S203	0.46	0.45	0.45	0.14	0.10	0.09	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.18	35.25	0.59	0.55
S204	0.36	0.35	0.35	0.14	0.11	0.09	0.06	0.06	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.94	43.75	0.73	0.46
S205	0.46	0.46	0.46	0.14	0.11	0.10	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.20	25.25	0.42	0.32
S206	0.39	0.38	0.38	0.15	0.12	0.11	0.07	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.06	47.00	0.78	0.60
S207	0.36	0.36	0.36	0.14	0.12	0.11	0.07	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.04	48.75	0.81	0.59
S208	0.35	0.35	0.35	0.16	0.14	0.13	0.08	0.08	0.08	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.05	60.50	1.01	0.67
S209	0.42	0.41	0.41	0.14	0.10	0.09	0.05	0.05	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.88	36.25	0.60	0.35
S210	0.45	0.44	0.44	0.13	0.09	0.08	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.76	27.50	0.46	0.29
S211	0.45	0.45	0.44	0.13	0.10	0.08	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.83	29.75	0.50	0.33
S300	0.43	0.42	0.42	0.14	0.11	0.10	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.11	22.50	0.38	0.26
S301	0.36	0.36	0.36	0.15	0.13	0.12	0.07	0.07	0.07	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	2.18	22.00	0.37	0.21
S302	0.46	0.45	0.45	0.14	0.10	0.09	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.08	27.50	0.46	0.26
S303	0.39	0.39	0.38	0.13	0.09	0.08	0.04	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.71	35.25	0.59	0.35
S304	0.38	0.38	0.37	0.14	0.11	0.10	0.06	0.05	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.73	32.00	0.53	0.40
S400	0.37	0.37	0.36	0.17	0.15	0.14	0.09	0.08	0.08	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	2.23	25.75	0.43	0.23
S401	0.42	0.42	0.41	0.14	0.11	0.10	0.05	0.05	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.89	23.75	0.40	0.22
S402	0.42	0.41	0.41	0.16	0.14	0.13	0.07	0.07	0.07	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.24	20.50	0.34	0.18
S403	0.48	0.47	0.47	0.18	0.15	0.15	0.08	0.08	0.07	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.61	18.00	0.30	0.20
S404	0.47	0.46	0.46	0.15	0.12	0.11	0.05	0.05	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	2.00	18.75	0.31	0.18
S500	0.35	0.35	0.35	0.15	0.13	0.12	0.07	0.07	0.07	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	2.11	40.50	0.68	0.47
S501	0.43	0.42	0.42	0.14	0.10	0.09	0.05	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.01	26.25	0.44	0.27
S502	0.45	0.45	0.44	0.13	0.09	0.08	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.97	25.42	0.42	0.25
S503	0.37	0.36	0.36	0.15	0.13	0.12	0.07	0.07	0.07	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.06	34.00	0.57	0.33
S504	0.46	0.46	0.45	0.14	0.11	0.10	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.19	27.00	0.45	0.42
S505	0.45	0.44	0.44	0.13	0.09	0.08	0.03	0.03	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.92	14.25	0.24	0.13
S506	0.47	0.47	0.47	0.16	0.12	0.11	0.05	0.05	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.24	15.50	0.26	0.19
S507	0.42	0.42	0.42	0.15	0.12	0.11	0.06	0.06	0.05	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.95	21.00	0.35	0.20

Table C-15

Time of concentration and duration of rainfall excess for future conditions, 100-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.47	0.46	0.46	0.15	0.11	0.10	0.05	0.05	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.11	14.75	0.25	0.17
S509	0.47	0.46	0.46	0.15	0.11	0.10	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.22	10.75	0.18	0.12
S510	0.50	0.49	0.49	0.18	0.15	0.15	0.07	0.07	0.07	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.69	15.50	0.26	0.22
S511	0.47	0.47	0.46	0.15	0.12	0.11	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.22	15.25	0.25	0.17
S512	0.50	0.50	0.50	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.79	18.75	0.31	0.24
S513	0.40	0.40	0.39	0.15	0.12	0.12	0.06	0.06	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.98	24.50	0.41	0.31
S514	0.45	0.45	0.45	0.18	0.15	0.15	0.08	0.08	0.08	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.51	20.25	0.34	0.26
S515	0.38	0.38	0.38	0.19	0.17	0.17	0.11	0.10	0.10	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	2.55	21.75	0.36	0.19
S516	0.47	0.46	0.46	0.16	0.13	0.12	0.06	0.06	0.06	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.47	23.00	0.38	0.28
S600	0.24	0.24	0.23	0.13	0.12	0.10	0.08	0.08	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.57	47.75	0.80	0.44
S601	0.39	0.39	0.38	0.17	0.14	0.13	0.08	0.08	0.08	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	2.34	34.50	0.58	0.35
S603	0.43	0.43	0.43	0.16	0.13	0.12	0.07	0.07	0.06	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.34	24.00	0.40	0.22
S602	0.27	0.26	0.26	0.15	0.14	0.13	0.09	0.09	0.09	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	1.93	48.00	0.80	0.49
S606	0.42	0.41	0.41	0.14	0.11	0.09	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.11	34.50	0.58	0.46
S605	0.34	0.34	0.34	0.14	0.12	0.11	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	2.01	43.50	0.73	0.49
S604	0.22	0.22	0.21	0.16	0.15	0.14	0.11	0.10	0.10	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.87	67.25	1.12	0.75
S609	0.43	0.42	0.42	0.12	0.09	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.93	39.25	0.65	0.61
S607	0.40	0.39	0.39	0.15	0.13	0.12	0.07	0.07	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.16	42.00	0.70	0.59
S608	0.47	0.46	0.46	0.16	0.12	0.11	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.32	25.25	0.42	0.27
S610	0.45	0.44	0.44	0.16	0.13	0.12	0.06	0.06	0.06	0.04	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.32	31.25	0.52	0.40
S612	0.41	0.41	0.41	0.17	0.15	0.14	0.08	0.08	0.08	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.31	35.75	0.60	0.49
S611	0.44	0.43	0.43	0.13	0.10	0.08	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.10	28.75	0.48	0.28
S613	0.28	0.28	0.28	0.16	0.15	0.14	0.10	0.10	0.10	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	2.04	54.75	0.91	0.50
S614	0.35	0.34	0.34	0.15	0.12	0.11	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	2.04	51.25	0.85	0.58
S617	0.42	0.41	0.41	0.14	0.11	0.10	0.05	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.99	28.75	0.48	0.26
S615	0.38	0.38	0.37	0.18	0.16	0.15	0.10	0.09	0.09	0.05	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	2.54	52.00	0.87	0.55
S616	0.46	0.45	0.45	0.14	0.10	0.09	0.04	0.04	0.04	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	2.03	31.00	0.52	0.41
S618	0.37	0.36	0.36	0.15	0.12	0.11	0.07	0.07	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	45.50	0.76	0.56
S619	0.41	0.40	0.40	0.17	0.15	0.14	0.08	0.08	0.08	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.35	41.25	0.69	0.32
S620	0.48	0.47	0.47	0.16	0.13	0.12	0.06	0.06	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.37	38.50	0.64	0.57
S621	0.36	0.35	0.35	0.13	0.11	0.10	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.60	31.00	0.52	0.25
S622	0.36	0.36	0.35	0.13	0.10	0.09	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.58	55.75	0.93	0.63
S700	0.43	0.42	0.42	0.14	0.11	0.10	0.05	0.05	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.84	20.50	0.34	0.25
S701	0.41	0.41	0.40	0.15	0.12	0.11	0.06	0.06	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.98	40.50	0.68	0.66
S702	0.47	0.46	0.46	0.15	0.12	0.11	0.05	0.05	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.14	17.25	0.29	0.26
S703	0.45	0.44	0.44	0.12	0.09	0.07	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.69	24.00	0.40	0.32
S704	0.45	0.45	0.44	0.13	0.10	0.08	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.91	18.25	0.30	0.20
S705	0.42	0.42	0.42	0.17	0.15	0.14	0.08	0.08	0.08	0.05	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.37	19.25	0.32	0.23

Table C-15

Time of concentration and duration of rainfall excess for future conditions, 100-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.49	0.49	0.49	0.18	0.15	0.14	0.07	0.07	0.07	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.01	0.00	2.36	27.25	0.45	0.38
S706	0.43	0.42	0.42	0.17	0.14	0.13	0.07	0.07	0.07	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.34	17.25	0.29	0.20
S707	0.45	0.45	0.45	0.18	0.15	0.15	0.08	0.08	0.07	0.06	0.05	0.05	0.02	0.02	0.01	0.01	0.01	0.01	2.63	16.75	0.28	0.22
S728	0.48	0.48	0.48	0.17	0.13	0.13	0.06	0.06	0.06	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.52	23.75	0.40	0.39
S708	0.44	0.44	0.44	0.18	0.16	0.15	0.08	0.08	0.08	0.06	0.06	0.05	0.02	0.02	0.01	0.01	0.01	0.01	2.35	17.25	0.29	0.16
S709	0.50	0.50	0.50	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.02	0.02	0.01	0.01	0.01	0.01	2.63	19.25	0.32	0.22
S710	0.50	0.49	0.49	0.18	0.15	0.15	0.07	0.07	0.07	0.07	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.53	10.00	0.17	0.12
S711	0.50	0.50	0.50	0.19	0.16	0.16	0.08	0.08	0.07	0.07	0.07	0.07	0.02	0.02	0.02	0.01	0.01	0.01	2.71	10.00	0.17	0.09
S712	0.50	0.50	0.49	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.60	10.00	0.17	0.09
S713	0.50	0.50	0.50	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.58	10.00	0.17	0.11
S714	0.48	0.48	0.48	0.17	0.13	0.12	0.06	0.06	0.06	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.10	10.00	0.17	0.13
S715	0.50	0.49	0.49	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.54	21.50	0.36	0.27
S716	0.38	0.38	0.38	0.20	0.18	0.18	0.11	0.11	0.11	0.08	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	2.57	26.25	0.44	0.27
S717	0.50	0.50	0.50	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.02	0.01	0.01	0.01	0.01	0.01	2.64	13.75	0.23	0.11
S718	0.50	0.50	0.49	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	2.60	41.50	0.69	0.71
S719	0.51	0.50	0.50	0.20	0.16	0.16	0.08	0.08	0.08	0.08	0.08	0.08	0.02	0.02	0.02	0.02	0.02	0.02	2.84	19.25	0.32	0.36
S720	0.50	0.50	0.50	0.19	0.16	0.15	0.08	0.08	0.07	0.07	0.07	0.07	0.02	0.01	0.01	0.01	0.01	0.01	2.66	18.00	0.30	0.24
S721	0.50	0.49	0.49	0.18	0.15	0.15	0.07	0.07	0.07	0.07	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.76	11.75	0.20	0.10
S722	0.40	0.40	0.40	0.19	0.17	0.17	0.10	0.10	0.10	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.01	2.51	26.50	0.44	0.30
S723	0.50	0.50	0.50	0.19	0.16	0.16	0.08	0.08	0.07	0.07	0.07	0.07	0.02	0.01	0.01	0.01	0.01	0.01	2.72	10.00	0.17	0.13
S724	0.39	0.38	0.38	0.20	0.19	0.19	0.12	0.12	0.11	0.09	0.09	0.09	0.04	0.04	0.04	0.03	0.03	0.03	2.94	24.75	0.41	0.25
S725	0.38	0.38	0.38	0.20	0.18	0.18	0.11	0.11	0.11	0.08	0.08	0.08	0.04	0.04	0.04	0.02	0.02	0.02	2.79	33.00	0.55	0.43
S726	0.47	0.47	0.47	0.16	0.12	0.11	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.24	11.50	0.19	0.11
S727	0.50	0.50	0.50	0.19	0.16	0.16	0.08	0.08	0.08	0.08	0.08	0.07	0.02	0.02	0.02	0.01	0.01	0.01	2.89	24.50	0.41	0.39

Table C-16

Time of concentration and duration of rainfall excess for future conditions, 50-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.38	0.38	0.38	0.11	0.08	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.74	41.75	0.70	0.55
S101	0.37	0.36	0.36	0.11	0.08	0.06	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.58	34.25	0.57	0.37
S102	0.40	0.40	0.39	0.12	0.08	0.07	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.84	34.00	0.57	0.43
S103	0.40	0.40	0.39	0.11	0.08	0.06	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.68	44.75	0.75	0.57
S104	0.33	0.33	0.33	0.13	0.11	0.10	0.06	0.06	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.72	41.00	0.68	0.38
S105	0.39	0.38	0.38	0.12	0.09	0.08	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.79	43.75	0.73	0.61
S106	0.39	0.38	0.38	0.11	0.08	0.07	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.60	33.00	0.55	0.42
S107	0.31	0.31	0.31	0.11	0.09	0.07	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	37.50	0.63	0.49
S200	0.31	0.31	0.31	0.11	0.09	0.07	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.70	40.75	0.68	0.37
S201	0.40	0.39	0.39	0.11	0.07	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.81	31.50	0.53	0.38
S202	0.40	0.39	0.39	0.11	0.07	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.81	19.75	0.33	0.26
S203	0.40	0.40	0.39	0.11	0.08	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.88	94.00	1.57	1.62
S204	0.31	0.31	0.30	0.11	0.08	0.07	0.05	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.65	48.00	0.80	0.51
S205	0.41	0.40	0.40	0.12	0.09	0.08	0.04	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.90	27.00	0.45	0.35
S206	0.34	0.33	0.33	0.12	0.10	0.09	0.05	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.77	51.25	0.85	0.66
S207	0.32	0.31	0.31	0.12	0.09	0.08	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.75	53.25	0.89	0.65
S208	0.31	0.31	0.30	0.13	0.11	0.10	0.07	0.06	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.77	92.25	1.54	1.06
S209	0.37	0.36	0.36	0.11	0.08	0.07	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.59	39.75	0.66	0.38
S210	0.39	0.39	0.38	0.10	0.07	0.05	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	30.00	0.50	0.32
S211	0.40	0.39	0.39	0.11	0.07	0.06	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.54	32.50	0.54	0.36
S300	0.38	0.37	0.37	0.12	0.09	0.07	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.81	24.00	0.40	0.28
S301	0.32	0.32	0.31	0.13	0.10	0.09	0.06	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	1.88	23.75	0.40	0.23
S302	0.40	0.40	0.39	0.11	0.08	0.06	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.78	29.75	0.50	0.28
S303	0.34	0.34	0.33	0.10	0.07	0.05	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.43	38.75	0.65	0.39
S304	0.33	0.33	0.33	0.11	0.09	0.07	0.04	0.04	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.46	35.00	0.58	0.45
S400	0.33	0.32	0.32	0.14	0.12	0.12	0.07	0.07	0.07	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.94	27.50	0.46	0.25
S401	0.37	0.37	0.36	0.12	0.09	0.07	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.61	25.50	0.43	0.23
S402	0.37	0.36	0.36	0.14	0.11	0.10	0.06	0.06	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.95	21.75	0.36	0.19
S403	0.42	0.42	0.42	0.16	0.13	0.13	0.07	0.07	0.06	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.29	19.25	0.32	0.22
S404	0.41	0.41	0.40	0.13	0.09	0.08	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.71	20.25	0.34	0.19
S500	0.31	0.31	0.30	0.13	0.10	0.09	0.06	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	1.82	43.75	0.73	0.51
S501	0.37	0.37	0.36	0.11	0.08	0.06	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.72	28.25	0.47	0.29
S502	0.40	0.39	0.39	0.11	0.07	0.05	0.03	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.67	28.00	0.47	0.28
S503	0.32	0.32	0.31	0.13	0.11	0.09	0.06	0.06	0.06	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.77	36.75	0.61	0.36
S504	0.41	0.40	0.40	0.12	0.09	0.07	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.89	29.00	0.48	0.45
S505	0.40	0.39	0.38	0.10	0.07	0.05	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.63	15.25	0.25	0.13
S506	0.42	0.41	0.41	0.13	0.10	0.09	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.94	16.50	0.28	0.20
S507	0.37	0.37	0.37	0.13	0.10	0.09	0.05	0.05	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.67	22.50	0.38	0.21

Table C-16

Time of concentration and duration of rainfall excess for future conditions, 50-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.41	0.41	0.40	0.12	0.09	0.08	0.04	0.04	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.82	15.50	0.26	0.18
S509	0.41	0.41	0.40	0.12	0.09	0.08	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.92	11.25	0.19	0.12
S510	0.44	0.44	0.44	0.16	0.13	0.13	0.06	0.06	0.06	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.37	16.25	0.27	0.24
S511	0.42	0.41	0.41	0.13	0.10	0.08	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	16.25	0.27	0.19
S512	0.45	0.44	0.44	0.17	0.14	0.13	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.47	20.00	0.33	0.26
S513	0.35	0.35	0.35	0.13	0.10	0.09	0.05	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	1.70	26.25	0.44	0.33
S514	0.40	0.40	0.40	0.16	0.13	0.13	0.07	0.07	0.07	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.19	21.25	0.35	0.28
S515	0.34	0.34	0.34	0.17	0.15	0.15	0.09	0.09	0.09	0.06	0.06	0.05	0.03	0.03	0.02	0.02	0.02	0.01	2.23	23.00	0.38	0.21
S516	0.41	0.41	0.41	0.14	0.11	0.10	0.05	0.05	0.05	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.16	24.50	0.41	0.30
S600	0.21	0.20	0.20	0.10	0.09	0.07	0.06	0.06	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.30	53.50	0.89	0.50
S601	0.35	0.34	0.34	0.14	0.12	0.11	0.07	0.07	0.06	0.04	0.04	0.04	0.02	0.02	0.01	0.01	0.01	0.01	2.04	37.00	0.62	0.37
S602	0.23	0.23	0.22	0.13	0.11	0.10	0.08	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.64	52.50	0.88	0.54
S603	0.38	0.38	0.38	0.14	0.11	0.10	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.04	25.75	0.43	0.24
S604	0.19	0.19	0.18	0.13	0.12	0.11	0.09	0.09	0.09	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	1.60	73.75	1.23	0.83
S605	0.30	0.30	0.29	0.12	0.09	0.08	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.71	47.50	0.79	0.54
S606	0.37	0.36	0.36	0.12	0.08	0.07	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.81	37.50	0.63	0.51
S607	0.35	0.34	0.34	0.13	0.10	0.09	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.87	45.50	0.76	0.65
S608	0.42	0.41	0.41	0.13	0.10	0.09	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.02	27.00	0.45	0.29
S609	0.38	0.37	0.36	0.10	0.06	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.65	43.25	0.72	0.68
S610	0.39	0.39	0.39	0.13	0.10	0.09	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.02	33.75	0.56	0.43
S611	0.38	0.38	0.37	0.11	0.08	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.80	31.25	0.52	0.30
S612	0.36	0.36	0.36	0.15	0.12	0.12	0.07	0.07	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.01	38.50	0.64	0.54
S613	0.25	0.24	0.24	0.14	0.12	0.11	0.08	0.08	0.08	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.76	59.75	1.00	0.55
S614	0.31	0.30	0.30	0.12	0.10	0.09	0.06	0.06	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.75	56.00	0.93	0.64
S615	0.34	0.33	0.33	0.16	0.14	0.13	0.08	0.08	0.08	0.05	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.24	55.75	0.93	0.59
S616	0.40	0.40	0.39	0.12	0.08	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.74	33.75	0.56	0.45
S617	0.36	0.36	0.36	0.12	0.09	0.07	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.70	31.25	0.52	0.29
S618	0.32	0.32	0.31	0.12	0.10	0.09	0.06	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.65	50.00	0.83	0.62
S619	0.36	0.36	0.35	0.15	0.12	0.11	0.07	0.07	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.05	44.25	0.74	0.34
S620	0.42	0.42	0.41	0.14	0.11	0.10	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.06	41.50	0.69	0.61
S621	0.31	0.31	0.30	0.11	0.08	0.07	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33	34.00	0.57	0.28
S622	0.31	0.31	0.30	0.10	0.08	0.06	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	62.25	1.04	0.72
S700	0.38	0.37	0.37	0.11	0.08	0.07	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.56	22.00	0.37	0.27
S701	0.36	0.36	0.35	0.13	0.10	0.09	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	1.70	44.00	0.73	0.73
S702	0.41	0.41	0.40	0.13	0.09	0.08	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.85	18.50	0.31	0.28
S703	0.39	0.38	0.38	0.10	0.06	0.05	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41	26.00	0.43	0.35
S704	0.40	0.39	0.39	0.11	0.07	0.06	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.62	19.50	0.33	0.21
S705	0.38	0.37	0.37	0.15	0.13	0.12	0.07	0.07	0.06	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.06	20.50	0.34	0.24

Table C-16

Time of concentration and duration of rainfall excess for future conditions, 50-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.44	0.43	0.43	0.16	0.13	0.12	0.06	0.06	0.06	0.05	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	2.04	29.00	0.48	0.41
S706	0.38	0.37	0.37	0.14	0.12	0.11	0.06	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.04	18.25	0.30	0.21
S707	0.40	0.40	0.40	0.16	0.13	0.13	0.07	0.07	0.06	0.05	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.31	17.75	0.30	0.24
S708	0.39	0.39	0.39	0.16	0.14	0.13	0.07	0.07	0.07	0.05	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.04	18.25	0.30	0.18
S709	0.45	0.44	0.44	0.17	0.14	0.14	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.30	20.25	0.34	0.23
S710	0.44	0.44	0.44	0.16	0.13	0.13	0.06	0.06	0.06	0.06	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.00	2.21	9.00	0.15	0.11
S711	0.45	0.44	0.44	0.17	0.14	0.14	0.07	0.07	0.07	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.38	8.75	0.15	0.07
S712	0.45	0.44	0.44	0.16	0.14	0.13	0.07	0.07	0.06	0.06	0.06	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.28	5.75	0.10	0.05
S713	0.45	0.44	0.44	0.16	0.14	0.13	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.26	8.00	0.13	0.09
S714	0.43	0.42	0.42	0.14	0.11	0.10	0.05	0.05	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.80	10.00	0.17	0.13
S715	0.44	0.44	0.44	0.16	0.14	0.13	0.07	0.07	0.06	0.06	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.20	22.75	0.38	0.29
S716	0.34	0.34	0.34	0.17	0.16	0.15	0.10	0.09	0.09	0.06	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.02	2.25	27.50	0.46	0.29
S717	0.45	0.44	0.44	0.17	0.14	0.14	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.31	14.25	0.24	0.12
S718	0.44	0.44	0.44	0.17	0.14	0.13	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.26	44.25	0.74	0.76
S719	0.45	0.45	0.45	0.17	0.15	0.14	0.07	0.07	0.07	0.07	0.07	0.07	0.02	0.02	0.02	0.01	0.01	0.01	2.49	20.25	0.34	0.38
S720	0.45	0.44	0.44	0.17	0.14	0.13	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.33	19.00	0.32	0.25
S721	0.44	0.44	0.44	0.16	0.13	0.13	0.06	0.06	0.06	0.06	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.44	12.25	0.20	0.10
S722	0.36	0.36	0.35	0.17	0.15	0.15	0.09	0.09	0.08	0.06	0.06	0.05	0.02	0.02	0.02	0.02	0.01	0.01	2.20	28.00	0.47	0.32
S723	0.45	0.44	0.44	0.17	0.14	0.14	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.39	10.25	0.17	0.13
S724	0.34	0.34	0.34	0.18	0.17	0.17	0.10	0.10	0.10	0.08	0.08	0.08	0.04	0.04	0.03	0.03	0.03	0.02	2.60	26.00	0.43	0.26
S725	0.34	0.34	0.34	0.18	0.16	0.16	0.10	0.10	0.10	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	2.46	35.00	0.58	0.46
S726	0.42	0.41	0.41	0.13	0.10	0.09	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.95	12.25	0.20	0.12
S727	0.45	0.44	0.44	0.17	0.14	0.14	0.07	0.07	0.07	0.07	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.56	26.00	0.43	0.41
S728	0.43	0.42	0.42	0.14	0.11	0.11	0.05	0.05	0.05	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.21	25.25	0.42	0.42

Table C-17

Time of concentration and duration of rainfall excess for future conditions, 25-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.33	0.32	0.32	0.09	0.06	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.44	46.75	0.78	0.62
S101	0.32	0.31	0.30	0.08	0.05	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.28	38.50	0.64	0.42
S102	0.35	0.34	0.34	0.09	0.06	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.54	37.75	0.63	0.48
S103	0.35	0.34	0.34	0.09	0.05	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.38	50.50	0.84	0.65
S104	0.29	0.28	0.28	0.10	0.08	0.07	0.05	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.43	45.25	0.75	0.42
S105	0.33	0.33	0.32	0.10	0.07	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	1.49	49.00	0.82	0.69
S106	0.33	0.32	0.32	0.09	0.06	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.30	37.00	0.62	0.47
S107	0.27	0.26	0.26	0.08	0.06	0.04	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	42.25	0.70	0.56
S200	0.27	0.26	0.26	0.09	0.06	0.05	0.04	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.41	45.50	0.76	0.42
S201	0.34	0.33	0.33	0.08	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.53	35.00	0.58	0.42
S202	0.34	0.34	0.33	0.08	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.53	21.75	0.36	0.29
S203	0.35	0.34	0.34	0.09	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.59	42.50	0.71	0.67
S204	0.27	0.26	0.26	0.08	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.35	54.00	0.90	0.58
S205	0.35	0.35	0.34	0.10	0.06	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.60	29.50	0.49	0.38
S206	0.29	0.29	0.28	0.10	0.07	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.47	57.25	0.95	0.75
S207	0.27	0.27	0.26	0.09	0.07	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.45	59.50	0.99	0.74
S208	0.27	0.26	0.26	0.11	0.09	0.07	0.05	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.47	73.75	1.23	0.83
S209	0.31	0.31	0.30	0.09	0.06	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.30	44.75	0.75	0.44
S210	0.34	0.33	0.32	0.08	0.04	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	33.50	0.56	0.36
S211	0.34	0.33	0.33	0.08	0.05	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	36.75	0.61	0.41
S300	0.33	0.32	0.32	0.09	0.06	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.51	26.50	0.44	0.31
S301	0.28	0.27	0.27	0.10	0.08	0.06	0.05	0.05	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.58	25.75	0.43	0.25
S302	0.35	0.34	0.33	0.09	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.48	33.00	0.55	0.32
S303	0.29	0.29	0.28	0.07	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.14	44.25	0.74	0.45
S304	0.29	0.28	0.27	0.09	0.06	0.04	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	39.25	0.65	0.51
S400	0.28	0.28	0.27	0.12	0.10	0.09	0.06	0.06	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.64	29.75	0.50	0.27
S401	0.32	0.31	0.31	0.09	0.06	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.32	28.25	0.47	0.26
S402	0.32	0.31	0.31	0.11	0.09	0.08	0.05	0.05	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.64	23.50	0.39	0.21
S403	0.37	0.37	0.37	0.14	0.11	0.11	0.06	0.06	0.05	0.04	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.96	20.50	0.34	0.23
S404	0.36	0.35	0.35	0.10	0.07	0.05	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.42	22.00	0.37	0.21
S500	0.27	0.26	0.26	0.10	0.08	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.51	48.75	0.81	0.57
S501	0.32	0.31	0.31	0.09	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.41	31.50	0.53	0.33
S502	0.34	0.33	0.33	0.08	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.38	31.25	0.52	0.31
S503	0.27	0.27	0.27	0.10	0.08	0.06	0.05	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.47	40.75	0.68	0.40
S504	0.35	0.35	0.34	0.10	0.06	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.58	32.00	0.53	0.50
S505	0.34	0.33	0.33	0.08	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.34	16.50	0.28	0.15
S506	0.36	0.36	0.35	0.11	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.63	17.75	0.30	0.22
S507	0.32	0.32	0.31	0.10	0.07	0.06	0.04	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.38	24.75	0.41	0.24

Table C-17

Time of concentration and duration of rainfall excess for future conditions, 25-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.35	0.35	0.35	0.10	0.07	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.51	16.75	0.28	0.19
S509	0.36	0.35	0.35	0.10	0.07	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.61	12.00	0.20	0.13
S510	0.39	0.38	0.38	0.14	0.11	0.11	0.05	0.05	0.05	0.04	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.04	17.50	0.29	0.26
S511	0.36	0.35	0.35	0.10	0.07	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.61	17.50	0.29	0.20
S512	0.39	0.39	0.39	0.14	0.12	0.11	0.06	0.06	0.05	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.13	21.25	0.35	0.28
S513	0.30	0.30	0.29	0.10	0.08	0.06	0.04	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	1.41	28.75	0.48	0.37
S514	0.35	0.35	0.35	0.14	0.11	0.11	0.06	0.06	0.06	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.87	22.75	0.38	0.30
S515	0.30	0.29	0.29	0.15	0.13	0.13	0.08	0.08	0.08	0.05	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	1.90	24.50	0.41	0.22
S516	0.36	0.35	0.35	0.12	0.09	0.08	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.85	26.50	0.44	0.33
S600	0.17	0.17	0.16	0.08	0.06	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.03	61.75	1.03	0.58
S601	0.30	0.29	0.29	0.12	0.09	0.08	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.73	40.50	0.68	0.41
S602	0.20	0.19	0.19	0.10	0.08	0.06	0.06	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.35	59.00	0.98	0.62
S603	0.33	0.33	0.32	0.11	0.08	0.07	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.72	28.00	0.47	0.26
S604	0.16	0.15	0.15	0.10	0.09	0.07	0.07	0.07	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.31	82.75	1.38	0.94
S605	0.26	0.25	0.25	0.09	0.07	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.41	53.25	0.89	0.61
S606	0.32	0.31	0.30	0.09	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.51	41.75	0.70	0.57
S607	0.30	0.29	0.29	0.10	0.08	0.06	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.56	50.50	0.84	0.73
S608	0.36	0.35	0.35	0.11	0.08	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.70	29.50	0.49	0.32
S609	0.32	0.31	0.31	0.07	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.38	48.25	0.80	0.77
S610	0.34	0.34	0.33	0.11	0.08	0.06	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.70	37.00	0.62	0.48
S611	0.33	0.32	0.32	0.08	0.05	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.51	34.75	0.58	0.34
S612	0.32	0.31	0.31	0.12	0.10	0.09	0.06	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.71	41.75	0.70	0.59
S613	0.21	0.21	0.20	0.11	0.09	0.08	0.07	0.06	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.46	66.50	1.11	0.62
S614	0.26	0.26	0.25	0.10	0.07	0.06	0.05	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.45	62.50	1.04	0.72
S615	0.29	0.29	0.29	0.13	0.11	0.10	0.07	0.07	0.07	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	1.92	60.75	1.01	0.65
S616	0.35	0.34	0.34	0.09	0.06	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.44	37.75	0.63	0.51
S617	0.31	0.31	0.30	0.09	0.06	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.40	35.00	0.58	0.33
S618	0.27	0.27	0.27	0.10	0.07	0.06	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.35	56.25	0.94	0.70
S619	0.31	0.31	0.31	0.12	0.10	0.09	0.06	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.74	48.50	0.81	0.38
S620	0.37	0.36	0.36	0.11	0.08	0.07	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.75	45.50	0.76	0.68
S621	0.26	0.26	0.25	0.08	0.05	0.03	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	38.50	0.64	0.32
S622	0.27	0.26	0.25	0.08	0.05	0.03	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04	72.00	1.20	0.84
S700	0.32	0.32	0.31	0.09	0.06	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.27	24.25	0.40	0.30
S701	0.31	0.31	0.30	0.10	0.07	0.05	0.04	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.41	49.25	0.82	0.82
S702	0.36	0.35	0.35	0.10	0.07	0.06	0.03	0.03	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.55	20.00	0.33	0.31
S703	0.33	0.33	0.32	0.07	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	29.25	0.49	0.40
S704	0.34	0.34	0.33	0.08	0.05	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.32	21.25	0.35	0.24
S705	0.33	0.32	0.32	0.13	0.11	0.10	0.06	0.05	0.05	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.75	22.00	0.37	0.26

Table C-17

Time of concentration and duration of rainfall excess for future conditions, 25-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.38	0.38	0.38	0.13	0.11	0.10	0.05	0.05	0.05	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.71	31.25	0.52	0.45
S706	0.33	0.32	0.32	0.12	0.09	0.08	0.05	0.05	0.05	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.73	19.75	0.33	0.23
S707	0.35	0.35	0.35	0.13	0.11	0.10	0.06	0.06	0.05	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	1.99	19.00	0.32	0.26
S708	0.34	0.34	0.34	0.14	0.11	0.11	0.06	0.06	0.06	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.00	0.00	1.71	19.50	0.33	0.19
S709	0.39	0.39	0.39	0.14	0.12	0.12	0.06	0.06	0.05	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	1.95	21.75	0.36	0.25
S710	0.39	0.38	0.38	0.14	0.11	0.11	0.05	0.05	0.05	0.04	0.04	0.03	0.01	0.01	0.00	0.00	0.00	0.00	1.88	9.50	0.16	0.12
S711	0.39	0.39	0.39	0.15	0.12	0.12	0.06	0.06	0.06	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.03	9.25	0.15	0.08
S712	0.39	0.39	0.39	0.14	0.12	0.11	0.06	0.06	0.05	0.05	0.04	0.03	0.01	0.01	0.01	0.00	0.00	0.00	1.94	6.00	0.10	0.05
S713	0.39	0.39	0.39	0.14	0.12	0.11	0.06	0.06	0.05	0.05	0.05	0.04	0.01	0.01	0.01	0.00	0.00	0.00	1.93	8.50	0.14	0.09
S714	0.37	0.37	0.36	0.12	0.09	0.08	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.50	10.50	0.18	0.14
S715	0.39	0.39	0.38	0.14	0.12	0.11	0.06	0.06	0.05	0.04	0.04	0.02	0.01	0.01	0.01	0.01	0.01	0.00	1.86	24.50	0.41	0.31
S716	0.30	0.29	0.29	0.15	0.13	0.13	0.08	0.08	0.08	0.05	0.05	0.04	0.02	0.02	0.02	0.02	0.01	0.01	1.92	29.50	0.49	0.31
S717	0.39	0.39	0.39	0.14	0.12	0.12	0.06	0.06	0.05	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	1.96	15.25	0.25	0.13
S718	0.39	0.39	0.39	0.14	0.12	0.11	0.06	0.06	0.05	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	1.92	47.75	0.80	0.83
S719	0.40	0.39	0.39	0.15	0.13	0.12	0.06	0.06	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	2.14	21.75	0.36	0.41
S720	0.39	0.39	0.39	0.14	0.12	0.11	0.06	0.06	0.05	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	1.99	20.50	0.34	0.28
S721	0.39	0.38	0.38	0.14	0.12	0.11	0.06	0.05	0.05	0.05	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	2.11	13.00	0.22	0.11
S722	0.31	0.31	0.31	0.14	0.13	0.12	0.07	0.07	0.07	0.05	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	1.87	30.00	0.50	0.35
S723	0.39	0.39	0.39	0.14	0.12	0.12	0.06	0.06	0.05	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.06	10.75	0.18	0.14
S724	0.30	0.30	0.30	0.16	0.15	0.14	0.09	0.09	0.09	0.07	0.07	0.06	0.03	0.03	0.03	0.02	0.02	0.02	2.26	27.50	0.46	0.28
S725	0.30	0.29	0.29	0.15	0.14	0.14	0.09	0.08	0.08	0.06	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.01	2.13	37.25	0.62	0.49
S726	0.36	0.36	0.35	0.11	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.64	12.75	0.21	0.13
S727	0.39	0.39	0.39	0.15	0.12	0.12	0.06	0.06	0.06	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	2.22	27.75	0.46	0.44
S728	0.37	0.37	0.37	0.12	0.09	0.08	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.89	27.25	0.45	0.46

Table C-18

Time of concentration and duration of rainfall excess for future conditions, 10-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.26	0.25	0.25	0.05	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.09	55.25	0.92	0.75
S101	0.25	0.24	0.23	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.93	46.75	0.78	0.52
S102	0.27	0.27	0.26	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.19	44.00	0.73	0.57
S103	0.27	0.27	0.26	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.02	60.25	1.00	0.79
S104	0.23	0.22	0.22	0.07	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.05	54.50	0.91	0.52
S105	0.26	0.26	0.25	0.06	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.10	58.25	0.97	0.83
S106	0.26	0.25	0.25	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.94	45.00	0.75	0.59
S107	0.21	0.20	0.19	0.05	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	53.25	0.89	0.72
S200	0.21	0.20	0.19	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.07	53.25	0.89	0.50
S201	0.27	0.26	0.25	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.19	40.75	0.68	0.50
S202	0.27	0.26	0.25	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.19	25.25	0.42	0.34
S203	0.27	0.27	0.26	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.24	49.00	0.82	0.79
S204	0.20	0.20	0.19	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.02	63.50	1.06	0.69
S205	0.28	0.27	0.27	0.06	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.24	34.50	0.58	0.46
S206	0.23	0.22	0.22	0.06	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.09	68.50	1.14	0.91
S207	0.21	0.21	0.20	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.09	70.50	1.18	0.89
S208	0.21	0.20	0.20	0.07	0.05	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.10	88.25	1.47	1.01
S209	0.24	0.24	0.23	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.94	54.25	0.90	0.54
S210	0.26	0.26	0.25	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	41.00	0.68	0.45
S211	0.27	0.26	0.25	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	44.75	0.75	0.51
S300	0.26	0.25	0.24	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.16	30.75	0.51	0.37
S301	0.22	0.21	0.21	0.07	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.21	29.75	0.50	0.30
S302	0.27	0.26	0.26	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.14	38.75	0.65	0.38
S303	0.23	0.22	0.21	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.81	54.25	0.90	0.57
S304	0.22	0.22	0.21	0.05	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	48.75	0.81	0.64
S400	0.22	0.22	0.22	0.09	0.07	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.25	34.25	0.57	0.32
S401	0.25	0.24	0.24	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.95	33.75	0.56	0.32
S402	0.25	0.25	0.25	0.08	0.06	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.25	26.75	0.45	0.24
S403	0.30	0.30	0.30	0.11	0.09	0.08	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.55	22.75	0.38	0.26
S404	0.28	0.28	0.27	0.07	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03	25.50	0.43	0.25
S500	0.21	0.20	0.20	0.06	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.15	57.00	0.95	0.68
S501	0.25	0.24	0.24	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	1.08	37.25	0.62	0.40
S502	0.27	0.26	0.25	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.05	37.00	0.62	0.38
S503	0.22	0.21	0.21	0.07	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.10	48.25	0.80	0.49
S504	0.28	0.27	0.27	0.06	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.23	37.25	0.62	0.59
S505	0.26	0.26	0.25	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.01	19.00	0.32	0.17
S506	0.29	0.28	0.28	0.07	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.24	20.25	0.34	0.25
S507	0.25	0.25	0.24	0.07	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.00	28.75	0.48	0.28

Table C-18

Time of concentration and duration of rainfall excess for future conditions, 10-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.28	0.28	0.27	0.06	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.13	19.25	0.32	0.22
S509	0.28	0.28	0.27	0.06	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.24	13.25	0.22	0.15
S510	0.32	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.63	19.25	0.32	0.29
S511	0.29	0.28	0.28	0.07	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.22	19.75	0.33	0.23
S512	0.32	0.32	0.32	0.11	0.09	0.09	0.04	0.04	0.04	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.71	23.50	0.39	0.31
S513	0.24	0.23	0.23	0.07	0.04	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.03	34.25	0.57	0.45
S514	0.29	0.28	0.28	0.11	0.09	0.08	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.47	25.50	0.43	0.34
S515	0.24	0.24	0.24	0.12	0.10	0.10	0.06	0.06	0.06	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	1.48	27.00	0.45	0.25
S516	0.29	0.28	0.28	0.08	0.06	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.44	30.25	0.50	0.38
S600	0.12	0.12	0.11	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.70	78.25	1.30	0.76
S601	0.24	0.23	0.23	0.08	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.33	46.75	0.78	0.49
S602	0.15	0.14	0.14	0.06	0.05	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.99	71.00	1.18	0.76
S603	0.26	0.26	0.26	0.08	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.32	32.25	0.54	0.30
S604	0.12	0.11	0.11	0.06	0.05	0.05	0.05	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.95	90.00	1.50	1.03
S605	0.20	0.19	0.19	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	62.75	1.05	0.73
S606	0.25	0.24	0.23	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.16	48.50	0.81	0.67
S607	0.24	0.23	0.23	0.07	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.18	59.50	0.99	0.87
S608	0.29	0.28	0.28	0.07	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.31	34.50	0.58	0.39
S609	0.25	0.24	0.23	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.05	56.25	0.94	0.91
S610	0.27	0.27	0.26	0.07	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.31	43.00	0.72	0.56
S611	0.26	0.25	0.24	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.17	40.25	0.67	0.40
S612	0.25	0.25	0.25	0.09	0.07	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.31	48.50	0.81	0.69
S613	0.16	0.16	0.15	0.07	0.06	0.05	0.05	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.09	79.00	1.32	0.75
S614	0.20	0.20	0.19	0.06	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.09	74.50	1.24	0.87
S615	0.23	0.23	0.23	0.10	0.08	0.07	0.05	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	1.51	69.75	1.16	0.76
S616	0.27	0.27	0.26	0.05	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.08	45.00	0.75	0.62
S617	0.25	0.24	0.23	0.05	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.04	41.50	0.69	0.40
S618	0.21	0.21	0.20	0.06	0.04	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.98	68.25	1.14	0.87
S619	0.25	0.25	0.24	0.09	0.07	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.34	56.50	0.94	0.45
S620	0.29	0.29	0.28	0.08	0.05	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.35	53.00	0.88	0.81
S621	0.20	0.20	0.19	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	48.50	0.81	0.42
S622	0.20	0.20	0.19	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	90.00	1.50	1.08
S700	0.25	0.25	0.24	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.90	28.75	0.48	0.37
S701	0.25	0.24	0.24	0.06	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.03	59.25	0.99	1.01
S702	0.28	0.28	0.27	0.07	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.16	23.00	0.38	0.36
S703	0.26	0.25	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	35.75	0.60	0.50
S704	0.27	0.26	0.25	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.98	25.25	0.42	0.29
S705	0.26	0.26	0.26	0.09	0.07	0.06	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.36	24.75	0.41	0.30

Table C-18

Time of concentration and duration of rainfall excess for future conditions, 10-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.31	0.31	0.31	0.10	0.08	0.07	0.04	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	35.50	0.59	0.52
S706	0.26	0.26	0.26	0.09	0.06	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.33	22.25	0.37	0.26
S707	0.29	0.28	0.28	0.10	0.08	0.07	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.58	21.25	0.35	0.29
S708	0.28	0.27	0.27	0.11	0.09	0.08	0.05	0.05	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	21.75	0.36	0.21
S709	0.32	0.32	0.32	0.12	0.09	0.09	0.05	0.05	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.52	24.00	0.40	0.28
S710	0.32	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.46	10.25	0.17	0.13
S711	0.32	0.32	0.32	0.12	0.10	0.09	0.05	0.05	0.04	0.04	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.60	10.00	0.17	0.09
S712	0.32	0.32	0.31	0.11	0.09	0.09	0.04	0.04	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.52	6.50	0.11	0.06
S713	0.32	0.31	0.31	0.11	0.09	0.09	0.04	0.04	0.04	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.51	9.25	0.15	0.10
S714	0.30	0.29	0.29	0.08	0.05	0.03	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	11.50	0.19	0.15
S715	0.32	0.31	0.31	0.11	0.09	0.08	0.04	0.04	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43	27.00	0.45	0.35
S716	0.24	0.24	0.24	0.12	0.11	0.10	0.07	0.06	0.06	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	1.50	32.50	0.54	0.35
S717	0.32	0.32	0.32	0.12	0.09	0.09	0.05	0.05	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.53	16.75	0.28	0.14
S718	0.32	0.32	0.31	0.11	0.09	0.09	0.04	0.04	0.04	0.03	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	1.49	53.75	0.90	0.95
S719	0.33	0.32	0.32	0.12	0.10	0.10	0.05	0.05	0.05	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.69	24.00	0.40	0.46
S720	0.32	0.32	0.32	0.11	0.09	0.09	0.05	0.05	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.56	22.50	0.38	0.31
S721	0.32	0.31	0.31	0.11	0.09	0.09	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.69	14.00	0.23	0.12
S722	0.25	0.25	0.25	0.11	0.10	0.09	0.06	0.06	0.06	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	1.45	33.50	0.56	0.39
S723	0.32	0.32	0.32	0.12	0.10	0.09	0.05	0.05	0.04	0.04	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	1.63	11.50	0.19	0.15
S724	0.25	0.25	0.25	0.13	0.12	0.12	0.07	0.07	0.07	0.05	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.01	1.81	30.25	0.50	0.31
S725	0.24	0.24	0.24	0.12	0.11	0.11	0.07	0.07	0.07	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	1.70	41.25	0.69	0.55
S726	0.29	0.28	0.28	0.07	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.24	14.00	0.23	0.14
S727	0.32	0.32	0.32	0.12	0.10	0.09	0.05	0.05	0.04	0.04	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.79	30.75	0.51	0.50
S728	0.30	0.30	0.29	0.09	0.06	0.05	0.03	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.48	31.25	0.52	0.53

Table C-19

Time of concentration and duration of rainfall excess for future conditions, 5-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.21	0.20	0.19	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.87	63.25	1.05	0.87
S101	0.19	0.19	0.17	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.71	55.00	0.92	0.62
S102	0.22	0.21	0.20	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.96	50.00	0.83	0.66
S103	0.22	0.21	0.20	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.80	70.25	1.17	0.94
S104	0.18	0.18	0.17	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.80	64.25	1.07	0.63
S105	0.21	0.21	0.20	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.87	67.75	1.13	0.98
S106	0.21	0.20	0.19	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.71	53.00	0.88	0.70
S107	0.16	0.15	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	67.00	1.12	0.93
S200	0.16	0.15	0.14	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.85	60.50	1.01	0.58
S201	0.21	0.20	0.19	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.95	46.50	0.78	0.58
S202	0.21	0.20	0.19	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.95	28.75	0.48	0.39
S203	0.22	0.21	0.20	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.00	55.50	0.93	0.90
S204	0.16	0.15	0.14	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.81	73.25	1.22	0.81
S205	0.23	0.22	0.21	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.00	39.25	0.65	0.53
S206	0.18	0.18	0.17	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.86	79.25	1.32	1.07
S207	0.17	0.16	0.15	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.87	80.50	1.34	1.03
S208	0.17	0.16	0.16	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.84	90.00	1.50	1.03
S209	0.19	0.19	0.18	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.73	63.50	1.06	0.64
S210	0.21	0.20	0.19	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	49.00	0.82	0.54
S211	0.21	0.20	0.19	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	52.75	0.88	0.62
S300	0.20	0.20	0.19	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.92	35.50	0.59	0.43
S301	0.17	0.17	0.16	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.98	33.75	0.56	0.34
S302	0.22	0.21	0.20	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.91	44.25	0.74	0.44
S303	0.18	0.17	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.61	64.50	1.08	0.69
S304	0.17	0.17	0.16	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	59.50	0.99	0.80
S400	0.18	0.18	0.17	0.06	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.98	39.25	0.65	0.37
S401	0.20	0.19	0.18	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.72	40.00	0.67	0.39
S402	0.21	0.20	0.20	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.98	30.75	0.51	0.28
S403	0.25	0.25	0.25	0.09	0.07	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.27	25.25	0.42	0.29
S404	0.23	0.22	0.22	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	29.75	0.50	0.30
S500	0.16	0.16	0.15	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.92	64.75	1.08	0.79
S501	0.20	0.19	0.18	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	42.75	0.71	0.46
S502	0.21	0.20	0.19	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	93.75	1.56	1.06
S503	0.17	0.17	0.16	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.85	55.75	0.93	0.57
S504	0.23	0.22	0.21	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.98	42.50	0.71	0.69
S505	0.21	0.20	0.19	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.79	22.25	0.37	0.20
S506	0.24	0.23	0.22	0.05	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.98	23.00	0.38	0.29
S507	0.21	0.20	0.19	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.75	34.00	0.57	0.34

Table C-19

Time of concentration and duration of rainfall excess for future conditions, 5-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.23	0.22	0.21	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.89	22.00	0.37	0.26
S509	0.23	0.22	0.21	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.00	14.25	0.24	0.16
S510	0.26	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.33	21.25	0.35	0.32
S511	0.23	0.23	0.22	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.97	22.50	0.38	0.27
S512	0.27	0.27	0.26	0.09	0.07	0.07	0.04	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.41	25.75	0.43	0.34
S513	0.19	0.19	0.18	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.78	40.25	0.67	0.53
S514	0.24	0.23	0.23	0.08	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	1.19	28.25	0.47	0.38
S515	0.20	0.20	0.20	0.09	0.08	0.07	0.05	0.05	0.05	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.19	29.75	0.50	0.27
S516	0.24	0.23	0.23	0.06	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.18	34.00	0.57	0.44
S600	0.09	0.08	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.52	90.00	1.50	0.89
S601	0.19	0.19	0.18	0.05	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	53.25	0.89	0.56
S602	0.11	0.11	0.10	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.77	82.50	1.38	0.89
S603	0.22	0.21	0.20	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.07	36.50	0.61	0.35
S604	0.09	0.08	0.07	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.72	90.00	1.50	1.03
S605	0.15	0.15	0.14	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.85	71.75	1.20	0.85
S606	0.20	0.19	0.18	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.93	55.00	0.92	0.77
S607	0.19	0.18	0.18	0.04	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.94	68.25	1.14	1.02
S608	0.23	0.23	0.22	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.05	39.00	0.65	0.44
S609	0.19	0.18	0.17	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	65.00	1.08	1.07
S610	0.22	0.21	0.21	0.05	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	48.75	0.81	0.65
S611	0.20	0.19	0.18	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.94	46.00	0.77	0.47
S612	0.21	0.20	0.20	0.06	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.03	56.00	0.93	0.81
S613	0.13	0.12	0.12	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.84	90.00	1.50	0.87
S614	0.16	0.15	0.14	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.86	85.25	1.42	1.01
S615	0.19	0.19	0.18	0.07	0.06	0.06	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.22	79.00	1.32	0.87
S616	0.22	0.21	0.20	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.85	51.75	0.86	0.72
S617	0.20	0.19	0.18	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	48.00	0.80	0.46
S618	0.17	0.16	0.16	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.75	80.75	1.35	1.05
S619	0.21	0.20	0.20	0.06	0.04	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	64.75	1.08	0.52
S620	0.24	0.23	0.23	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.08	60.00	1.00	0.93
S621	0.16	0.15	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	60.00	1.00	0.53
S622	0.16	0.15	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	90.00	1.50	1.08
S700	0.20	0.19	0.18	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	34.25	0.57	0.44
S701	0.20	0.19	0.18	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.78	70.50	1.18	1.22
S702	0.23	0.22	0.22	0.04	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.92	26.50	0.44	0.42
S703	0.20	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	43.00	0.72	0.61
S704	0.21	0.21	0.19	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.75	29.50	0.49	0.34
S705	0.22	0.21	0.21	0.07	0.05	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.08	27.75	0.46	0.34

Table C-19

Time of concentration and duration of rainfall excess for future conditions, 5-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.26	0.26	0.25	0.08	0.06	0.04	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	40.25	0.67	0.59
S706	0.22	0.21	0.21	0.06	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.06	25.25	0.42	0.30
S707	0.24	0.23	0.23	0.08	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.29	23.50	0.39	0.32
S708	0.23	0.23	0.22	0.08	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02	24.00	0.40	0.24
S709	0.27	0.27	0.26	0.09	0.07	0.07	0.04	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21	26.25	0.44	0.31
S710	0.26	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.18	11.00	0.18	0.14
S711	0.27	0.27	0.27	0.10	0.08	0.07	0.04	0.04	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.29	10.75	0.18	0.09
S712	0.27	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.23	7.00	0.12	0.06
S713	0.27	0.26	0.26	0.09	0.07	0.07	0.03	0.03	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.21	9.75	0.16	0.11
S714	0.25	0.24	0.23	0.06	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	12.50	0.21	0.16
S715	0.27	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	30.00	0.50	0.39
S716	0.20	0.20	0.20	0.10	0.08	0.08	0.05	0.05	0.05	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	1.20	36.00	0.60	0.39
S717	0.27	0.27	0.26	0.09	0.08	0.07	0.04	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	18.25	0.30	0.16
S718	0.27	0.26	0.26	0.09	0.07	0.07	0.04	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19	61.00	1.02	1.09
S719	0.28	0.27	0.27	0.10	0.08	0.08	0.04	0.04	0.04	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.37	26.00	0.43	0.50
S720	0.27	0.27	0.26	0.09	0.07	0.07	0.04	0.04	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.26	24.75	0.41	0.34
S721	0.27	0.26	0.26	0.09	0.07	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.39	15.00	0.25	0.13
S722	0.21	0.21	0.21	0.09	0.08	0.07	0.05	0.05	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	1.16	37.25	0.62	0.44
S723	0.27	0.27	0.27	0.09	0.08	0.07	0.04	0.04	0.03	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.33	12.50	0.21	0.17
S724	0.21	0.21	0.21	0.11	0.10	0.10	0.06	0.06	0.06	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	1.50	32.75	0.55	0.34
S725	0.20	0.20	0.20	0.10	0.09	0.09	0.06	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	1.40	45.25	0.75	0.61
S726	0.24	0.23	0.22	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.99	15.25	0.25	0.16
S727	0.27	0.27	0.27	0.10	0.08	0.08	0.04	0.04	0.04	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.48	33.75	0.56	0.55
S728	0.25	0.24	0.24	0.06	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.20	35.25	0.59	0.61

Table C-19

Time of concentration and duration of rainfall excess for future conditions, 2-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.13	0.11	0.09	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.53	85.50	1.43	1.21
S101	0.11	0.10	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.40	78.50	1.31	0.92
S102	0.14	0.13	0.10	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	65.75	1.10	0.89
S103	0.13	0.12	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.47	90.00	1.50	1.23
S104	0.11	0.10	0.09	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.49	86.75	1.45	0.87
S105	0.13	0.12	0.10	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.54	90.00	1.50	1.35
S106	0.12	0.11	0.09	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	75.25	1.25	1.04
S107	0.09	0.08	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	90.00	1.50	1.29
S200	0.09	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.52	81.50	1.36	0.80
S201	0.13	0.11	0.08	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	61.75	1.03	0.79
S202	0.13	0.11	0.08	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.59	39.00	0.65	0.55
S203	0.14	0.12	0.10	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.63	73.50	1.23	1.23
S204	0.09	0.07	0.06	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.48	90.00	1.50	1.02
S205	0.14	0.13	0.11	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.64	51.00	0.85	0.70
S206	0.11	0.10	0.08	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.53	90.00	1.50	1.24
S207	0.10	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.54	90.00	1.50	1.17
S208	0.10	0.09	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.52	90.00	1.50	1.03
S209	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.42	89.25	1.49	0.94
S210	0.12	0.11	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	71.75	1.20	0.83
S211	0.13	0.11	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	76.25	1.27	0.93
S300	0.13	0.11	0.09	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.57	47.25	0.79	0.59
S301	0.10	0.09	0.07	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.63	43.75	0.73	0.46
S302	0.13	0.12	0.09	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.56	59.00	0.98	0.60
S303	0.10	0.08	0.05	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	90.00	1.50	1.00
S304	0.10	0.09	0.07	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	88.50	1.48	1.25
S400	0.12	0.11	0.10	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.63	50.75	0.85	0.49
S401	0.12	0.11	0.08	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	56.00	0.93	0.56
S402	0.13	0.13	0.11	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.63	40.00	0.67	0.38
S403	0.18	0.17	0.17	0.05	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.84	31.25	0.52	0.37
S404	0.15	0.13	0.12	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	41.50	0.69	0.43
S500	0.10	0.09	0.07	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.58	85.25	1.42	1.07
S501	0.12	0.11	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.51	57.75	0.96	0.64
S502	0.13	0.11	0.08	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.48	59.00	0.98	0.64
S503	0.10	0.09	0.07	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.53	74.00	1.23	0.78
S504	0.14	0.13	0.11	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.63	55.25	0.92	0.92
S505	0.12	0.11	0.08	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.46	31.50	0.53	0.30
S506	0.15	0.14	0.13	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.63	30.00	0.50	0.39
S507	0.13	0.12	0.10	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	47.50	0.79	0.49

Table C-19

Time of concentration and duration of rainfall excess for future conditions, 2-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.14	0.13	0.11	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.55	29.50	0.49	0.36
S509	0.15	0.13	0.11	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.64	18.50	0.31	0.21
S510	0.19	0.18	0.18	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.89	26.00	0.43	0.40
S511	0.15	0.14	0.12	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.62	29.75	0.50	0.37
S512	0.19	0.19	0.19	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.97	31.25	0.52	0.42
S513	0.12	0.11	0.09	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.47	54.75	0.91	0.75
S514	0.17	0.16	0.16	0.04	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.76	35.75	0.60	0.49
S515	0.14	0.14	0.14	0.06	0.04	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.77	37.00	0.62	0.35
S516	0.16	0.15	0.14	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.80	42.50	0.71	0.56
S600	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.29	90.00	1.50	0.89
S601	0.12	0.12	0.10	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.70	67.50	1.13	0.73
S602	0.06	0.05	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.48	90.00	1.50	0.98
S603	0.14	0.13	0.11	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.70	46.75	0.78	0.46
S604	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.47	90.00	1.50	1.03
S605	0.09	0.07	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.52	90.00	1.50	1.09
S606	0.12	0.11	0.08	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	73.50	1.23	1.07
S607	0.12	0.11	0.09	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.59	89.75	1.50	1.38
S608	0.15	0.14	0.12	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.69	50.25	0.84	0.58
S609	0.11	0.10	0.06	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.48	90.00	1.50	1.54
S610	0.14	0.13	0.11	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.69	62.00	1.03	0.84
S611	0.12	0.11	0.08	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	60.75	1.01	0.63
S612	0.14	0.13	0.12	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.66	73.00	1.22	1.09
S613	0.07	0.06	0.05	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.52	90.00	1.50	0.87
S614	0.09	0.08	0.06	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.54	90.00	1.50	1.08
S615	0.13	0.12	0.11	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.83	90.00	1.50	1.00
S616	0.14	0.12	0.10	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.51	70.25	1.17	1.01
S617	0.12	0.10	0.08	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.49	65.00	1.08	0.65
S618	0.10	0.09	0.07	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.44	90.00	1.50	1.18
S619	0.13	0.13	0.11	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.69	83.75	1.40	0.70
S620	0.16	0.15	0.14	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.72	77.25	1.29	1.23
S621	0.08	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	90.00	1.50	0.83
S622	0.08	0.07	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	90.00	1.50	1.08
S700	0.12	0.11	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	49.25	0.82	0.67
S701	0.12	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.46	90.00	1.50	1.60
S702	0.15	0.14	0.12	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	35.00	0.58	0.58
S703	0.12	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	64.50	1.08	0.96
S704	0.13	0.11	0.08	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	41.75	0.70	0.50
S705	0.15	0.14	0.13	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.69	35.75	0.60	0.45

Table C-19

Time of concentration and duration of rainfall excess for future conditions, 2-year, 6-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.18	0.18	0.17	0.04	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	54.50	0.91	0.83
S706	0.14	0.13	0.12	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.69	32.00	0.53	0.39
S707	0.16	0.16	0.16	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.88	29.00	0.48	0.41
S708	0.16	0.16	0.15	0.04	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	30.75	0.51	0.31
S709	0.19	0.19	0.19	0.06	0.04	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	32.50	0.54	0.40
S710	0.19	0.18	0.18	0.05	0.03	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	12.50	0.21	0.16
S711	0.19	0.19	0.19	0.06	0.04	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.86	12.25	0.20	0.11
S712	0.19	0.19	0.18	0.05	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.80	8.00	0.13	0.07
S713	0.19	0.19	0.18	0.06	0.04	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	11.25	0.19	0.13
S714	0.16	0.15	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	14.75	0.25	0.20
S715	0.19	0.19	0.18	0.05	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	38.00	0.63	0.51
S716	0.14	0.14	0.14	0.06	0.05	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.77	44.50	0.74	0.49
S717	0.19	0.19	0.19	0.06	0.04	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	21.75	0.36	0.19
S718	0.19	0.19	0.19	0.06	0.04	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	91.00	1.52	1.70
S719	0.20	0.20	0.20	0.07	0.05	0.03	0.03	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	31.50	0.53	0.62
S720	0.19	0.19	0.19	0.06	0.04	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.83	30.50	0.51	0.43
S721	0.19	0.19	0.18	0.06	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.95	17.75	0.30	0.15
S722	0.15	0.15	0.14	0.05	0.04	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.74	47.25	0.79	0.57
S723	0.19	0.19	0.19	0.06	0.04	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.89	14.00	0.23	0.19
S724	0.15	0.15	0.15	0.08	0.07	0.07	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.04	38.75	0.65	0.41
S725	0.14	0.14	0.14	0.07	0.06	0.05	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.96	55.50	0.93	0.76
S726	0.15	0.14	0.13	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.64	20.00	0.33	0.21
S727	0.20	0.19	0.19	0.07	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.04	41.00	0.68	0.68
S728	0.17	0.16	0.15	0.04	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.82	44.00	0.73	0.78

Table C-21

Time of concentration and duration of rainfall excess for future conditions, 100-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.99	41.25	0.69	0.54
S101	0.25	0.25	0.25	0.25	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.70	32.50	0.54	0.35
S102	0.25	0.25	0.25	0.25	0.25	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.15	33.50	0.56	0.42
S103	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.79	44.50	0.74	0.56
S104	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.99	38.75	0.65	0.36
S105	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.00	43.25	0.72	0.60
S106	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.64	32.00	0.53	0.40
S107	0.25	0.25	0.24	0.24	0.24	0.24	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37	34.25	0.57	0.44
S200	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	37.75	0.63	0.34
S201	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	31.00	0.52	0.37
S202	0.25	0.25	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.18	22.00	0.37	0.29
S203	0.25	0.25	0.25	0.25	0.25	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.28	38.00	0.63	0.59
S204	0.25	0.24	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.09	45.00	0.75	0.47
S205	0.26	0.26	0.26	0.25	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.23	27.50	0.46	0.35
S206	0.26	0.25	0.25	0.25	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.12	49.75	0.83	0.64
S207	0.25	0.25	0.25	0.25	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.21	50.75	0.85	0.62
S208	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.14	63.25	1.05	0.70
S209	0.25	0.25	0.25	0.25	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.72	38.25	0.64	0.37
S210	0.25	0.24	0.24	0.24	0.24	0.24	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39	29.25	0.49	0.31
S211	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.51	31.75	0.53	0.35
S300	0.26	0.25	0.25	0.25	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.16	24.75	0.41	0.29
S301	0.26	0.25	0.25	0.25	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.43	23.25	0.39	0.23
S302	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.06	29.50	0.49	0.28
S303	0.24	0.24	0.24	0.24	0.23	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.53	36.50	0.61	0.37
S304	0.25	0.25	0.25	0.25	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.51	32.50	0.54	0.41
S400	0.27	0.27	0.27	0.27	0.27	0.26	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.40	26.25	0.44	0.24
S401	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.71	25.75	0.43	0.24
S402	0.27	0.27	0.27	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.32	22.50	0.38	0.20
S403	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.74	21.00	0.35	0.24
S404	0.27	0.26	0.26	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.71	22.25	0.37	0.21
S500	0.26	0.25	0.25	0.25	0.25	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.34	41.25	0.69	0.48
S501	0.25	0.25	0.25	0.25	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.00	28.00	0.47	0.29
S502	0.25	0.25	0.24	0.24	0.24	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.86	28.25	0.47	0.28
S503	0.26	0.26	0.26	0.25	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.15	34.00	0.57	0.33
S504	0.26	0.25	0.25	0.25	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	29.00	0.48	0.45
S505	0.25	0.24	0.24	0.24	0.24	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.78	18.00	0.30	0.16
S506	0.27	0.27	0.27	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.17	19.25	0.32	0.24
S507	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.76	23.50	0.39	0.22

Table C-21

Time of concentration and duration of rainfall excess for future conditions, 100-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.98	18.25	0.30	0.21
S509	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.22	13.50	0.23	0.15
S510	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.86	19.00	0.32	0.28
S511	0.27	0.26	0.26	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.19	18.75	0.31	0.22
S512	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.02	3.06	22.00	0.37	0.29
S513	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.90	26.00	0.43	0.33
S514	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.57	22.50	0.38	0.29
S515	0.29	0.29	0.29	0.29	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.72	22.75	0.38	0.20
S516	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	2.67	25.50	0.43	0.32
S600	0.23	0.23	0.23	0.23	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.75	45.75	0.76	0.42
S601	0.27	0.27	0.27	0.27	0.26	0.26	0.03	0.03	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.58	35.25	0.59	0.35
S603	0.27	0.27	0.27	0.26	0.26	0.26	0.03	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.50	26.00	0.43	0.24
S602	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	47.25	0.79	0.48
S606	0.25	0.25	0.25	0.25	0.25	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.22	36.00	0.60	0.48
S605	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	44.50	0.74	0.50
S604	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	66.00	1.10	0.73
S609	0.24	0.24	0.24	0.24	0.23	0.23	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.96	42.00	0.70	0.66
S607	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.28	44.00	0.73	0.62
S608	0.27	0.27	0.27	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.40	27.50	0.46	0.30
S610	0.27	0.26	0.26	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.45	32.75	0.55	0.42
S612	0.28	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.41	37.00	0.62	0.51
S611	0.25	0.25	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.20	30.25	0.50	0.29
S613	0.26	0.26	0.26	0.25	0.25	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.29	55.50	0.93	0.51
S614	0.25	0.25	0.25	0.25	0.25	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.22	53.25	0.89	0.60
S617	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.94	29.75	0.50	0.27
S615	0.28	0.28	0.28	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.93	54.75	0.91	0.58
S616	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.90	33.25	0.55	0.44
S618	0.26	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.91	47.75	0.80	0.59
S619	0.28	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.53	43.25	0.72	0.33
S620	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.44	41.75	0.70	0.62
S621	0.24	0.24	0.24	0.24	0.24	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36	30.50	0.51	0.25
S622	0.24	0.24	0.24	0.24	0.24	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35	58.50	0.98	0.67
S700	0.25	0.25	0.25	0.25	0.25	0.25	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.58	23.25	0.39	0.29
S701	0.26	0.26	0.26	0.26	0.26	0.25	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.88	42.50	0.71	0.70
S702	0.26	0.26	0.26	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.03	21.00	0.35	0.33
S703	0.24	0.24	0.24	0.24	0.24	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	26.75	0.45	0.36
S704	0.25	0.25	0.25	0.25	0.25	0.24	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.68	21.75	0.36	0.24
S705	0.28	0.28	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.42	21.50	0.36	0.26

Table C-21

Time of concentration and duration of rainfall excess for future conditions, 100-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.36	29.25	0.49	0.42
S706	0.27	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.45	19.75	0.33	0.23
S707	0.28	0.28	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.89	19.75	0.33	0.27
S728	0.28	0.27	0.27	0.27	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.69	26.50	0.44	0.44
S708	0.29	0.29	0.28	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.33	19.75	0.33	0.19
S709	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03	2.91	22.25	0.37	0.26
S710	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.59	10.75	0.18	0.13
S711	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.05	0.05	0.05	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.99	10.25	0.17	0.09
S712	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.76	10.00	0.17	0.09
S713	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.71	10.00	0.17	0.11
S714	0.28	0.28	0.28	0.28	0.27	0.27	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.85	11.75	0.20	0.15
S715	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.73	24.25	0.40	0.31
S716	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.81	26.50	0.44	0.28
S717	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.89	16.75	0.28	0.14
S718	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.82	45.25	0.75	0.78
S719	0.30	0.30	0.29	0.29	0.29	0.29	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03	3.37	22.50	0.38	0.42
S720	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.92	21.25	0.35	0.29
S721	0.29	0.29	0.29	0.28	0.28	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	3.01	14.50	0.24	0.12
S722	0.29	0.29	0.29	0.29	0.29	0.28	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.66	27.25	0.45	0.31
S723	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.99	12.00	0.20	0.16
S724	0.30	0.30	0.29	0.29	0.29	0.29	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03	3.49	25.25	0.42	0.26
S725	0.29	0.29	0.29	0.29	0.29	0.29	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	3.18	33.00	0.55	0.43
S726	0.27	0.27	0.27	0.26	0.26	0.26	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.21	14.50	0.24	0.15
S727	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.03	3.30	27.00	0.45	0.43

Table C-22

Time of concentration and duration of rainfall excess for future conditions, 50-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.73	44.50	0.74	0.59
S101	0.22	0.22	0.22	0.21	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.46	35.50	0.59	0.38
S102	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.88	36.25	0.60	0.46
S103	0.23	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.54	48.25	0.80	0.62
S104	0.23	0.23	0.23	0.23	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.72	42.00	0.70	0.39
S105	0.23	0.23	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.72	47.00	0.78	0.66
S106	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39	34.75	0.58	0.44
S107	0.22	0.22	0.21	0.21	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	37.25	0.62	0.49
S200	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	40.75	0.68	0.37
S201	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	33.50	0.56	0.40
S202	0.22	0.22	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.90	23.25	0.39	0.31
S203	0.22	0.22	0.22	0.22	0.22	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.99	41.25	0.69	0.65
S204	0.22	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.82	48.75	0.81	0.52
S205	0.23	0.23	0.22	0.22	0.22	0.22	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.96	29.00	0.48	0.38
S206	0.23	0.23	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.86	53.50	0.89	0.69
S207	0.22	0.22	0.22	0.22	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.93	54.75	0.91	0.67
S208	0.23	0.23	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.86	68.50	1.14	0.76
S209	0.22	0.22	0.22	0.22	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.49	41.50	0.69	0.40
S210	0.22	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18	31.50	0.53	0.33
S211	0.22	0.22	0.22	0.22	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	34.50	0.58	0.39
S300	0.23	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.89	26.00	0.43	0.31
S301	0.23	0.23	0.22	0.22	0.22	0.22	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.13	24.50	0.41	0.24
S302	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.80	31.50	0.53	0.30
S303	0.21	0.21	0.21	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	39.75	0.66	0.40
S304	0.22	0.22	0.22	0.22	0.21	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28	35.25	0.59	0.45
S400	0.24	0.24	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.09	27.50	0.46	0.25
S401	0.23	0.22	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.45	27.00	0.45	0.25
S402	0.24	0.24	0.24	0.24	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.02	23.50	0.39	0.21
S403	0.26	0.26	0.26	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.40	22.00	0.37	0.25
S404	0.24	0.23	0.23	0.23	0.23	0.23	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.46	23.25	0.39	0.23
S500	0.23	0.22	0.22	0.22	0.22	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.05	44.25	0.74	0.52
S501	0.22	0.22	0.22	0.21	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.74	29.50	0.49	0.31
S502	0.22	0.22	0.21	0.21	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	29.75	0.50	0.30
S503	0.23	0.23	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.89	36.75	0.61	0.36
S504	0.23	0.23	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.93	30.75	0.51	0.48
S505	0.22	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.54	19.00	0.32	0.17
S506	0.24	0.24	0.24	0.23	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.88	20.00	0.33	0.25
S507	0.23	0.23	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.51	24.50	0.41	0.24

Table C-22

Time of concentration and duration of rainfall excess for future conditions, 50-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.23	0.23	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.71	19.25	0.32	0.22
S509	0.23	0.23	0.23	0.23	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.95	14.25	0.24	0.16
S510	0.26	0.26	0.26	0.26	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.51	19.75	0.33	0.29
S511	0.24	0.23	0.23	0.23	0.23	0.23	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.90	19.75	0.33	0.23
S512	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.68	23.00	0.38	0.30
S513	0.23	0.23	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	27.25	0.45	0.35
S514	0.26	0.26	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.01	0.01	0.01	0.01	0.01	2.24	23.50	0.39	0.31
S515	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.35	23.50	0.39	0.21
S516	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.35	26.75	0.45	0.34
S600	0.20	0.20	0.20	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.50	50.00	0.83	0.46
S601	0.24	0.24	0.24	0.24	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.26	37.75	0.63	0.38
S602	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	51.25	0.85	0.53
S603	0.24	0.24	0.24	0.24	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.19	94.50	1.58	1.00
S604	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	71.25	1.19	0.79
S605	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	48.00	0.80	0.54
S606	0.22	0.22	0.22	0.22	0.22	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.94	39.00	0.65	0.53
S607	0.23	0.23	0.23	0.23	0.23	0.22	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.00	47.50	0.79	0.68
S608	0.24	0.24	0.24	0.23	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.09	29.00	0.48	0.32
S609	0.21	0.21	0.21	0.20	0.20	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.70	45.75	0.76	0.73
S610	0.24	0.23	0.23	0.23	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.15	35.25	0.59	0.45
S611	0.22	0.22	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.92	32.50	0.54	0.32
S612	0.25	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.12	39.75	0.66	0.56
S613	0.23	0.23	0.22	0.22	0.22	0.22	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.01	59.50	0.99	0.55
S614	0.22	0.22	0.22	0.22	0.22	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.94	57.25	0.95	0.65
S615	0.25	0.25	0.25	0.24	0.24	0.24	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.59	58.50	0.98	0.62
S616	0.23	0.22	0.22	0.22	0.22	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.64	36.00	0.60	0.48
S617	0.22	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.69	32.00	0.53	0.30
S618	0.23	0.22	0.22	0.22	0.22	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.66	51.50	0.86	0.64
S619	0.25	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.21	46.50	0.78	0.36
S620	0.24	0.24	0.24	0.24	0.24	0.23	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.14	45.00	0.75	0.67
S621	0.21	0.21	0.21	0.21	0.21	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	33.25	0.55	0.27
S622	0.21	0.21	0.21	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15	63.75	1.06	0.73
S700	0.22	0.22	0.22	0.22	0.22	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34	24.50	0.41	0.31
S701	0.23	0.23	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	46.25	0.77	0.77
S702	0.23	0.23	0.23	0.23	0.23	0.22	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.75	22.00	0.37	0.34
S703	0.21	0.21	0.21	0.21	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	28.25	0.47	0.38
S704	0.22	0.22	0.22	0.22	0.21	0.21	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.45	22.75	0.38	0.25
S705	0.25	0.25	0.25	0.25	0.24	0.24	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.13	22.50	0.38	0.27

Table C-22

Time of concentration and duration of rainfall excess for future conditions, 50-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.98	30.75	0.51	0.44
S706	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.15	20.75	0.35	0.24
S707	0.25	0.25	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.55	20.50	0.34	0.28
S708	0.26	0.26	0.25	0.25	0.25	0.25	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.97	20.50	0.34	0.20
S709	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.50	23.25	0.39	0.27
S710	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.21	11.00	0.18	0.14
S711	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.59	10.75	0.18	0.09
S712	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.37	7.00	0.12	0.06
S713	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.32	10.00	0.17	0.11
S714	0.25	0.25	0.25	0.25	0.25	0.24	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.54	12.25	0.20	0.16
S715	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.33	25.25	0.42	0.33
S716	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.42	27.50	0.46	0.29
S717	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.49	17.50	0.29	0.15
S718	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.43	48.00	0.80	0.83
S719	0.27	0.27	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	2.94	23.25	0.39	0.44
S720	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.52	22.25	0.37	0.30
S721	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.65	15.00	0.25	0.13
S722	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.29	28.25	0.47	0.32
S723	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.59	12.50	0.21	0.17
S724	0.27	0.27	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	3.06	26.25	0.44	0.27
S725	0.26	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.78	35.00	0.58	0.46
S726	0.24	0.24	0.24	0.23	0.23	0.23	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.92	15.00	0.25	0.15
S727	0.27	0.26	0.26	0.26	0.26	0.26	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.90	28.25	0.47	0.45
S728	0.25	0.24	0.24	0.24	0.24	0.24	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.36	27.50	0.46	0.46

Table C-23

Time of concentration and duration of rainfall excess for future conditions, 25-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.19	0.19	0.19	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.47	48.75	0.81	0.65
S101	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.22	39.00	0.65	0.42
S102	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.60	39.75	0.66	0.51
S103	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.29	53.00	0.88	0.68
S104	0.20	0.20	0.19	0.19	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.46	46.00	0.77	0.43
S105	0.20	0.20	0.20	0.19	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.46	51.25	0.85	0.72
S106	0.19	0.19	0.19	0.19	0.19	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17	38.25	0.64	0.49
S107	0.19	0.18	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96	41.25	0.69	0.54
S200	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	45.00	0.75	0.41
S201	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	37.00	0.62	0.45
S202	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	24.75	0.41	0.33
S203	0.19	0.19	0.19	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.70	45.00	0.75	0.72
S204	0.18	0.18	0.18	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.53	53.75	0.90	0.58
S205	0.20	0.20	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.67	31.00	0.52	0.40
S206	0.20	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.58	58.50	0.98	0.77
S207	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.64	60.00	1.00	0.74
S208	0.20	0.20	0.20	0.20	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.59	74.75	1.25	0.84
S209	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.25	45.75	0.76	0.45
S210	0.18	0.18	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	35.00	0.58	0.38
S211	0.19	0.19	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	38.25	0.64	0.43
S300	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	27.75	0.46	0.33
S301	0.20	0.20	0.19	0.19	0.19	0.18	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.83	26.00	0.43	0.26
S302	0.19	0.19	0.19	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.52	34.50	0.58	0.33
S303	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	44.25	0.74	0.45
S304	0.19	0.19	0.18	0.18	0.18	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	39.00	0.65	0.50
S400	0.21	0.21	0.21	0.21	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.79	29.00	0.48	0.27
S401	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.22	28.75	0.48	0.27
S402	0.21	0.21	0.20	0.20	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.72	25.00	0.42	0.23
S403	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.05	23.00	0.38	0.26
S404	0.20	0.20	0.20	0.20	0.20	0.19	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	24.50	0.41	0.24
S500	0.19	0.19	0.19	0.19	0.19	0.18	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.75	48.50	0.81	0.57
S501	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.47	32.00	0.53	0.33
S502	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.35	32.50	0.54	0.33
S503	0.20	0.20	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.61	40.25	0.67	0.40
S504	0.20	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.65	33.50	0.56	0.53
S505	0.18	0.18	0.18	0.17	0.17	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.29	20.25	0.34	0.18
S506	0.21	0.21	0.20	0.20	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.59	21.25	0.35	0.27
S507	0.20	0.20	0.20	0.20	0.20	0.19	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25	26.00	0.43	0.25

Table C-23

Time of concentration and duration of rainfall excess for future conditions, 25-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.20	0.20	0.20	0.20	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.45	20.25	0.34	0.24
S509	0.20	0.20	0.20	0.19	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.67	15.00	0.25	0.17
S510	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.16	20.50	0.34	0.31
S511	0.21	0.20	0.20	0.20	0.20	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.62	20.75	0.35	0.25
S512	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.31	24.00	0.40	0.32
S513	0.20	0.20	0.20	0.19	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.38	28.75	0.48	0.37
S514	0.23	0.23	0.22	0.22	0.22	0.22	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.90	24.50	0.41	0.32
S515	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.99	24.75	0.41	0.22
S516	0.21	0.21	0.21	0.21	0.21	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.03	28.25	0.47	0.36
S600	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	55.50	0.93	0.52
S601	0.21	0.21	0.20	0.20	0.20	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.95	41.00	0.68	0.42
S602	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	56.00	0.93	0.58
S603	0.21	0.21	0.20	0.20	0.20	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.89	28.75	0.48	0.27
S604	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	78.00	1.30	0.88
S605	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	52.50	0.88	0.60
S606	0.19	0.19	0.19	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.65	42.75	0.71	0.59
S607	0.20	0.20	0.20	0.19	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.71	51.75	0.86	0.75
S608	0.21	0.21	0.20	0.20	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.80	30.75	0.51	0.34
S609	0.18	0.18	0.17	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.42	50.50	0.84	0.81
S610	0.21	0.20	0.20	0.20	0.20	0.20	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.85	38.50	0.64	0.50
S611	0.19	0.19	0.18	0.18	0.18	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	36.00	0.60	0.35
S612	0.22	0.21	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.81	93.75	1.56	1.44
S613	0.20	0.20	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.71	65.00	1.08	0.61
S614	0.19	0.19	0.19	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.65	62.75	1.05	0.72
S615	0.22	0.22	0.22	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.24	63.25	1.05	0.68
S616	0.20	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.39	39.50	0.66	0.53
S617	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.43	35.25	0.59	0.33
S618	0.19	0.19	0.19	0.19	0.19	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.40	56.50	0.94	0.71
S619	0.21	0.21	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.89	50.50	0.84	0.40
S620	0.21	0.21	0.21	0.21	0.21	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.82	48.75	0.81	0.74
S621	0.18	0.18	0.18	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	37.00	0.62	0.31
S622	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	71.00	1.18	0.83
S700	0.19	0.19	0.19	0.19	0.18	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12	26.00	0.43	0.33
S701	0.20	0.20	0.19	0.19	0.19	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.36	50.75	0.85	0.85
S702	0.20	0.20	0.20	0.20	0.20	0.19	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.50	23.25	0.39	0.37
S703	0.18	0.18	0.17	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	30.25	0.50	0.41
S704	0.19	0.19	0.18	0.18	0.18	0.18	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.21	24.25	0.40	0.27
S705	0.22	0.22	0.22	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.82	23.50	0.39	0.28

Table C-23

Time of concentration and duration of rainfall excess for future conditions, 25-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.61	32.75	0.55	0.47
S706	0.21	0.21	0.21	0.21	0.21	0.21	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.84	21.75	0.36	0.26
S707	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.21	21.50	0.36	0.29
S708	0.23	0.23	0.23	0.23	0.22	0.22	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.62	21.50	0.36	0.21
S709	0.24	0.24	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.10	24.25	0.40	0.29
S710	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	1.84	11.50	0.19	0.14
S711	0.24	0.24	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.19	11.25	0.19	0.10
S712	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.98	7.25	0.12	0.07
S713	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.93	10.25	0.17	0.11
S714	0.22	0.22	0.22	0.22	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.25	13.00	0.22	0.17
S715	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.94	26.50	0.44	0.34
S716	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.03	28.75	0.48	0.30
S717	0.24	0.24	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.09	18.25	0.30	0.16
S718	0.24	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.03	51.25	0.85	0.90
S719	0.24	0.24	0.24	0.24	0.24	0.24	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.50	24.25	0.40	0.46
S720	0.24	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.12	23.25	0.39	0.32
S721	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.29	15.75	0.26	0.14
S722	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.92	29.75	0.50	0.34
S723	0.24	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.19	13.00	0.22	0.17
S724	0.24	0.24	0.24	0.24	0.24	0.24	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	2.64	27.50	0.46	0.28
S725	0.23	0.23	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.39	37.25	0.62	0.49
S726	0.21	0.21	0.20	0.20	0.20	0.20	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.63	16.00	0.27	0.16
S727	0.24	0.24	0.23	0.23	0.23	0.23	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.49	29.50	0.49	0.47
S728	0.22	0.21	0.21	0.21	0.21	0.21	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	2.04	29.00	0.48	0.49

Table C-24

Time of concentration and duration of rainfall excess for future conditions, 10-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.12	56.75	0.95	0.77
S101	0.15	0.15	0.14	0.14	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	46.25	0.77	0.51
S102	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	46.00	0.77	0.60
S103	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.97	62.00	1.03	0.81
S104	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.12	53.00	0.88	0.51
S105	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.13	59.25	0.99	0.85
S106	0.15	0.15	0.15	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	44.75	0.75	0.58
S107	0.14	0.14	0.14	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	49.00	0.82	0.66
S200	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	52.25	0.87	0.49
S201	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	43.25	0.72	0.54
S202	0.15	0.15	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	27.50	0.46	0.38
S203	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.31	52.00	0.87	0.84
S204	0.14	0.14	0.14	0.13	0.13	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.16	63.00	1.05	0.69
S205	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.30	35.75	0.60	0.47
S206	0.16	0.16	0.15	0.15	0.14	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.22	67.50	1.13	0.90
S207	0.15	0.15	0.14	0.14	0.14	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.26	69.75	1.16	0.88
S208	0.16	0.16	0.16	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	86.00	1.43	0.98
S209	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.93	53.50	0.89	0.53
S210	0.14	0.14	0.14	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	41.50	0.69	0.45
S211	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	45.25	0.75	0.52
S300	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	31.00	0.52	0.37
S301	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.42	28.50	0.48	0.28
S302	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.16	40.25	0.67	0.40
S303	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	52.75	0.88	0.55
S304	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	46.00	0.77	0.60
S400	0.17	0.17	0.17	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.42	94.25	1.57	0.98
S401	0.15	0.15	0.15	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	32.75	0.55	0.31
S402	0.17	0.17	0.16	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.36	27.25	0.45	0.25
S403	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.62	24.75	0.41	0.29
S404	0.16	0.16	0.16	0.16	0.15	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	27.00	0.45	0.27
S500	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.35	56.00	0.93	0.67
S501	0.15	0.15	0.14	0.14	0.14	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.12	37.50	0.63	0.40
S502	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.01	38.50	0.64	0.40
S503	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	46.50	0.78	0.47
S504	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.28	38.75	0.65	0.62
S505	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.95	22.50	0.38	0.21
S506	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.25	23.00	0.38	0.29
S507	0.16	0.16	0.16	0.15	0.15	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95	28.50	0.48	0.28

Table C-24

Time of concentration and duration of rainfall excess for future conditions, 10-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.11	22.25	0.37	0.26
S509	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.30	16.25	0.27	0.18
S510	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.73	22.00	0.37	0.33
S511	0.16	0.16	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.26	22.75	0.38	0.27
S512	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.84	25.75	0.43	0.34
S513	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.05	32.50	0.54	0.42
S514	0.19	0.19	0.19	0.18	0.18	0.18	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.50	26.50	0.44	0.35
S515	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.55	26.50	0.44	0.24
S516	0.17	0.17	0.17	0.17	0.17	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.62	30.75	0.51	0.39
S600	0.13	0.13	0.12	0.12	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.90	66.75	1.11	0.64
S601	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.54	46.50	0.78	0.48
S602	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	65.25	1.09	0.69
S603	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.49	32.00	0.53	0.30
S604	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	90.00	1.50	1.03
S605	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	61.00	1.02	0.71
S606	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.27	49.50	0.83	0.69
S607	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.33	59.25	0.99	0.87
S608	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.41	35.25	0.59	0.39
S609	0.14	0.14	0.13	0.13	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.06	59.50	0.99	0.97
S610	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.46	44.00	0.73	0.58
S611	0.15	0.15	0.14	0.14	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.24	42.00	0.70	0.42
S612	0.18	0.17	0.17	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.42	49.00	0.82	0.70
S613	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.33	74.75	1.25	0.71
S614	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.27	72.75	1.21	0.85
S615	0.18	0.18	0.18	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.80	71.00	1.18	0.77
S616	0.15	0.15	0.15	0.15	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.06	46.00	0.77	0.63
S617	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.09	41.00	0.68	0.39
S618	0.15	0.15	0.15	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.06	65.75	1.10	0.84
S619	0.17	0.17	0.17	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.50	57.25	0.95	0.46
S620	0.17	0.17	0.17	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.44	55.50	0.93	0.85
S621	0.14	0.14	0.13	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	44.25	0.74	0.38
S622	0.14	0.14	0.13	0.13	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	85.00	1.42	1.01
S700	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	28.75	0.48	0.37
S701	0.16	0.16	0.15	0.15	0.15	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.03	58.75	0.98	1.00
S702	0.16	0.16	0.16	0.15	0.15	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.16	25.25	0.42	0.40
S703	0.14	0.14	0.13	0.13	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	36.25	0.60	0.50
S704	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	27.00	0.45	0.31
S705	0.18	0.18	0.18	0.18	0.17	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.43	25.50	0.43	0.31

Table C-24

Time of concentration and duration of rainfall excess for future conditions, 10-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.17	36.75	0.61	0.54
S706	0.17	0.17	0.17	0.17	0.17	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.46	23.75	0.40	0.28
S707	0.18	0.18	0.18	0.18	0.18	0.18	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.77	23.25	0.39	0.32
S708	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	1.20	23.25	0.39	0.23
S709	0.20	0.20	0.20	0.19	0.19	0.19	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.58	26.00	0.43	0.31
S710	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.39	12.50	0.21	0.16
S711	0.20	0.20	0.20	0.20	0.19	0.19	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.68	12.00	0.20	0.11
S712	0.20	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.51	7.75	0.13	0.07
S713	0.20	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.45	11.00	0.18	0.12
S714	0.18	0.18	0.17	0.17	0.17	0.17	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.92	14.00	0.23	0.19
S715	0.20	0.20	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.43	28.50	0.48	0.37
S716	0.20	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.56	31.25	0.52	0.33
S717	0.20	0.20	0.19	0.19	0.19	0.19	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.57	19.50	0.33	0.17
S718	0.20	0.20	0.19	0.19	0.19	0.19	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.52	56.50	0.94	1.00
S719	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	1.94	26.00	0.43	0.50
S720	0.20	0.20	0.19	0.19	0.19	0.19	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.62	24.75	0.41	0.34
S721	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.84	17.00	0.28	0.15
S722	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.48	32.50	0.54	0.38
S723	0.20	0.20	0.19	0.19	0.19	0.19	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.69	14.00	0.23	0.19
S724	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	2.10	29.25	0.49	0.30
S725	0.20	0.20	0.19	0.19	0.19	0.19	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	1.91	41.25	0.69	0.55
S726	0.17	0.17	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.28	17.25	0.29	0.18
S727	0.20	0.20	0.20	0.20	0.20	0.19	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	2.00	32.00	0.53	0.52
S728	0.18	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.63	32.25	0.54	0.55

Table C-25

Time of concentration and duration of rainfall excess for future conditions, 5-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.12	0.12	0.12	0.11	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.87	65.25	1.09	0.90
S101	0.12	0.12	0.11	0.10	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	54.25	0.90	0.61
S102	0.12	0.12	0.12	0.11	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	52.75	0.88	0.70
S103	0.12	0.12	0.12	0.11	0.11	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	91.75	1.53	1.26
S104	0.13	0.13	0.12	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.88	60.50	1.01	0.58
S105	0.13	0.13	0.12	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.88	67.50	1.13	0.98
S106	0.12	0.12	0.11	0.11	0.11	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	52.25	0.87	0.69
S107	0.11	0.11	0.11	0.10	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	92.75	1.55	1.34
S200	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	60.50	1.01	0.58
S201	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	50.25	0.84	0.63
S202	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	30.75	0.51	0.42
S203	0.12	0.12	0.12	0.11	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.03	59.50	0.99	0.98
S204	0.12	0.11	0.11	0.10	0.09	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.89	73.00	1.22	0.81
S205	0.13	0.13	0.12	0.12	0.12	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.03	40.75	0.68	0.55
S206	0.13	0.13	0.12	0.12	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.95	77.25	1.29	1.04
S207	0.12	0.12	0.11	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.98	80.00	1.33	1.02
S208	0.13	0.13	0.13	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	90.00	1.50	1.03
S209	0.12	0.12	0.11	0.11	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	62.50	1.04	0.63
S210	0.11	0.11	0.11	0.10	0.10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	49.00	0.82	0.54
S211	0.12	0.12	0.11	0.11	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	53.00	0.88	0.62
S300	0.13	0.12	0.12	0.11	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	35.75	0.60	0.44
S301	0.13	0.13	0.12	0.12	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.13	31.75	0.53	0.32
S302	0.12	0.12	0.12	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.90	46.50	0.78	0.46
S303	0.11	0.11	0.10	0.09	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	62.75	1.05	0.67
S304	0.12	0.12	0.11	0.11	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	54.00	0.90	0.72
S400	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.14	36.25	0.60	0.34
S401	0.12	0.12	0.12	0.11	0.11	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	38.00	0.63	0.36
S402	0.14	0.14	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.09	29.50	0.49	0.27
S403	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.33	26.25	0.44	0.31
S404	0.13	0.13	0.13	0.12	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	29.50	0.49	0.29
S500	0.13	0.13	0.12	0.11	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.07	63.75	1.06	0.77
S501	0.12	0.12	0.11	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.86	43.50	0.73	0.47
S502	0.12	0.12	0.11	0.10	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.77	45.00	0.75	0.47
S503	0.13	0.13	0.12	0.12	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.98	53.00	0.88	0.54
S504	0.13	0.13	0.12	0.12	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.01	44.25	0.74	0.72
S505	0.11	0.11	0.11	0.10	0.09	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.71	24.75	0.41	0.23
S506	0.14	0.14	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.99	25.00	0.42	0.32
S507	0.13	0.13	0.12	0.12	0.12	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	32.00	0.53	0.32

Table C-25

Time of concentration and duration of rainfall excess for future conditions, 5-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.13	0.13	0.13	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.87	24.25	0.40	0.29
S509	0.13	0.13	0.13	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.03	17.75	0.30	0.20
S510	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.43	23.50	0.39	0.36
S511	0.14	0.14	0.13	0.13	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.00	24.50	0.41	0.29
S512	0.17	0.17	0.17	0.17	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.53	27.25	0.45	0.36
S513	0.13	0.13	0.12	0.12	0.12	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	37.50	0.63	0.49
S514	0.16	0.16	0.16	0.16	0.16	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.23	28.25	0.47	0.38
S515	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.26	28.25	0.47	0.26
S516	0.14	0.14	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.33	34.50	0.58	0.44
S600	0.10	0.10	0.09	0.08	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.65	79.50	1.33	0.77
S601	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.25	52.25	0.87	0.55
S602	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	75.00	1.25	0.80
S603	0.14	0.14	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.20	36.00	0.60	0.34
S604	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	90.00	1.50	1.03
S605	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	70.50	1.18	0.83
S606	0.12	0.12	0.12	0.11	0.10	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.99	57.00	0.95	0.81
S607	0.13	0.13	0.13	0.12	0.12	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.05	67.50	1.13	1.00
S608	0.14	0.14	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.13	40.00	0.67	0.45
S609	0.11	0.11	0.10	0.10	0.09	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.80	69.75	1.16	1.16
S610	0.14	0.14	0.13	0.13	0.13	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.17	49.50	0.83	0.66
S611	0.12	0.12	0.11	0.11	0.10	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.97	48.50	0.81	0.49
S612	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.15	54.75	0.91	0.79
S613	0.13	0.13	0.12	0.12	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.05	84.75	1.41	0.82
S614	0.12	0.12	0.12	0.11	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.00	90.75	1.51	1.09
S615	0.15	0.15	0.15	0.14	0.14	0.14	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.48	78.75	1.31	0.87
S616	0.13	0.12	0.12	0.11	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.81	53.00	0.88	0.74
S617	0.12	0.12	0.12	0.11	0.11	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.84	93.50	1.56	0.97
S618	0.12	0.12	0.12	0.11	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	75.75	1.26	0.98
S619	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.22	64.00	1.07	0.52
S620	0.14	0.14	0.14	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.17	62.25	1.04	0.96
S621	0.11	0.11	0.10	0.10	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	52.75	0.88	0.46
S622	0.11	0.11	0.10	0.09	0.09	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	90.00	1.50	1.08
S700	0.12	0.12	0.11	0.11	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61	32.75	0.55	0.42
S701	0.13	0.13	0.12	0.12	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.80	67.50	1.13	1.17
S702	0.13	0.13	0.13	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.91	27.50	0.46	0.44
S703	0.11	0.11	0.10	0.10	0.09	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	43.25	0.72	0.61
S704	0.12	0.12	0.11	0.11	0.10	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	30.00	0.50	0.35
S705	0.15	0.15	0.15	0.14	0.14	0.14	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.17	27.25	0.45	0.33

Table C-25

Time of concentration and duration of rainfall excess for future conditions, 5-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.89	40.25	0.67	0.59
S706	0.14	0.14	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.18	25.50	0.43	0.31
S707	0.16	0.16	0.15	0.15	0.15	0.15	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.47	24.75	0.41	0.34
S708	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.94	24.75	0.41	0.25
S709	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.23	27.50	0.46	0.33
S710	0.17	0.16	0.16	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	1.09	13.25	0.22	0.17
S711	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.33	12.75	0.21	0.11
S712	0.17	0.17	0.17	0.17	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.20	8.25	0.14	0.08
S713	0.17	0.17	0.17	0.17	0.17	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.14	11.75	0.20	0.13
S714	0.15	0.15	0.14	0.14	0.14	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69	15.00	0.25	0.20
S715	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.10	30.00	0.50	0.39
S716	0.17	0.17	0.17	0.17	0.17	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.24	34.00	0.57	0.37
S717	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.23	20.75	0.35	0.18
S718	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.17	61.75	1.03	1.10
S719	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.55	27.50	0.46	0.53
S720	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.28	26.25	0.44	0.36
S721	0.17	0.16	0.16	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.53	18.00	0.30	0.16
S722	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	1.19	35.75	0.60	0.42
S723	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.36	14.75	0.25	0.20
S724	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.72	31.25	0.52	0.32
S725	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.58	45.00	0.75	0.60
S726	0.14	0.14	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.02	18.75	0.31	0.20
S727	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.65	35.00	0.58	0.57
S728	0.15	0.15	0.14	0.14	0.14	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.34	36.00	0.60	0.62

Table C-26

Time of concentration and duration of rainfall excess for future conditions, 2-year, 24-hour

Subbasin ID	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S100	0.08	0.08	0.07	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.49	87.25	1.45	1.24
S101	0.07	0.07	0.06	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	76.75	1.28	0.90
S102	0.08	0.08	0.07	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	69.00	1.15	0.94
S103	0.08	0.08	0.07	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	90.00	1.50	1.23
S104	0.09	0.08	0.08	0.07	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	81.25	1.35	0.81
S105	0.09	0.08	0.08	0.07	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	90.00	1.50	1.35
S106	0.08	0.07	0.07	0.06	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	74.25	1.24	1.02
S107	0.07	0.07	0.06	0.05	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	87.75	1.46	1.26
S200	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	76.50	1.28	0.75
S201	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	63.50	1.06	0.82
S202	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	39.25	0.65	0.56
S203	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.64	76.00	1.27	1.28
S204	0.07	0.06	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.55	90.00	1.50	1.02
S205	0.09	0.08	0.08	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.63	53.25	0.89	0.74
S206	0.08	0.08	0.07	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.56	90.00	1.50	1.24
S207	0.08	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.61	90.00	1.50	1.17
S208	0.09	0.09	0.08	0.07	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.57	90.00	1.50	1.03
S209	0.07	0.07	0.06	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	87.50	1.46	0.92
S210	0.07	0.07	0.06	0.05	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	73.75	1.23	0.86
S211	0.07	0.07	0.06	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	77.50	1.29	0.95
S300	0.08	0.08	0.07	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	47.00	0.78	0.59
S301	0.08	0.08	0.08	0.08	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.73	40.50	0.68	0.42
S302	0.08	0.07	0.07	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.53	61.50	1.03	0.63
S303	0.06	0.06	0.05	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	90.00	1.50	1.00
S304	0.07	0.07	0.06	0.05	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	79.00	1.32	1.10
S400	0.10	0.10	0.09	0.09	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.72	46.75	0.78	0.45
S401	0.08	0.08	0.07	0.06	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	53.75	0.90	0.53
S402	0.10	0.10	0.09	0.08	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.67	37.75	0.63	0.36
S403	0.12	0.12	0.12	0.11	0.11	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.90	29.75	0.50	0.35
S404	0.09	0.09	0.08	0.07	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	40.25	0.67	0.41
S500	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.68	91.00	1.52	1.15
S501	0.08	0.07	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.49	58.00	0.97	0.65
S502	0.07	0.07	0.06	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	61.25	1.02	0.66
S503	0.08	0.08	0.07	0.07	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.58	92.00	1.53	0.99
S504	0.08	0.08	0.08	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.61	57.75	0.96	0.96
S505	0.07	0.06	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	32.00	0.53	0.31
S506	0.09	0.09	0.09	0.08	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	30.00	0.50	0.39
S507	0.09	0.08	0.08	0.07	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	44.25	0.74	0.45

Table C-26

Time of concentration and duration of rainfall excess for future conditions, 2-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S508	0.09	0.09	0.08	0.07	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	29.75	0.50	0.36
S509	0.09	0.09	0.08	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.62	21.00	0.35	0.24
S510	0.12	0.12	0.12	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.98	26.50	0.44	0.41
S511	0.09	0.09	0.08	0.08	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	29.75	0.50	0.37
S512	0.13	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.06	30.50	0.51	0.41
S513	0.09	0.08	0.08	0.07	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	51.25	0.85	0.70
S514	0.12	0.12	0.11	0.11	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	33.25	0.55	0.45
S515	0.12	0.12	0.12	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.84	32.75	0.55	0.31
S516	0.10	0.10	0.10	0.09	0.09	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.87	43.25	0.72	0.57
S600	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	90.00	1.50	0.89
S601	0.10	0.10	0.09	0.08	0.08	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.81	65.75	1.10	0.71
S602	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	90.00	1.50	0.98
S603	0.10	0.10	0.09	0.08	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.76	46.25	0.77	0.45
S604	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	90.00	1.50	1.03
S605	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	89.50	1.49	1.08
S606	0.08	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.61	73.25	1.22	1.06
S607	0.09	0.09	0.08	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.65	87.25	1.45	1.33
S608	0.10	0.09	0.09	0.08	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.71	51.50	0.86	0.60
S609	0.06	0.06	0.06	0.06	0.06	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.48	89.75	1.50	1.53
S610	0.09	0.09	0.09	0.08	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.74	63.00	1.05	0.86
S611	0.07	0.07	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.60	61.75	1.03	0.64
S612	0.10	0.10	0.10	0.09	0.09	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.73	69.75	1.16	1.04
S613	0.09	0.08	0.08	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.65	90.00	1.50	0.87
S614	0.08	0.08	0.07	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.61	90.00	1.50	1.08
S615	0.11	0.11	0.10	0.10	0.09	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.00	90.00	1.50	1.00
S616	0.08	0.08	0.07	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	72.25	1.20	1.05
S617	0.08	0.08	0.07	0.06	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	64.25	1.07	0.64
S618	0.08	0.08	0.07	0.06	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	90.00	1.50	1.18
S619	0.10	0.10	0.10	0.09	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.78	81.00	1.35	0.67
S620	0.10	0.10	0.09	0.09	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.74	79.25	1.32	1.26
S621	0.06	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	80.50	1.34	0.73
S622	0.06	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	90.00	1.50	1.08
S700	0.08	0.07	0.07	0.06	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	47.25	0.79	0.64
S701	0.09	0.08	0.08	0.07	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	90.00	1.50	1.60
S702	0.09	0.09	0.08	0.07	0.07	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	35.50	0.59	0.59
S703	0.06	0.06	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	67.25	1.12	1.00
S704	0.07	0.07	0.06	0.05	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	42.50	0.71	0.51
S705	0.11	0.11	0.10	0.10	0.09	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.76	32.50	0.54	0.41

Table C-26

Time of concentration and duration of rainfall excess for future conditions, 2-year, 24-hour

Subbasin	Excess Rainfall Values By Decreasing Rank																		Total Excess	Tc	Tc	R
ID	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	inches	min.	hours	hours
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
S705AF	0.12	0.12	0.11	0.11	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	50.50	0.84	0.76
S706	0.10	0.10	0.10	0.09	0.08	0.07	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.76	30.25	0.50	0.37
S707	0.11	0.11	0.11	0.11	0.11	0.10	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.01	28.25	0.47	0.40
S708	0.12	0.12	0.11	0.11	0.11	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	28.25	0.47	0.28
S709	0.13	0.13	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.75	31.00	0.52	0.38
S710	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.70	14.75	0.25	0.19
S711	0.13	0.13	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.86	14.25	0.24	0.13
S712	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.78	9.25	0.15	0.09
S713	0.13	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.72	13.25	0.22	0.15
S714	0.10	0.10	0.10	0.09	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	17.50	0.29	0.24
S715	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.65	36.00	0.60	0.48
S716	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	40.75	0.68	0.45
S717	0.13	0.13	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.75	23.00	0.38	0.20
S718	0.13	0.13	0.13	0.13	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.71	75.25	1.25	1.37
S719	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.99	30.50	0.51	0.60
S720	0.13	0.13	0.13	0.13	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.82	29.25	0.49	0.41
S721	0.12	0.12	0.12	0.12	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.07	20.25	0.34	0.18
S722	0.12	0.12	0.12	0.12	0.12	0.11	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	43.50	0.73	0.52
S723	0.13	0.13	0.13	0.13	0.13	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.90	16.50	0.28	0.23
S724	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	1.17	36.25	0.60	0.38
S725	0.13	0.13	0.13	0.13	0.12	0.12	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.11	53.25	0.89	0.73
S726	0.09	0.09	0.09	0.08	0.07	0.06	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.61	22.00	0.37	0.23
S727	0.13	0.13	0.13	0.13	0.13	0.13	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.16	41.25	0.69	0.69
S728	0.11	0.10	0.10	0.10	0.09	0.08	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.88	45.00	0.75	0.80

APPENDIX D: REACH ROUTE PARAMETERS

Stantec

Project: N. Peoria ADMP Project Number: 82000146

Notes: Hydrologic Routing Sections Scale:

Page 1 of Page(s)

Computed By: MCG Date: 3 29 00 Checked By: Date:

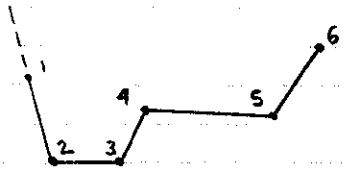
Ground elevations are estimated using a hand level and a 25' Philadelphia rod looking downstream from left to right.

Unnamed Wash 1

Routing reach 1 104 → 105

$\bar{x} = 5.4'$

PT#	B.S.	F.S.	Ground	Dist.
1		1.8'	103.6	0
2		8.6'	96.8	14.7'
3		8.8'	96.6	21.8'
4		5.4'	100.0	28.3'
5		6.5'	98.9	42.3'
6		1.5'	103.9	17.1'



Reach length = 2880.09 + 4080.73 = 6960.8
Channel slope = (1440-1360)/6960.8 = 0.0115
NSTEPS =

Eight point cross section w/ elevations adjusted to min = 100.0

Sta:	1000.0[2]	1002.3[2]	1004.6	1019.3	1041.1	1069.4	1111.7	1128.8
Elev:	108.0[2]	107.5	107.0	100.2	100.0	103.4	102.3	107.3

Manning's n-values
LOB =
ch =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Extrapolated using slope between survey points (1) + (2)

Stantec

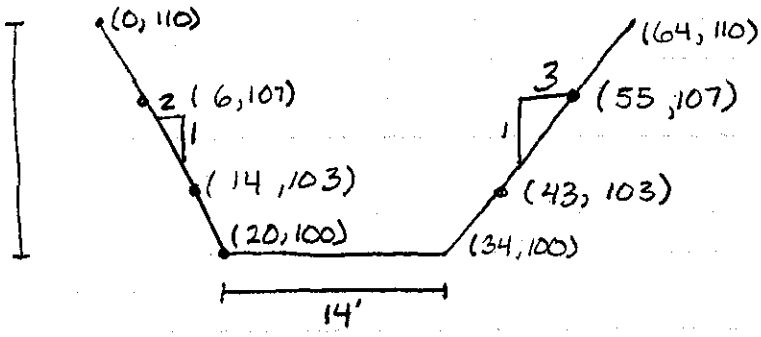
Project: North Peoria Project Number: 82000146

Notes: Scale:

Page ___ of ___ Page(s)

Computed By: SRJ Date: 5 26 00 Checked By: Date:

KK 101 102
KM
RS
RC .045 .04 .045 7254 .0138
RX 100 106 114 120 134 143 155 164
RY 110 107 103 100 100 103 107 110



Stantec

Project: Project Number:

Notes: Scale:

Page 2 of Page(s)

Computed By: Date: Checked By: Date:

Routing Reach 2

- Assume a trapezoidal section w/ sides slopes of 0.5:1 and a bottom width of 20'

Reach length = } See Routing Reach 1
channel slope =
NSTEPS =

Eight point cross section

Sta:	1000.0	1001.7	1003.4	1005.0	1025.0	1026.7	1028.4	1030.0
Elev:	110.0	106.7	103.3	100.0	100.0	103.3	106.7	110.0

Manning's n-values
LOB =
Ch =
ROB =

Stantec

Project: Project Number:

Notes: Scale:

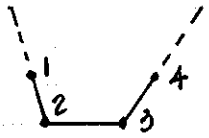
Page 3 of Page(s)

Computed By: Date: Checked By: Date:

Routing reach 3

T = 5.4 103 → 104

PT#	B.S.	F.S.	Ground	Dist.
1		0.7'	104.7	0
2		6.1'	99.3	8'
3		5.6'	99.8	22'
4		1.7'	103.7	14



Reach length = 8608
Channel slope = (1580 - 1440)/8608 = .0163
NSTEPS =

Eight point cross section w/elevations adjusted to min = 10

Sta:	1000.0[2]	1001.5[2]	1003.0	1011.0	1033.0	1047.0	1050.6[3]	1054.2[3]
Elev:	107.4[2]	106.4[2]	105.4	100.0	100.5	104.4	105.4[3]	106.4[3]

Manning's n-values
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Extrapolated using slope between survey points (1) & (2)
3. Extrapolated using slope between survey points (3) & (4)

Stantec

Project: Project Number:

Notes: Scale:

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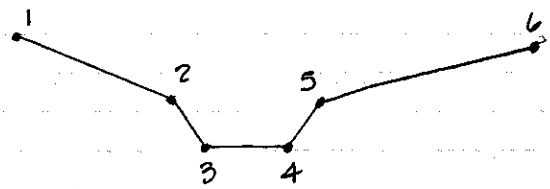
Computed By: Date: Checked By: Date:

Routing Reach 4

T = 5.4' 102→103

PT#	B.S.	F.S.	Ground	Dist.
1		1.2'	104.2	0
2		5.4'	100.0	57.9'
3		6.9'	98.5	14.1'
4		7.2'	98.2	17.6'
5		5.0'	100.4	9.8'
6		2.8	102.6	20.9'



Reach length = 1884.22 + 6183.45 = 8067.67
Channel Slope = (1680-1580)/8067.67 = 0.0124
NSTEPS =

Eight point cross section w/elevations adjusted to min = 100.0

Sta:	1000.0	1029.0[2]	1057.9	1072.0	1089.6	1099.4	1109.9[3]	1120.3
Elev:	106.0	103.9[2]	101.8	100.3	100.0	102.2	103.3[3]	104.4

Manning's n-values
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Interpolated between survey points (1) + (2)
3. Interpolated between survey points (5) + (6)

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

Routing Reach 5

$\pi = 5.4'$ 100 → 102

PT#	B.S.	F.S.	Ground'	Dist.
1		2.6'	102.8	0
2		5.1'	100.3	12.7'
3		5.1'	100.3	24.8'
4		7.3'	98.1	10.2'
5		7.4'	98.0	12.3'
6		4.7'	100.7	12.4'
7		3.9'	101.5	15.4'
8		0.7'	104.7	11.0'

Reach length = 2321.34 + 4213.62 = 6534.96
Channel slope = (1770 − 1680)/6534.96 = 0.0138
JSTEPS =

Eight point cross section w/ elevations adjusted to min. = 100.0

Sta:	1000.0	1012.7	1037.5	1047.7	1060.0	1072.4	1087.8	1098.8
Elev:	104.8	102.3	102.3	100.1	100.0	102.7	103.5	106.7

Manning's n-values
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

Unnamed Wash 2

Routing Reach 1 207 → 105

- Assume a trapezoidal section w/ sides slopes of 1:1 and 1.5:1 and a bottom width of 29.5'

Reach length = 7176.26
Channel Slope = (1480 - 1360)/7176.26 = 0.0167
NSTEPS =

Eight point cross section

Sta:	1000.0	1003.0	1006.0	1009.0	1038.5	1041.5	1047.5	1053.5
Elev:	109.0	106.0	103.0	100.0	100.0	102.0	106.0	110.0

Stantec

Project: Project Number:

Notes: Scale:

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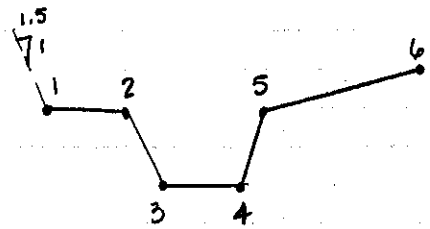
Computed By: Date: Checked By: Date:

Routing Reach 2

$T = 5.5'$

PT#	B.S.	F.S.	Ground'	Dist.
1		3.8'	101.7	0
2		5.3'	100.2	41.7'
3		11.7'	93.8	21.2'
4		11.6'	93.9	14.0'
5		5.3'	100.2	14.6'
6		1.4'	104.1	27.3'



Reach length =
Channel Slope = } See Routing Reach 1
NSTEPS =

Eight point cross section w/ elevations adjusted to a min = [illegible]

Sta:	1000.0[2]	1003.0	1044.7	1065.9	1079.9	1094.5	1115.5[3]	1121.8
Elev:	109.9[2]	107.9	106.4	100.0	100.1	106.4	109.4[3]	110.3

Manning's n-values
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Extrapolated using a slope of 1.5:1
3. Interpolated using survey points (5) + (6)

Stantec

Project: Project Number:

Notes: Scale:

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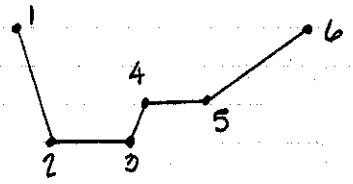
Computed By: Date: Checked By: Date:

Routing Reach 3

π = 5.5' 206 → 207

PT#	B.S.	F.S.	Ground[1]	Dist.
1		2.7'	102.8	0
2		8.7'	96.8	22.2'
3		8.5'	97.0	35.4'
4		6.5'	99.0	10.5'
5		5.8'	99.7	20.1'



Reach length = 4971.68
Channel slope = (1635 - 1480)/4971.68 = 0.0312
NSTEPS =

Eight point cross section w/elevations adjusted to min = 100.0

Sta:	1000.0	1007.4[2]	1014.8[2]	1022.2	1057.6	1068.1	1088.2	1094.2[3]
Elev:	106.0	104.0[2]	102.0[2]	100.0	100.2	102.2	102.9	105.9[3]

Manning's n-values
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Interpolated using survey points (1) & (2)
3. Extrapolated using slope of 2:1

Stantec

Project: Project Number:

Notes: Scale:

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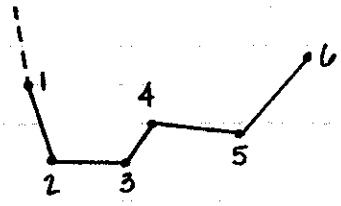
Computed By: Date: Checked By: Date:

Routing Reach 4

$\pi = 5.5'$ 205 → 206

PT#	B.S.	F.S.	Ground'	Dist.
1		4.6'	100.9	0
2		9.7'	95.8	14.1'
3		9.5'	96.0	33.4'
4		5.1'	100.4	18.0'
5		6.0'	99.5	50.3'
6		0.2'	105.3	26.1'



Reach length = 10061.07 + 1832.40 = 11893.47
Channel slope = (1710 - 1635)/11893.47 = 0.00631
NSTEPS =

Eight point cross section w/ elevations adjusted to min = 100.0'

Sta:	1000.0[2]	1002.5[2]	1005.0	1019.1	1052.5	1070.5	1120.8	1146.9
Elev:	110.1[2]	107.6[2]	105.1	100.0	100.2	104.6	103.7	109.5

Manning's n-value
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Extrapolated using a slope of 1:1

Stantec

Project: Project Number:

Notes: Scale:

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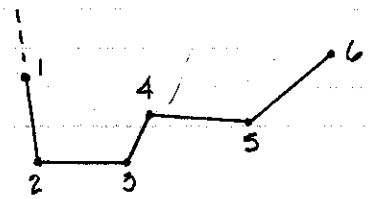
Computed By: Date: Checked By: Date:

Routing Reach 5

$\bar{\pi}$ = 5.5'

PT#	B.S.	F.S.	Ground'	Dist.
1		7.0'	98.5	0
2		9.2'	96.3	5'
3		9.1'	96.4	40.4'
4		5.5'	100.0	12.2'
5		5.8'	99.7	40.4'
6		1.2'	104.3	20.6'



Reach length =
Channel slope =
NSTEPS =
} See Routing Reach 4

Eight point cross section w/elevations adjusted to min = 100.0'

Sta:	1000.0[2]	1006.8[2]	1013.6	1018.6	1059.0	1071.2	1111.6	1132.2
Elev:	108.2[2]	105.2[2]	102.2	100.0	100.1	103.7	103.4	108.0

Manning's n-values
LOB =
CH =
ROB =

Notes

1. Assume ground elevations at instrument = 100.0
2. Extrapolated using slope between survey points (1) & (2)

Stantec

Project: Project Number:

Notes: Scale:

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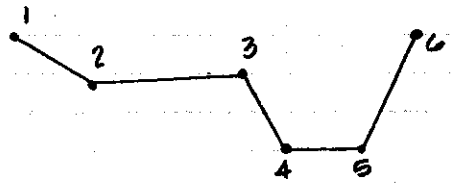
Computed By: Date: Checked By: Date:

Routing Reach 6

$\pi = 5.2'$ 204 → 205

PT#	B.S.	F.S.	Ground'	Dist.
1		2.0'	103.2	0
2		5.1'	100.1	10.6
3		4.3'	100.9	42.6,
4		7.2'	98.0	11.7'
5		7.6'	97.6	29.8'
6		0.8'	104.4	19.1'



Reach length = 1679.32 + 3327.98 = 5007.3
Channel slope = (1780 - 1710)/ 5007.3 = 0.0140
NSTEPS =

Eight point cross section w/ elevations adjusted to min = 100.0

Sta:	1000.0	1010.6	1053.2	1064.9	1094.7	1103.1[2]	1105.9[2]	1113.8
Elev:	105.6	102.5	103.3	100.4	100.0	103.0[2]	104.0[2]	106.8

Manning's n-value
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Interpolated using survey points (5) + (6)

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

Routing Reach 7 202 → 203

T = 5.2' 201 → 202 → 203 → 204

PT#	B.S.	F.S.	Ground'	Dist.
1		3.6'	101.6	0
2		6.1'	99.1	8.4'
3		5.2'	100.0	49.1'
4		6.9'	98.3	8.8'
5		7.2'	98.0	32.1'
6		3.0'	102.2	9.2'

Reach length = 203 → 204 1325.49 203 → 201 2164.36

Channel slope = (1800 − 1780)/1325.49 = 0.0151 (1850 − 1800)/2164.36 = 0.023

NSTEPS =

Eight point cross section w/ elevations adjusted to min = 100.0'

Sta:	1000.0	1008.4	1057.5	1066.3	1098.4	1102.8[2]	1105.0[2]	1107.6
Elev:	103.6	101.1	102.0	100.3	100.0	102.0[2]	103.0[2]	104.2

Manning's n-values

LOB =

CH =

ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Interpolated using survey points (5) & (6)

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

Unnamed Wash 3

Routing Reach 1 302→303

T = 5.4'

PT#	B.S.	F.S.	Ground'	Dist.
1		0.1'	105.3	0
2		6.2'	99.2	26.5'
3		5.2'	100.2	40.8'
4		0.3'	105.1	8.2'

Reach length = 1950.52 + 5353.94 = 7304.46
Channel slopes = (1480 − 1340)/7304.46 = 0.0192
JSTEPS =

Eight point cross section w/ elevations adjusted to min = 100.0'

Sta :	1000.0	1009.4[2]	1017.8[2]	1026.5	1067.3	1068.7[3]	1071.5[3]	1075.5
Elev :	106.1	104.0[2]	102.0[2]	100.0	101.0	102.0[3]	104.0[3]	105.9

Manning's n-value
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0
2. Interpolated using survey points (1) & (2)
3. Interpolated using survey points (3) & (4)

Stantec

Project: Project Number:

Notes: Scale:

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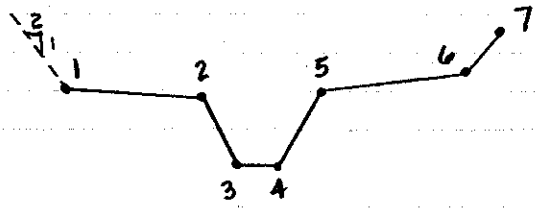
Computed By: Date: Checked By: Date:

Routing Reach 2

T = 5.4' 301 → 302

PT #	B.S.	F.S.	Ground'	Dist.
1		1.7'	103.7	0
2		6.8'	98.6	196.3'
3		10.1'	95.3	13.3'
4		10.3'	95.1	27.0'
5		6.1	99.3	9.3'
TP_1	8.1'			
6		5.0'	102.4	94.5'
7		2.0'	105.4	25.2



Reach length = 8124.27
Channel Slope = (1550 − 1480)/ 8124.27 = 0.008616
ISTEPS =

Eight point cross section w/ elevations adjusted to min = 100.0

Sta:	1000.0[2]	1004.0	1200.3	1213.6	1240.6	1249.9	1344.4	1369.6
Elev:	110.6[2]	108.6	103.5	100.2	100.0	104.2	107.4	110.4

Manning's n-values
LOB =
CH =
ROB =

Notes

1. Assume ground elevation at instrument = 100.0 for points (1) − (5). Ground elevation at TP_1 = 102.0
2. Extrapolated using a slope of 2:1

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

Routing Reach 3 300 → 301

- Assume a trapezoidal section w/ sides slopes of 1:1 and 1.5:1 and a bottom width of 37'.

Reach length = 2309.19 + 2808.10 = 5117.29
Channel slope = (1620 - 1550)/5117.29 = 0.0137
NSTEPS =

Eight point cross section

Sta:	1000	1001	1002	1010	1047	1059	1060.5	1062
Elev:	110	109	108	100	100	108	109	110

Manning's n-values
LOB =
CH =
ROB =

Stantec

Project: North Peoria - Caterpillar Tank Project Number: 82000146

Notes: Scale:

Page 1 of 2 Page(s)

Computed By: SRJ Date: 5 15 00 Checked By: Date:

KK 403404
KM
RS 4256 0.0164
RC .045 .045 .045 ~~4400~~ ~~0.0129~~

RX	9506.5	9551.7	9955.5	9995	10007.4	10060.9	10227.2	10315.3
RY	1300.9	1282.3	1282.7	1276.7	1276.5	1283.5	1283.3	1302.1

Notes: 1) Includes x-secs A (0.02) → K (0.83) Lower = 1259
2) Used an average for n-values upper = 1315.3

.045	.045	.040
.045	.045	.045
.045	.045	.050
Avg .045	.045	.045

3) Used 0.38 as a typical x-sec

---

402 403
KM
RS 6138 0.0049
RC .045 .043 .045 ~~5600~~ ~~0.0105~~

RX	9267	9571.2	9916.2	9988.7	9997.4	10095.3	10157.8	10641.
RY	1395.9	1388.7	1383.7	1355	1355	1361.4	1359.6	1378

Notes: 1) Includes x-sec K(0.83) → W(1.99)
2) Average n-values Lower = 1315.3
upper = 1374.1

.045	.045	.040
.045	.045	.045
.045	.045	.043 - Avg

3) Used 1.61 as a typical sect

KK 401402
KM
RS 8029 0.0112
RC .045 .043 .045 ~~8000~~ ~~0.0106~~

RX	9581.3	9756.6	9997.5	10000	10022.2	10086.4	10119.5	10362.5
RY	1455.4	1419.3	1413.3	1410.9	1409.8	1414.4	1419	1428.6

Notes 1) Includes x-secs W(1.99) → AM (3.50) 3) Used 2.84 as a typical sect.
2) Average n-values Lower = 1374.1
upper = 1432.2

.045	.045	.040
.045	.045	.045
.045	.045	.043

Stantec

Project: North Peoria- Caterpillar Tank Project Number: 82000146

Notes: Scale:

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Computed By: SRS Date: 5 15 00 Checked By: Date:

RK	400401							
KM								
RS				7424	0.0101			
RC	.045	.040	.045	~~7750~~	~~0.00849~~			
RX	9729.2	9772.7	9849.9	10000	10007.8	10090.6	10147.3	10185.4
RY	1509.6	1508.8	1500.2	1475.5	1475.3	1495.3	1496	1497.5

Notes: 1) Includes x-secs AM(3.50) → BB (4.92) Lower = 1374.1
upper = 1498

2) Average n-values

.045	.045	.045
.045	.045	.035
.045	.045	.050 - only applies to 2 x-sec, average does not include this value
.045	.045	.040

3) Used 4.45 as a typical x-sec

Stantec

Project: Peoria Project Number: 28000146

Notes: Scale:

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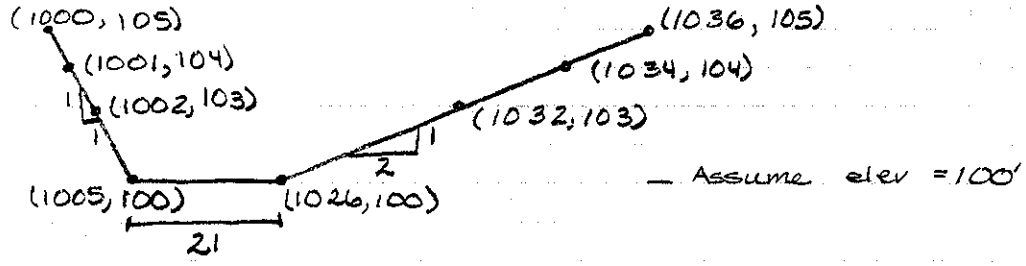
Computed By: SRJ Date: 5 17 00 Checked By: Date:

KK ~~201200~~ 200201 - Unnamed Wash 2 RR8

KM

RS

RC	LOB	CH	ROB	3952.3	0.0228			
RX	1000	1001	1002	1005	1026	1032	1034	1036
RY	105	104	103	100	100	103	104	105



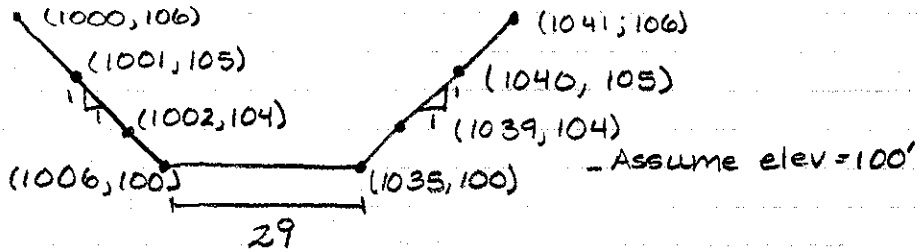
Lower Elev = 1850
Upper Elev = 1940

Length = 2006.6 + 1945.
= 3952.3

KK 501502 - Twin Buttes Wash

KM

RC	0.05	0.035	0.05	5020.89	0.0159			
RX	1000	1001	1002	1006	1035	1039	1040	1041
RY	106	105	104	100	100	104	105	106



Lower = 1500
Upper = 1580

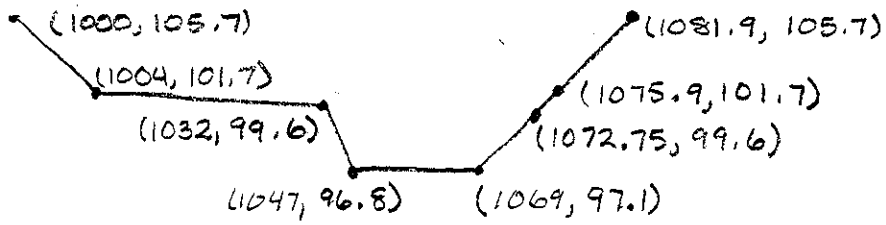
L = 4505.83 + 515.
= 5020.89

KK 500501 - Twin Buttes Wash

KM

RS

RC	0.05	0.035	0.05	5972	0.0134			
RX	1000	1004	1032	1047	1069	1072.75	1075.9	1081.9
RY	105.7	101.7	99.6	96.8	97.1	99.6	101.7	105.7



Lower = 1580
Upper = 1660

L = 5972.15

3:40 pm

Stantec

Project: North Peoria - Twin Buttes Project Number: 82000146

Notes: Scale:

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Computed By: SRH Date: 5 15 00 Checked By: Date:

KK 511 512
KM
RS 9226 0.0081
RC .046 .044 .046 ~~9120~~ ~~0.00824~~
RX 9565.4 9565.5 9852.4 10000 10019.5 10074.2 10242.6 10760
RY 1305.6 1305.6 1303.1 1297.8 1296.9 1336.3 1339.3 1336.5

Note: 1) Between xsec U(1.92) → A (0.19) Lower elev = 1240.2
upper = 1313.8
2) Average n-values

.045	.045	.035
.045	.045	.040
.045	.050	.040
.045	.040	.040
.045	.060	.045
.053	.045	.04
.043	.045	.045
.045	.045	.045
.045	.045	.05
.045	.045	.055
.046	.042	0.044

3) Used 1.52 as a typical x-sec.

KK 510 511
KM
RS 6772 0.0067
RC .046 .044 .046 ~~6880~~ ~~.00583~~
RX 9361.9 9781.7 9944.4 9985.6 10000 10040.8 10420 11470.9
RY 1382.6 1375.5 1364.2 1355.1 1355.4 1360.8 1363.1 1381.1

Note: 1) Between x-sec U(1.92) → AI (3.22) Lower elev = 1313.8
upper elev = 1355.4
2) Average n-values

.045	.045	.055
.045	.045	.050
.045	.045	.040
.048	.045	.04
.045	.05	.04
.045	.045	.04
.046	.046	0.44

3) Used 3.22 as a typical Sect

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

KK 509510
KM
RS 1958 0.0102
RC .046 .043 .045 ~~2000~~ ~~0.0065~~
RX 9605.5 9805.1 9911.8 10000 10026.3 10119.6 10293.4 10613.5
RY 1374.6 1369.2 1370.3 1365.5 1364.6 1379.6 1383.9 1390.1

Notes: 1) Between X-sec AJ (3.22) → AN (3.60)
2) Average n-values

.045	.045	.040
.046	.045	.050
.048	.045	.045
.043	.045	.035
.046	.045	.043

Lower elev = 1355.4
upper elev = 1368.4

3) Used 3.5 as a typical x-sec

KK 508509
K
KJ 10349 0.0077
RC .045 .041 .045 ~~10400~~ ~~.00838~~
RX 9573.3 9869.3 9973 9985.2 10000 10053 10231.6 10511.6
RY 1439.9 1425.1 1424.7 1422.1 1419.1 1425.1 1437.1 1444.5

Notes: 1) Between A(0.09) → V(1.97) on White Peaks Wash
2) Average n-values

.045	.045	.045	(0.09)
.045	.045	.035	(1.48)
.045	.045	.041	

Lower = 1374.6
upper = 1455.5

3) Used 1.33 for a typical sect.

KK 507508
KM
RS 5400
RC .045 .045 .035 ~~5100~~ 0.0111
RX 9723.2 9781.7 9912.1 9989.1 10000 10022.9 10089.7 10209.7
RY 1491.1 1490.1 1489.9 1476.5 1477.1 1483.3 1486.2 1492.1

Notes 1) Between x-sec V(1.97) → AG(2.94) on White Peaks Wash
2) Average n-values
.045 .045 .035
3) Used 2.37 for a typical sect

Lower = 1455.5
upper = 1512.1

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

KK 506 508
KM
RS 4023 0.0149
RC .045 .045 .035 3500 ~~0.0166~~
RX 9717.6 9800.2 9981.4 10000 10010.3 10036.3 10068.8 10227.2
RY 1512.9 1510.9 1508.9 1502 1499 1505.7 1511.5 1512.3

Notes: 1) Between A(0.09) → G(0.66) on West Fork White Peak Wash
2) Average n-value
.045 .045 .035
3) Use 0.57 as a typical sect.

Lower = 1463.3
upper = 1513.7

KK 505 509
KM
RS 6213 0.0064
RC .046 .047 .036 ~~6800~~ ~~0.00688~~
RX 9136.7 9456.9 9928.8 10000 10150.9 10209.7 10414 10505.9
RY 1419.5 1401.9 1395 1390 1390.3 1398.3 1395.1 1398.3

Notes: 1) Between AN(3.60) → BA(4.79) on Twin Buttes Wash
2) Average n-values

.043	.045	.035
.045	.045	.035
.045	.050	.035
.045	.058	.042
.045	.045	.042
.045	.050	.035
.045	.045	.043
.053	.043	.043
.052	.045	.038
.045	.045	.042
.045	.045	.040
.045	.043	.045
.046	.047	.036

Lower elev = 1368.4
upper elev = 1415.2

3) Used 4.17 as a typical sect.

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

KK 504505
KM
RS
RC .045 .043 .044 7753.8 0.0129 ~~.0135~~
RX 9785.2 9855.2 9914.4 9959.2 10013.6 10041.2 10119.8 10183.2
RY 1501 1493.8 1487.5 1473 1468.9 1480.7 1487.9 1494.5

Notes: 1) Between A (0.09) → O (1.33) East Garambullo Wash
2) Average n-values

.045	.043	.045
.045	.045	.040
.045	.044	.043

3) Use 0.95 for typical sect

KK 503505
KM
RS 9136 0.0115
RC .045 .047 .043 ~~9200~~ ~~0.0104~~
RX 9715 9892.4 9965 9996.6 10000 10044.9 10077.4 10088.5
RY 1504.8 1497.4 1487.9 1471.1 1471.6 1487.4 1484.4 1483.1

Notes: 1) Between A(0.09) → S(1.69) on West Garambullo Wash
2) Average n-value

.045	.048	.045
.045	.045	.040
.045	.047	.043

Lower = 1419.9
Upper = 1515.6

3) Use 1.14 for typical sect

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

KK 502505

KM

RS				8775	0.0091			
RC	.046	.040	.046	~~8200~~	~~0.009646~~			
RX	9875.7	9921.8	9941.2	9962.7	10048.7	10088.3	10258.2	10339.9
RY	1488.4	1467.5	1472.2	1469	1470.4	1480.9	1485.4	1497.1

Notes: 1) Between BA(4.79) → BR(6.34)

2) Average n-values

.045	.043	.045
.045	.045	.043
.045	.047	.045
.045	.047	.045
.045	.052	.048
.055	.045	.045
.045	.045	.040
.045	.045	.035
.045	.045	.043
.045	.045	.042
.043	.045	.053
.045	.045	.038
.045	.045	.035
.045	.045	.043
.046	.046	.040

Lower elev = 1415.2

upper elev = 1494.3

3) Used 5.87 as a typical sect

Stantec

Project: Project Number:

Notes: Scale:

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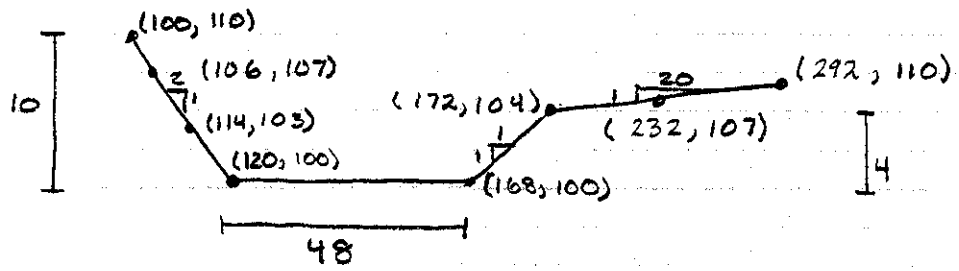
Computed By: Date: Checked By: Date:

607 608

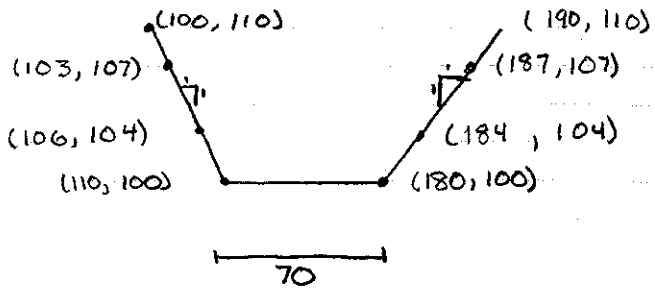
RC	.075	.03	.075	11166.71	0.0242			
RX	100	106	114	120	168	172	232	292
RY	110	107	103	100	100	104	107	110



612 613

[illegible] a bottom width from topo + assumed 1:1 sides

RC	0.05	0.035	0.05	8752	.0331			
RX	100	103	106	110	180	184	187	190
RY	110	107	104	100	100	104	107	110



Stantec

Project: North Peoria Project Number: 82000146

Notes: Scale:

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Computed By: SRJ Date: 5 30 00 Checked By: Date:

704 705

RC	.035	.045	.025	7534	.0186			
RX	100	123	159.5	162.8	186.8	205.3	206.3	207.3
RY	108.5	102.7	101.3	100.2	100	108.3	109.3	110.3

Notes: 1) X-sec info from field notes.
2) Length from ACAD dwg
3) Δ elev from Tc excel sheet

709 710

RC	.05	.035	.05	2540	.0256			
RX	100	132	163	232	268	311	353	418
RY	1500	1490	1480	1470	1470	1480	1490	1500

Notes: 1) X-sec info from CAP Plans
2) Length from ACAD dwg
3) Δ elev from Tc excel sheet

Revised, see Reach Route Data 2/5/01

711 712

RC	.05	.035	.05	1586	.0378			
RX	100	137	179	232	263	300	332	368
RY	1524	1518	1514	1508	1508	1514	1518	1524

Notes: 1) x-sec info from CAP Plans
2) Length from ACAD dwg
3) Δ elev from Tc excel sheet

Revised, see Reach Route Data 2/5/01

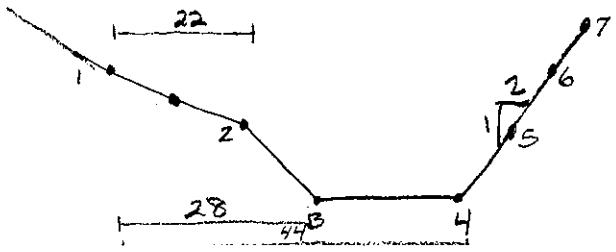
716 717

RC	.07	.045	.07	4232	0.0189			
RX	100	115	122	128	144	147	148	150.2
RY	103.1	102	101.5	100	100.3	101.5	102	103.1

Revised; see Reach Route Data 2/5/01

Notes: 1) x-sec from field notes
2) length from ACAD dwg
3) Δ elev from Tc excel sheet

	B.S.		Y	X
1	3.0	102.4	103.1	100
* 1.5			102	115
2	4.6	100.8	101.5	122
3	6.1	99.3	100	128
4	5.8	99.6	100.3	144
* 5			101.5	147
* 6			102	148
* 7			103.1	150.2



* Interpulated pts

Stantec

Project: Project Number:

Notes: Scale:

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Computed By: Date: Checked By: Date:

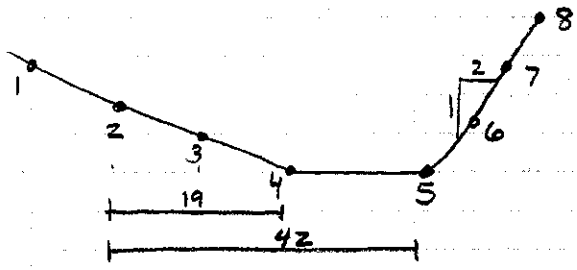
718 719
RC
RX
RY

Notes! 718 719 = 717 718

721.722

RC	.05	.035	.05	8812	0.0159				Revised, see Reach Route Data 2/5/0
RX	100	124.32	138	143.32	166.32	168.32	171.92	178.32	
RY	106	102.8	101	100.3	100	101	102.8	106	

Notes: 1) X-sec info from field notes
2) Length from ACAD dwg
3) Δ elev from T_c excel sheet



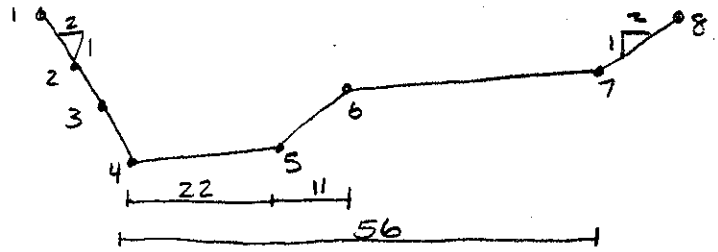
	B.S.		Y	X
* 1			106	0
2	2.9	102.5	102.8	124.32
* 3			101	138.00
4	5	100	100.3	143.32
5	5.7	99.7	100	166.32
* 6			101	168.32
* 7			102.8	171.92
* 8			106	178.32

* interpolated pts

726727

RC	.05	.035	.05	6228	.0048				Revised, see Reach Route Data 2/5/01
RX	100	104.4	108.4	112	134	145	168	175.6	
RY	106	102.2	102	100	100.9	102.	102.2	106	

Notes: 1) x-sec info from field notes
2) Length from ACAD dwg
3) Δ elev from T_c excel sheet



	BS		Y	X
* 1			106	100
* 2			102.2	104.
* 3			102	108.
4	6.8	98.6	100	112
5	5.9	99.5	100.9	134
6	4.8	100.6	102.0	145
7	4.6	100.8	102.2	168
* 8			106	175.6

* interpolated pts

Stantec

Project: North Peoria ADMP Project Number: 82000146

Notes: Reach Route Data Scale:

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Computed By: MMZ Date: 2 5 01 Checked By: Date:

709 710

RC	0.05	0.035	0.05	2683	.0261			
RX	100	160	200	220	255	265	280	305
RY	1448	1444	1440	1436	1436	1440	1444	1448

Notes: 1) X-sec info from Agua Fria FIS Workstudy maps and field notes.
2) Length from ACAD drawing.

711 712

RC	0.05	0.035	0.05	1586	.0441			
RX	100	135	190	215	250	285	335	395
RY	1488	1484	1480	1476	1476	1480	1484	1488

Notes: 1) X-sec info from Agua Fria FIS Workstudy maps and field notes.
2) Length from ACAD drawing.

712 714

RC	0.05	0.035	0.05	2032	.0172			
RX	100	325	355	370	415	435	450	515
RY	1416	1412	1408	1404	1404	1408	1412	1408

Notes: 1) X-sec info from Agua Fria FIS Worstudy maps and field notes
2) Length from ACAD drawing.

713 714

RC	0.05	0.035	0.05	831	.0421			
RX	100	260	270	280	305	315	335	490
RY	1416	1416	1412	1408	1408	1412	1416	1420

Notes: 1) X-sec info from Agua Fria FIS Workstudy maps and field notes.
2) Length from ACAD drawing.

716 717

RC	0.05	0.035	0.05	4232	.0177			
RX	100	115	150	165	195	285	370	425
RY	1504	1500	1496	1492	1492	1496	1500	1504

Notes: 1) X-sec info from Agua Fria FIS Workstudy maps and field notes
2) Length from ACAD drawing.

Stantec

Project: North Peoria ADMP Project Number: 82000146

Notes: Reach Route Data Scale:

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Computed By: MMZ Date: 2 5 01 Checked By: Date:

717718

RC	0.05	0.035	0.05	7146	.0105			
RX	100	235	275	325	420	455	465	530
RY	1364	1360	1356	1352	1352	1356	1360	1380
RL			0.03	1352				

Notes: 1) X-sec info from Agua Fria FIS Workstudy maps and field notes.
2) Length from ACAD drawing.
3) Transmission loss from soils map review.

721722

RC	0.05	0.035	0.05	8812	.0170			
RX	100	125	175	200	235	250	270	595
RY	1420	1416	1412	1408	1408	1412	1420	1424

Notes: 1) X-sec info from Agua Fria FIS Workstudy maps and field notes.
2) Length from ACAD drawing.

726727

RC	0.05	0.035	0.05	6228	.0185			
RX	100	120	145	170	225	240	250	265
RY	1308	1304	1300	1296	1296	1300	1304	1308

Notes: 1) X-sec info from Agua Fria FIS Workstudy maps and field notes.
2) Length from ACAD drawing.

Reach 100102 Looking Upstream

Reach 100102 Looking Downstream

Reach 101102 Looking Upstream

Reach 101102 Looking Downstream

Reach 102103 Looking Upstream

Reach 102103 Looking Downstream

Reach 103104 Looking Upstream

Reach 103104 Looking Downstream

Reach 104105 Looking Upstream

Reach 104105 Looking Downstream

Reach 200201 Looking Upstream

Reach 200201 Looking Downstream

Reach 201203 Looking Upstream

Reach 201203 Looking Downstream

Reach 202203 Looking Upstream

Reach 202203 Looking Downstream

Reach 203204 Looking Upstream

Reach 203204 Looking Downstream

Reach 204205 Looking Upstream

Reach 204205 Looking Downstream

Reach 205206 Looking Upstream

Reach 205206 Looking Downstream

Reach 206207 Looking Upstream

Reach 206207 Looking Downstream

Reach 207105 Looking Upstream

Reach 207105 Looking Downstream

Reach 300301 Looking Upstream

Reach 300301 Looking Downstream

Reach 301302 Looking Upstream

Reach 301302 Looking Downstream

Reach 302303 Looking Upstream

Reach 302303 Looking Downstream

Reach 500501 Looking Upstream

Reach 500501 Looking Downstream

Reach 501502 Looking Upstream

Reach 501502 Looking Downstream

Reach 607608 Looking Upstream

Reach 607608 Looking Downstream

Reach 716717 Looking Upstream

Reach 716717 Looking Downstream

Reach 717718 Looking Upstream

Reach 717718 Looking Downstream

Reach 721722 Looking Upstream

Reach 721722 Looking Downstream

Table D-1

Summary of the normal depth reach route hydraulic data for the existing condition 100-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.046	724	12.3	112.6	75.1	3.3	0.96	6.7	7.8	4.1	6.8	0.2333	7	7
101102	0.014	7254	0.040	529	14.0	71.0	30.1	3.2	0.88	7.7	8.6	4.5	7.6	0.2333	6	7
102103	0.012	8068	0.047	1747	17.6	221.0	97.5	4.4	0.95	8.1	9.6	5.0	8.4	0.2333	7	7
103104	0.016	8625	0.053	2651	22.0	257.4	55.5	6.9	0.86	10.5	14.4	7.2	13.5	0.1667	4	5
104105	0.012	6956	0.053	2873	21.8	414.1	116.2	5.8	0.66	7.1	9.7	5.0	8.7	0.2000	6	6
200201	0.023	3952	0.031	1362	21.0	92.5	31.6	3.5	1.55	15.1	33.0	9.9	49.5	0.0333	1	1
201203	0.016	3233	0.048	1649	32.1	225.2	102.1	3.3	0.89	7.5	13.5	5.4	20.3	0.0667	2	2
202203	0.017	2353	0.035	269	32.1	45.2	55.0	1.4	1.23	6.4	6.5	2.9	7.4	0.1000	3	3
203204	0.015	1325	0.048	2622	32.1	308.3	105.5	4.1	0.90	8.7	11.1	3.3	16.6	0.0333	1	1
204205	0.014	5007	0.045	2898	29.8	312.9	106.5	5.0	0.97	9.5	10.4	5.0	10.5	0.1333	4	4
205206	0.006	11893	0.044	3809	33.4	503.5	130.8	6.7	0.69	7.7	9.9	5.4	8.3	0.3333	10	10
206207	0.031	4972	0.045	4308	35.4	286.0	86.9	4.7	1.49	15.4	20.7	8.3	31.2	0.0667	2	2
207105	0.017	7176	0.044	4497	29.5	280.1	47.7	7.3	1.18	16.2	29.9	11.9	45.0	0.0667	2	2
300301	0.014	5117	0.044	1648	37.0	192.3	48.3	4.5	0.77	8.7	14.2	6.4	16.0	0.1000	3	3
301302	0.009	8124	0.047	1950	27.0	268.7	138.4	5.1	0.94	7.4	6.8	3.7	5.7	0.3333	10	10
302303	0.019	7304	0.050	2192	40.8	220.7	65.9	4.6	0.97	10.1	15.2	7.3	15.3	0.1333	4	4
400401	0.010	7424	0.040	499	7.8	114.2	48.9	4.1	0.52	4.5	6.9	3.7	5.8	0.3000	9	9
401402	0.011	8029	0.043	904	22.2	157.7	76.3	3.6	0.73	5.9	7.4	4.0	6.3	0.3000	9	9
402403	0.005	6138	0.044	1274	8.7	320.3	150.6	5.4	0.49	4.1	4.6	2.6	3.8	0.3667	11	11
403404	0.016	4256	0.045	1565	12.4	205.0	77.4	4.7	0.84	7.8	11.8	5.3	13.3	0.1000	3	3
500501	0.013	5972	0.037	908	22.0	105.3	47.9	3.3	1.06	8.9	12.4	6.0	12.5	0.1333	4	4
501502	0.016	5021	0.035	1243	29.0	116.3	36.1	3.6	1.07	10.9	20.9	8.4	31.5	0.0667	2	2
502505	0.009	8775	0.040	1968	86.0	311.3	118.3	3.7	0.71	6.5	10.4	5.5	9.2	0.2333	7	7
503505	0.012	9136	0.047	96	3.4	35.2	18.5	3.5	0.36	2.8	5.1	2.8	4.1	0.5000	15	15
504505	0.013	7754	0.043	93	54.4	35.7	33.4	2.1	0.47	2.8	5.9	3.2	4.9	0.3667	11	11
505509	0.006	6213	0.047	2486	150.9	553.2	216.7	3.2	0.51	4.6	6.5	3.4	5.6	0.2667	8	8
506508	0.015	4023	0.045	93	10.3	27.1	19.9	2.7	0.55	3.6	5.6	2.9	5.0	0.2000	6	6
507508	0.011	5400	0.045	98	10.9	35.0	28.1	2.1	0.47	3.0	5.6	3.0	4.8	0.2667	8	8
508509	0.008	10349	0.041	579	14.8	119.5	57.1	4.2	0.61	5.0	6.2	3.4	5.0	0.4667	14	14
509510	0.010	1958	0.044	3183	26.3	541.7	300.6	5.0	0.79	6.0	5.4	2.4	6.1	0.1000	3	3
510511	0.007	6722	0.045	3450	14.4	627.9	360.5	7.4	0.75	5.6	5.6	3.0	4.7	0.3333	10	10
511512	0.008	9226	0.044	3745	19.5	625.2	213.0	6.7	0.63	6.1	8.5	4.6	7.2	0.3000	9	9

Table D-1

Summary of the normal depth reach route hydraulic data for the existing condition 100-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1833	20.0	164.4	74.3	4.3	1.36	11.5	14.4	5.8	21.7	0.0667	2	2
601602	0.027	6017	0.035	2611	90.0	234.0	105.0	2.4	1.36	11.5	16.7	7.5	18.9	0.1000	3	3
602603	0.017	7614	0.035	4336	257.0	528.8	266.6	2.0	1.06	8.5	9.1	4.7	8.0	0.2333	7	7
603604	0.019	7830	0.035	6459	275.0	672.0	287.3	2.4	1.14	9.9	16.3	7.8	16.4	0.1333	4	4
604605	0.007	1543	0.035	6979	85.0	760.6	155.7	6.3	0.74	9.3	12.9	3.8	19.3	0.0333	1	1
605606	0.020	5520	0.042	7091	33.0	634.3	295.2	4.9	1.38	11.5	15.3	6.9	17.3	0.1000	3	3
606608	0.018	1141	0.035	7691	87.0	597.9	161.1	4.8	1.20	13.1	9.5	2.8	14.3	0.0333	1	1
607608	0.024	11167	0.030	1018	48.0	97.7	53.8	1.9	1.42	10.9	18.6	9.3	17.5	0.1667	5	5
608609	0.012	6518	0.035	8758	42.0	774.5	199.3	6.4	1.03	11.5	13.6	6.5	13.6	0.1333	4	4
609611	0.003	6519	0.035	9045	180.0	1324.0	259.1	6.0	0.54	6.9	9.1	4.6	8.2	0.2000	5	6
610611	0.010	7981	0.035	1300	9.0	159.4	27.4	8.8	0.60	8.2	13.3	6.6	12.5	0.1667	5	5
611613	0.038	4445	0.035	9775	88.0	511.9	135.0	4.6	1.76	19.4	37.1	11.1	55.7	0.0333	2	1
612613	0.033	8752	0.035	1364	70.0	131.4	73.7	1.8	1.42	10.8	18.2	8.7	18.3	0.1333	4	4
613614	0.011	5557	0.035	10371	80.0	787.5	123.0	7.8	0.93	13.3	15.4	6.9	17.4	0.1000	3	3
614615	0.014	7995	0.035	10302	45.0	706.4	126.1	8.3	1.10	14.8	16.7	8.0	16.7	0.1333	3	4
704705	0.019	7534	0.040	713	24.0	111.6	70.6	2.8	0.93	6.7	9.0	4.7	7.9	0.2333	7	7
705OAF	0.008	2254	0.045	689	156.4	299.9	417.4	1.1	0.52	2.5	3.8	1.9	3.5	0.1667	8	5
709710	0.026	2683	0.035	411	35.0	58.2	45.8	1.4	1.17	7.5	11.2	4.5	16.8	0.0667	2	2
711712	0.044	1586	0.035	181	35.0	31.9	46.7	0.8	1.35	6.3	13.2	4.0	19.9	0.0333	1	1
712714	0.017	2032	0.035	245	45.0	52.1	54.2	1.1	0.91	5.0	8.5	3.4	12.7	0.0667	2	2
713714	0.042	831	0.035	179	25.0	27.2	30.0	1.0	1.33	7.2	6.9	2.1	10.4	0.0333	1	1
716717	0.018	4232	0.035	618	30.0	101.2	78.8	1.9	1.00	6.4	8.8	4.2	8.8	0.1333	4	4
717718	0.011	7146	0.045	833	95.0	200.1	132.4	1.8	0.62	4.4	5.4	3.0	4.5	0.3667	11	11
721722	0.017	8812	0.035	252	35.0	50.6	47.3	1.2	0.91	5.4	8.2	4.4	6.9	0.3000	9	9
726727	0.019	6228	0.035	816	55.0	114.5	72.9	1.8	1.05	7.5	10.4	5.2	9.8	0.1667	5	5

Table D-2

Summary of the normal depth reach route hydraulic data for the existing condition 50-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.045	581	12.3	94.6	69.0	3.0	0.96	6.4	6.8	3.6	5.8	0.267	8	8
101102	0.014	7254	0.040	420	14.0	61.3	28.5	2.9	0.85	7.1	8.6	4.5	7.6	0.233	6	7
102103	0.012	8068	0.047	1391	17.6	183.9	88.2	4.0	0.95	7.8	9.6	5.0	8.4	0.233	7	7
103104	0.016	8625	0.053	2113	22.0	220.8	52.0	6.3	0.83	9.7	14.4	7.2	13.5	0.167	5	5
104105	0.012	6956	0.053	2279	21.8	355.6	113.4	5.2	0.65	6.5	9.7	5.0	8.7	0.200	6	6
200201	0.023	3952	0.030	1103	21.0	81.3	30.5	3.2	1.50	13.9	16.5	6.6	24.8	0.067	2	2
201203	0.016	3233	0.048	1342	32.1	196.8	100.9	3.0	0.89	7.1	9.0	4.0	10.1	0.100	3	3
202203	0.017	2353	0.034	224	32.1	39.5	47.8	1.2	1.18	6.1	9.8	3.9	14.7	0.067	2	2
203204	0.015	1325	0.048	2108	32.1	267.4	103.9	3.7	0.89	8.1	11.1	3.3	16.6	0.033	1	1
204205	0.014	5007	0.045	2323	29.8	267.7	103.9	4.6	0.98	8.9	10.4	5.0	10.5	0.133	4	4
205206	0.006	11893	0.044	3023	33.4	427.3	127.5	6.1	0.69	7.2	9.0	4.9	7.5	0.367	11	11
206207	0.031	4972	0.045	3394	35.4	242.4	84.0	4.2	1.48	14.3	20.7	8.3	31.2	0.067	2	2
207105	0.017	7176	0.043	3517	29.5	237.3	45.4	6.3	1.16	15.0	19.9	9.0	22.5	0.100	3	3
300301	0.014	5117	0.044	1311	37.0	167.1	47.0	4.0	0.75	8.0	14.2	6.4	16.0	0.100	3	3
301302	0.009	8124	0.045	1554	27.0	213.3	107.8	4.7	0.93	7.4	7.5	4.1	6.4	0.300	9	9
302303	0.019	7304	0.049	1764	40.8	191.1	62.9	4.1	0.95	9.4	15.2	7.3	15.3	0.133	4	4
400401	0.010	7424	0.040	456	7.8	107.4	47.5	4.0	0.51	4.4	6.9	3.7	5.8	0.300	9	9
401402	0.011	8029	0.043	753	22.2	138.9	70.4	3.3	0.70	5.6	7.4	4.0	6.3	0.300	9	9
402403	0.005	6138	0.043	1018	8.7	264.0	117.5	4.9	0.46	3.9	4.6	2.6	3.8	0.367	11	11
403404	0.016	4256	0.045	1233	12.4	173.8	71.4	4.2	0.82	7.3	11.8	5.3	13.3	0.100	3	3
500501	0.013	5972	0.036	717	22.0	90.3	43.0	3.0	1.00	8.2	10.0	5.0	9.4	0.167	5	5
501502	0.016	5021	0.035	975	29.0	100.6	35.3	3.1	1.04	10.0	13.9	6.3	15.7	0.100	3	3
502505	0.009	8775	0.040	1635	86.0	277.4	115.9	3.4	0.69	6.1	10.4	5.5	9.2	0.233	7	7
503505	0.012	9136	0.047	92	3.4	34.1	18.2	3.4	0.36	2.8	5.4	3.0	4.4	0.467	15	14
504505	0.013	7754	0.043	90	54.4	34.7	32.9	2.1	0.47	2.7	5.4	3.0	4.4	0.400	12	12
505509	0.006	6213	0.047	2047	150.9	487.1	210.0	2.8	0.50	4.3	5.2	2.8	4.3	0.333	10	10
506508	0.015	4023	0.045	90	10.3	26.5	19.7	2.7	0.54	3.6	5.6	2.9	5.0	0.200	6	6
507508	0.011	5400	0.045	97	10.9	34.8	28.0	2.0	0.47	3.0	5.0	2.7	4.2	0.300	9	9
508509	0.008	10349	0.041	498	14.8	107.8	54.3	4.0	0.60	4.8	5.4	3.0	4.3	0.533	16	16
509510	0.010	1958	0.044	2574	26.3	446.4	267.7	4.6	0.81	5.9	8.2	3.3	12.3	0.067	2	2
510511	0.007	6722	0.045	2784	14.4	497.2	292.8	7.0	0.78	5.7	5.1	2.8	4.2	0.367	11	11
511512	0.008	9226	0.044	3028	19.5	544.2	181.8	6.3	0.58	5.7	7.7	4.2	6.4	0.333	10	10

Table D-2

Summary of the normal depth reach route hydraulic data for the existing condition 50-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1409	20.0	139.5	71.4	3.9	1.32	10.5	14.4	5.8	21.7	0.067	2	2
601602	0.027	6017	0.035	2045	90.0	201.8	103.1	2.1	1.33	10.5	16.7	7.5	18.9	0.100	3	3
602603	0.017	7614	0.035	3405	257.0	459.7	265.4	1.8	1.04	7.8	9.1	4.7	8.0	0.233	7	7
603604	0.019	7830	0.035	5047	275.0	580.3	285.7	2.1	1.11	9.0	13.0	6.5	12.3	0.167	5	5
604605	0.007	1543	0.035	5456	85.0	645.5	147.2	5.6	0.72	8.6	6.4	2.6	9.7	0.067	2	2
605606	0.020	5520	0.042	5559	33.0	519.7	292.2	4.5	1.45	11.0	11.5	5.5	11.5	0.133	4	4
606608	0.018	1141	0.035	6043	87.0	508.6	152.3	4.3	1.17	12.1	0.0	0.0	0.0	0.000	1	1
607608	0.024	11167	0.030	835	48.0	86.5	53.1	1.7	1.39	10.1	15.5	8.0	14.0	0.200	6	6
608609	0.012	6518	0.035	6887	42.0	652.0	183.6	5.8	1.01	10.8	13.6	6.5	13.6	0.133	4	4
609611	0.003	6519	0.035	7121	180.0	1133.4	249.3	5.3	0.53	6.4	9.1	4.6	8.2	0.200	6	6
610611	0.010	7981	0.035	1082	9.0	142.3	26.1	8.1	0.58	7.7	13.3	6.6	12.5	0.167	5	5
611613	0.038	4445	0.035	7707	88.0	439.2	129.4	4.0	1.72	17.9	37.1	11.1	55.7	0.033	1	1
612613	0.033	8752	0.035	1142	70.0	118.2	73.3	1.7	1.40	10.1	14.6	7.3	13.7	0.167	5	5
613614	0.011	5557	0.035	8150	80.0	675.5	117.8	6.8	0.90	12.2	15.4	6.9	17.4	0.100	3	3
614615	0.014	7995	0.035	8076	45.0	598.1	117.3	7.4	1.07	13.7	16.7	8.0	16.7	0.133	4	4
704705	0.019	7534	0.040	574	24.0	95.7	67.0	2.6	0.92	6.2	9.0	4.7	7.9	0.233	7	7
705OAF	0.008	2254	0.045	618	156.4	279.4	405.4	1.1	0.51	2.4	3.8	1.9	3.5	0.167	5	5
709710	0.026	2683	0.035	385	35.0	55.9	45.4	1.4	1.16	7.3	11.2	4.5	16.8	0.067	2	2
711712	0.044	1586	0.035	172	35.0	30.9	46.4	0.8	1.34	6.2	13.2	4.0	19.9	0.033	1	1
712714	0.017	2032	0.035	228	45.0	49.9	53.8	1.0	0.90	4.9	5.6	2.5	6.4	0.100	3	3
713714	0.042	831	0.035	160	25.0	25.4	29.7	0.9	1.31	6.9	6.9	2.1	10.4	0.033	1	1
716717	0.018	4232	0.035	579	30.0	96.5	77.3	1.8	0.99	6.3	8.8	4.2	8.8	0.133	4	4
717718	0.011	7146	0.045	705	95.0	180.5	129.2	1.6	0.61	4.1	3.1	1.8	2.5	0.633	19	19
721722	0.017	8812	0.035	237	35.0	48.3	46.8	1.2	0.91	5.2	8.2	4.4	6.9	0.300	9	9
726727	0.019	6228	0.035	672	55.0	101.5	71.1	1.6	1.03	7.0	13.0	6.2	13.0	0.133	4	4

Table D-3

Summary of the normal depth reach route hydraulic data for the existing condition 25-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.044	436	12.3	75.6	62.0	2.7	0.96	6.0	6.8	3.6	5.8	0.267	8	8
101102	0.014	7254	0.040	323	14.0	51.7	26.7	2.5	0.82	6.5	7.6	4.0	6.5	0.267	8	8
102103	0.012	8068	0.046	1044	17.6	146.5	77.7	3.5	0.94	7.3	9.6	5.0	8.4	0.233	7	7
103104	0.016	8625	0.053	1493	22.0	176.6	47.4	5.4	0.79	8.6	12.0	6.1	10.8	0.200	6	6
104105	0.012	6956	0.053	1600	21.8	283.1	109.7	4.6	0.64	5.8	8.3	4.3	7.3	0.233	7	7
200201	0.023	3952	0.030	845	21.0	69.1	29.3	2.8	1.45	12.6	16.5	6.6	24.8	0.067	2	2
201203	0.016	3233	0.048	1023	32.1	163.7	99.4	2.7	0.89	6.5	9.0	4.0	10.1	0.100	3	3
202203	0.017	2353	0.031	177	32.1	33.9	39.3	1.1	1.08	5.7	9.8	3.9	14.7	0.067	2	2
203204	0.015	1325	0.048	1591	32.1	222.1	102.0	3.3	0.88	7.4	11.1	3.3	16.6	0.033	1	1
204205	0.014	5007	0.045	1742	29.8	217.5	100.8	4.1	0.99	8.3	10.4	5.0	10.5	0.133	4	4
205206	0.006	11893	0.044	2227	33.4	341.9	123.8	5.4	0.71	6.7	7.6	4.2	6.2	0.433	13	13
206207	0.031	4972	0.044	2474	35.4	194.7	80.7	3.6	1.48	13.1	13.8	6.2	15.6	0.100	3	3
207105	0.017	7176	0.042	2543	29.5	191.0	42.7	5.3	1.12	13.5	19.9	9.0	22.5	0.100	3	3
300301	0.014	5117	0.044	752	37.0	119.1	44.3	2.9	0.70	6.5	10.7	5.1	10.7	0.133	4	4
301302	0.009	8124	0.041	952	27.0	141.2	58.6	3.8	0.79	6.9	8.5	4.5	7.3	0.267	8	8
302303	0.019	7304	0.049	1140	40.8	144.4	58.5	3.4	0.91	8.1	12.2	6.1	11.4	0.167	5	5
400401	0.010	7424	0.040	406	7.8	100.0	45.8	3.8	0.50	4.2	6.9	3.7	5.8	0.300	9	9
401402	0.011	8029	0.043	605	22.2	119.1	66.0	3.0	0.69	5.3	6.7	3.6	5.6	0.333	10	10
402403	0.005	6138	0.043	776	8.7	216.1	88.2	4.5	0.41	3.7	4.3	2.4	3.5	0.400	12	12
403404	0.016	4256	0.045	916	12.4	141.1	64.6	3.8	0.80	6.7	8.9	4.2	8.9	0.133	4	4
500501	0.013	5972	0.035	537	22.0	75.2	39.2	2.6	0.94	7.4	10.0	5.0	9.4	0.167	5	5
501502	0.016	5021	0.035	718	29.0	83.5	34.3	2.6	1.00	8.9	13.9	6.3	15.7	0.100	3	3
502505	0.009	8775	0.040	1238	86.0	234.0	112.3	3.0	0.67	5.5	7.3	4.0	6.1	0.333	10	10
503505	0.012	9136	0.047	87	3.4	33.0	17.9	3.4	0.35	2.7	5.1	2.8	4.1	0.500	15	15
504505	0.013	7754	0.043	81	54.4	32.5	31.8	2.0	0.46	2.6	4.6	2.6	3.7	0.467	14	14
505509	0.006	6213	0.047	1517	150.9	402.8	201.2	2.4	0.49	3.9	5.8	3.1	4.9	0.300	9	9
506508	0.015	4023	0.045	86	10.3	25.7	19.4	2.7	0.54	3.5	5.6	2.9	5.0	0.200	6	6
507508	0.011	5400	0.045	93	10.9	33.9	27.7	2.0	0.46	2.9	5.6	3.0	4.8	0.267	8	8
508509	0.008	10349	0.041	415	14.8	94.7	50.9	3.7	0.59	4.5	5.4	3.0	4.3	0.533	16	16
509510	0.010	1958	0.044	1925	26.3	338.1	193.0	4.2	0.78	5.9	5.4	2.4	6.1	0.100	3	3
510511	0.007	6722	0.045	2083	14.4	355.9	194.5	6.4	0.78	6.0	5.1	2.8	4.2	0.367	11	11
511512	0.008	9226	0.044	2286	19.5	445.7	161.1	5.7	0.55	5.2	7.7	4.2	6.4	0.333	10	10

Table D-3

Summary of the normal depth reach route hydraulic data for the existing condition 25-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1001	20.0	109.9	63.3	3.5	1.27	9.5	9.6	4.3	10.8	0.100	3	3
601602	0.027	6017	0.035	1486	90.0	166.1	100.9	1.7	1.28	9.3	16.7	7.5	18.9	0.100	3	3
602603	0.017	7614	0.035	2459	257.0	380.3	263.9	1.5	1.01	6.8	9.1	4.7	8.0	0.233	7	7
603604	0.019	7830	0.035	3628	275.0	477.8	283.8	1.7	1.08	7.9	13.0	6.5	12.3	0.167	5	5
604605	0.007	1543	0.035	3919	85.0	518.9	137.2	4.7	0.70	7.7	12.9	3.8	19.3	0.033	1	1
605606	0.020	5520	0.042	3997	33.0	383.3	288.5	4.1	1.65	10.8	11.5	5.5	11.5	0.133	4	4
606608	0.018	1141	0.035	4366	87.0	410.0	142.0	3.6	1.13	10.9	9.5	2.8	14.3	0.033	1	1
607608	0.024	11167	0.030	652	48.0	74.9	52.5	1.5	1.36	9.2	13.3	7.0	11.7	0.233	7	7
608609	0.012	6518	0.035	4981	42.0	516.3	164.5	5.0	0.98	9.8	13.6	6.5	13.6	0.133	5	4
609611	0.003	6519	0.035	5142	180.0	919.1	237.8	4.4	0.51	5.7	7.8	4.1	6.8	0.233	7	7
610611	0.010	7981	0.035	869	9.0	124.1	24.5	7.4	0.56	7.1	11.1	5.7	10.0	0.200	6	6
611613	0.038	4445	0.035	5568	88.0	356.0	122.6	3.4	1.66	16.0	37.1	11.1	55.7	0.033	1	1
612613	0.033	8752	0.035	910	70.0	103.6	72.9	1.5	1.37	9.2	14.6	7.3	13.7	0.167	5	5
613614	0.011	5557	0.035	5880	80.0	549.3	111.7	5.7	0.86	10.8	23.1	9.2	34.8	0.067	2	2
614615	0.014	7995	0.035	5815	45.0	479.3	106.9	6.3	1.02	12.3	22.2	10.0	25.0	0.100	3	3
704705	0.019	7534	0.041	435	24.0	78.0	59.1	2.3	0.89	5.8	7.0	3.8	5.9	0.300	9	9
705OAF	0.008	2254	0.045	529	156.4	255.5	390.9	1.0	0.50	2.3	3.8	1.9	3.5	0.167	5	5
709710	0.026	2683	0.035	355	35.0	53.2	45.0	1.3	1.15	7.1	7.5	3.3	8.4	0.100	3	3
711712	0.044	1586	0.035	159	35.0	29.5	46.0	0.7	1.33	6.1	13.2	4.0	19.9	0.033	1	1
712714	0.017	2032	0.035	211	45.0	47.8	53.5	1.0	0.89	4.8	5.6	2.5	6.4	0.100	3	3
713714	0.042	831	0.035	140	25.0	23.3	29.3	0.9	1.29	6.5	0.0	0.0	0.0	0.000	1	1
716717	0.018	4232	0.035	537	30.0	91.9	75.7	1.7	0.99	6.2	7.1	3.5	6.6	0.167	5	5
717718	0.011	7146	0.045	600	95.0	162.6	126.2	1.5	0.61	3.9	3.5	2.0	2.8	0.567	17	17
721722	0.017	8812	0.035	205	35.0	44.1	45.9	1.1	0.89	5.0	8.2	4.4	6.9	0.300	10	9
726727	0.019	6228	0.035	542	55.0	88.9	69.3	1.4	1.01	6.5	8.7	4.4	7.8	0.200	6	6

Table D-4

Summary of the normal depth reach route hydraulic data for the existing condition 10-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	287	12.3	51.0	57.9	2.3	1.10	5.9	6.1	3.3	5.1	0.3	9	9
101102	0.014	7254	0.040	215	14.0	39.7	24.4	2.1	0.78	5.6	7.6	4.0	6.5	0.3	8	8
102103	0.012	8068	0.044	656	17.6	102.8	63.3	2.9	0.92	6.6	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	951	22.0	132.9	42.5	4.4	0.73	7.3	10.3	5.4	9.0	0.2	7	7
104105	0.012	6956	0.053	998	21.8	206.6	105.8	3.9	0.63	5.0	6.4	3.5	5.4	0.3	9	9
200201	0.023	3952	0.030	563	21.0	53.7	27.6	2.2	1.37	10.9	11.0	4.9	12.4	0.1	3	3
201203	0.016	3233	0.048	673	32.1	122.4	97.6	2.3	0.91	5.8	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.030	123	32.1	27.0	37.4	0.9	1.03	5.0	6.5	2.9	7.4	0.1	3	3
203204	0.015	1325	0.048	996	32.1	162.7	99.4	2.7	0.88	6.4	5.5	2.2	8.3	0.1	2	2
204205	0.014	5007	0.044	1084	29.8	150.4	96.6	3.4	1.05	7.5	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.043	1364	33.4	225.5	107.7	4.4	0.75	6.2	6.6	3.7	5.3	0.5	15	15
206207	0.031	4972	0.044	1523	35.4	136.5	75.4	2.9	1.51	11.5	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.041	1572	29.5	140.0	39.6	4.1	1.07	11.4	19.9	9.0	22.5	0.1	3	3
300301	0.014	5117	0.044	631	37.0	107.3	43.7	2.7	0.68	6.1	8.5	4.3	8.0	0.2	5	5
301302	0.009	8124	0.039	734	27.0	118.8	46.9	3.3	0.71	6.4	9.7	5.1	8.5	0.2	7	7
302303	0.019	7304	0.049	808	40.8	115.9	55.7	2.9	0.88	7.2	12.2	6.1	11.4	0.2	5	5
400401	0.010	7424	0.040	314	7.8	84.5	42.2	3.5	0.48	3.8	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	432	22.2	94.5	60.2	2.6	0.67	4.8	5.1	2.9	4.2	0.4	13	13
402403	0.005	6138	0.043	496	8.7	159.5	75.9	3.8	0.39	3.2	4.6	2.6	3.8	0.4	12	11
403404	0.016	4256	0.045	560	12.4	100.0	54.8	3.1	0.76	5.8	8.9	4.2	8.9	0.1	4	4
500501	0.013	5972	0.035	348	22.0	56.8	35.9	2.1	0.90	6.4	10.0	5.0	9.4	0.2	5	5
501502	0.016	5021	0.035	450	29.0	63.0	33.1	2.0	0.95	7.4	10.5	5.0	10.5	0.1	4	4
502505	0.009	8775	0.040	763	86.0	172.7	106.4	2.5	0.64	4.6	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	80	3.4	31.2	17.4	3.3	0.35	2.6	5.4	3.0	4.4	0.5	14	14
504505	0.013	7754	0.043	70	54.4	29.7	30.4	2.0	0.45	2.5	3.2	1.8	2.6	0.7	20	20
505509	0.006	6213	0.047	896	150.9	289.7	188.6	1.9	0.46	3.3	4.3	2.4	3.5	0.4	12	12
506508	0.015	4023	0.045	79	10.3	24.3	18.9	2.6	0.53	3.4	5.6	2.9	5.0	0.2	5	6
507508	0.011	5400	0.045	86	10.9	32.0	27.0	1.9	0.46	2.8	5.0	2.7	4.2	0.3	9	9
508509	0.008	10349	0.041	308	14.8	76.8	45.9	3.3	0.57	4.2	5.7	3.2	4.6	0.5	15	15
509510	0.010	1958	0.043	1079	26.3	215.3	107.3	3.3	0.64	5.2	8.2	3.3	12.3	0.1	2	2
510511	0.007	6722	0.044	1158	14.4	217.9	73.9	5.1	0.56	5.4	6.2	3.4	5.3	0.3	9	9
511512	0.008	9226	0.044	1262	19.5	294.0	130.7	4.7	0.52	4.4	7.0	3.8	5.8	0.4	11	11

Table D-4

Summary of the normal depth reach route hydraulic data for the existing condition 10-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	557	20.0	73.6	51.8	2.8	1.17	7.9	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	850	90.0	119.3	97.9	1.3	1.21	7.6	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	1439	257.0	277.7	262.1	1.1	0.95	5.6	10.6	5.4	9.5	0.2	6	6
603604	0.019	7830	0.035	2216	275.0	359.0	281.7	1.3	1.03	6.6	8.2	4.3	7.0	0.3	8	8
604605	0.007	1543	0.035	2373	85.0	374.7	124.9	3.6	0.66	6.5	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	2420	33.0	261.7	128.1	3.3	1.18	9.6	15.3	6.9	17.3	0.1	3	3
606608	0.018	1141	0.035	2649	87.0	294.8	129.0	2.7	1.08	9.2	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	447	48.0	59.8	51.6	1.2	1.30	8.0	11.6	6.2	10.0	0.3	8	8
608609	0.012	6518	0.035	3034	42.0	364.0	140.0	4.0	0.94	8.6	10.9	5.4	10.2	0.2	4	5
609611	0.003	6519	0.035	3138	180.0	672.2	223.7	3.3	0.49	4.8	6.0	3.3	5.1	0.3	8	9
610611	0.010	7981	0.035	614	9.0	100.2	22.4	6.4	0.52	6.2	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	3427	88.0	261.2	114.4	2.6	1.58	13.5	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	629	70.0	84.0	72.4	1.2	1.32	8.0	12.2	6.2	11.0	0.2	6	6
613614	0.011	5557	0.035	3668	80.0	408.7	104.5	4.4	0.81	9.1	11.6	5.5	11.6	0.1	4	4
614615	0.014	7995	0.035	3641	45.0	350.5	94.4	5.0	0.97	10.6	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.042	277	24.0	56.2	47.5	1.9	0.84	5.2	7.0	3.8	5.9	0.3	9	9
705OAF	0.008	2254	0.045	381	156.4	206.7	359.4	0.9	0.48	2.1	2.7	1.4	2.4	0.2	7	7
709710	0.026	2683	0.035	292	35.0	47.4	44.0	1.2	1.12	6.6	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	144	35.0	27.7	45.4	0.7	1.32	5.9	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	186	45.0	44.0	52.9	0.9	0.88	4.6	8.5	3.4	12.7	0.1	2	2
713714	0.042	831	0.035	114	25.0	20.7	28.9	0.8	1.26	6.1	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	471	30.0	83.8	72.8	1.6	0.97	5.9	7.1	3.5	6.6	0.2	5	5
717718	0.011	7146	0.045	472	95.0	140.2	122.4	1.3	0.59	3.6	4.0	2.2	3.2	0.5	15	15
721722	0.017	8812	0.035	165	35.0	38.7	44.7	1.0	0.87	4.6	6.1	3.4	5.0	0.4	12	12
726727	0.019	6228	0.035	363	55.0	69.2	66.4	1.1	0.97	5.6	8.7	4.4	7.8	0.2	6	6

Table D-5

Summary of the normal depth reach route hydraulic data for the existing condition 5-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	197	12.3	39.4	29.6	1.9	0.80	5.2	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	150	14.0	31.7	22.7	1.7	0.74	5.0	6.7	3.6	5.7	0.3	9	9
102103	0.012	8068	0.041	414	17.6	73.5	51.4	2.4	0.87	5.9	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	572	22.0	95.6	37.8	3.5	0.68	6.2	9.0	4.8	7.7	0.3	8	8
104105	0.012	6956	0.053	593	21.8	138.7	93.7	3.2	0.64	4.4	4.8	2.7	4.0	0.4	12	12
200201	0.023	3952	0.030	389	21.0	42.9	26.4	1.8	1.31	9.5	11.0	4.9	12.4	0.1	3	3
201203	0.016	3233	0.047	462	32.1	92.3	95.1	2.0	0.94	5.3	6.7	3.2	6.8	0.1	4	4
202203	0.017	2353	0.030	87	32.1	22.2	36.4	0.8	1.00	4.4	6.5	2.9	7.4	0.1	3	3
203204	0.015	1325	0.048	653	32.1	121.4	97.6	2.3	0.89	5.7	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.042	705	29.8	102.6	64.3	2.8	0.99	7.1	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.039	926	33.4	163.1	57.8	3.7	0.61	5.8	7.6	4.2	6.2	0.4	13	13
206207	0.031	4972	0.041	1041	35.4	104.6	60.2	2.4	1.39	10.4	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.040	1078	29.5	110.6	37.7	3.3	1.03	10.0	15.0	7.2	15.0	0.1	4	4
300301	0.014	5117	0.044	418	37.0	83.6	42.3	2.1	0.65	5.2	8.5	4.3	8.0	0.2	5	5
301302	0.009	8124	0.039	476	27.0	89.6	42.9	2.7	0.67	5.5	8.5	4.5	7.3	0.3	9	8
302303	0.019	7304	0.048	499	40.8	86.6	52.6	2.3	0.83	6.0	8.7	4.6	7.6	0.2	7	7
400401	0.010	7424	0.040	243	7.8	71.5	39.0	3.2	0.46	3.5	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	297	22.2	73.8	54.8	2.3	0.64	4.2	4.2	2.4	3.4	0.5	16	16
402403	0.005	6138	0.043	310	8.7	115.8	64.8	3.2	0.37	2.8	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	338	12.4	70.6	46.5	2.5	0.71	5.0	5.9	3.0	5.3	0.2	6	6
500501	0.013	5972	0.035	262	22.0	47.3	34.0	1.8	0.87	5.8	8.3	4.3	7.5	0.2	6	6
501502	0.016	5021	0.035	333	29.0	52.8	32.4	1.7	0.91	6.6	10.5	5.0	10.5	0.1	4	4
502505	0.009	8775	0.040	496	86.0	133.1	102.4	2.1	0.61	3.9	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	71	3.4	29.0	16.8	3.1	0.34	2.5	5.1	2.8	4.1	0.5	15	15
504505	0.013	7754	0.043	58	54.4	26.4	28.7	1.8	0.44	2.4	3.4	1.9	2.7	0.6	19	19
505509	0.006	6213	0.047	545	150.9	212.4	179.6	1.4	0.44	2.7	2.7	1.6	2.2	0.6	19	19
506508	0.015	4023	0.045	72	10.3	22.9	18.3	2.5	0.52	3.3	4.8	2.5	4.2	0.2	7	7
507508	0.011	5400	0.045	82	10.9	31.2	26.7	1.9	0.45	2.8	4.1	2.2	3.4	0.4	11	11
508509	0.008	10349	0.041	230	14.8	62.8	41.6	3.0	0.55	3.8	5.1	2.9	4.1	0.6	17	17
509510	0.010	1958	0.043	640	26.3	150.0	90.7	2.6	0.61	4.4	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.044	676	14.4	150.1	61.8	4.1	0.52	4.6	6.2	3.4	5.3	0.3	9	9
511512	0.008	9226	0.044	729	19.5	201.0	107.9	3.9	0.48	3.7	5.5	3.1	4.4	0.5	14	14

Table D-5

Summary of the normal depth reach route hydraulic data for the existing condition 5-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	343	20.0	53.0	44.0	2.4	1.10	6.8	9.6	4.3	10.8	0.1	3	3
601602	0.027	6017	0.035	538	90.0	91.2	96.1	1.0	1.16	6.4	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	959	257.0	220.2	261.0	0.9	0.92	4.8	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	1546	275.0	291.6	280.4	1.1	0.99	5.7	6.5	3.6	5.5	0.3	10	10
604605	0.007	1543	0.035	1656	85.0	297.1	117.8	2.9	0.64	5.7	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	1696	33.0	202.5	113.7	2.8	1.14	8.7	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	1868	87.0	235.9	121.7	2.3	1.04	8.2	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	315	48.0	49.0	51.0	1.0	1.26	7.0	10.3	5.6	8.7	0.3	9	9
608609	0.012	6518	0.035	2161	42.0	286.9	125.8	3.4	0.91	7.8	10.9	5.4	10.2	0.2	5	5
609611	0.003	6519	0.035	2238	180.0	544.6	216.1	2.8	0.47	4.2	6.8	3.6	5.8	0.3	8	8
610611	0.010	7981	0.035	449	9.0	82.5	20.7	5.6	0.49	5.5	9.5	5.0	8.3	0.2	7	7
611613	0.038	4445	0.035	2481	88.0	214.0	110.1	2.2	1.52	12.1	12.3	5.5	13.9	0.1	3	3
612613	0.033	8752	0.035	448	70.0	68.8	71.9	1.0	1.27	7.1	9.1	4.9	7.8	0.3	8	8
613614	0.011	5557	0.035	2683	80.0	336.9	100.6	3.7	0.78	8.1	11.6	5.5	11.6	0.1	4	4
614615	0.014	7995	0.035	2660	45.0	285.1	87.3	4.3	0.93	9.5	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.043	183	24.0	41.7	37.8	1.6	0.78	4.6	6.3	3.4	5.2	0.3	10	10
705OAF	0.008	2254	0.045	217	156.4	142.9	312.6	0.7	0.46	1.8	2.7	1.4	2.4	0.2	7	7
709710	0.026	2683	0.035	244	35.0	42.2	43.1	1.1	1.10	6.2	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	131	35.0	25.9	44.8	0.7	1.31	5.6	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	163	45.0	40.9	52.4	0.8	0.87	4.4	8.5	3.4	12.7	0.1	3	2
713714	0.042	831	0.035	91	25.0	18.2	28.4	0.7	1.23	5.6	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	387	30.0	73.1	68.9	1.5	0.96	5.6	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	384	95.0	123.3	119.4	1.2	0.58	3.3	4.0	2.2	3.2	0.5	15	15
721722	0.017	8812	0.035	128	35.0	33.4	43.5	0.9	0.85	4.2	4.3	2.4	3.5	0.6	17	17
726727	0.019	6228	0.035	246	55.0	54.8	64.2	0.9	0.93	4.9	6.5	3.5	5.6	0.3	8	8

Table D-6

Summary of the normal depth reach route hydraulic data for the existing condition 2-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	87	12.3	23.1	24.0	1.3	0.73	4.1	5.4	3.0	4.5	0.3	10	10
101102	0.014	7254	0.040	74	14.0	20.4	20.0	1.2	0.68	3.9	5.5	3.0	4.5	0.4	11	11
102103	0.012	8068	0.039	173	17.6	41.4	37.8	1.7	0.75	4.4	5.6	3.1	4.6	0.4	12	12
103104	0.016	8625	0.053	206	22.0	49.8	31.1	2.1	0.60	4.3	6.5	3.6	5.4	0.4	11	11
104105	0.012	6956	0.053	211	21.8	62.8	42.7	2.0	0.51	3.5	5.3	2.9	4.4	0.4	11	11
200201	0.023	3952	0.030	183	21.0	27.4	24.6	1.2	1.20	7.2	11.0	4.9	12.4	0.1	3	3
201203	0.016	3233	0.044	224	32.1	49.7	59.8	1.4	0.92	4.8	5.4	2.7	5.1	0.2	5	5
202203	0.017	2353	0.030	40	32.1	14.4	34.8	0.6	0.93	3.4	4.9	2.3	4.9	0.1	4	4
203204	0.015	1325	0.046	345	32.1	72.2	80.3	1.8	0.94	5.0	5.5	2.2	8.3	0.1	2	2
204205	0.014	5007	0.039	367	29.8	65.7	42.1	2.0	0.82	5.8	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.039	516	33.4	111.8	51.4	2.7	0.57	4.8	7.1	4.0	5.7	0.5	14	14
206207	0.031	4972	0.039	571	35.4	71.4	50.2	1.8	1.24	8.4	13.8	6.2	15.6	0.1	3	3
207105	0.017	7176	0.039	587	29.5	76.2	35.4	2.4	0.95	7.9	12.0	6.0	11.2	0.2	5	5
300301	0.014	5117	0.044	208	37.0	55.1	40.6	1.4	0.60	4.0	7.1	3.6	6.4	0.2	6	6
301302	0.009	8124	0.039	236	27.0	57.3	37.9	1.9	0.62	4.3	5.6	3.1	4.6	0.4	12	12
302303	0.019	7304	0.048	232	40.8	54.6	49.1	1.7	0.76	4.5	6.8	3.6	5.7	0.3	9	9
400401	0.010	7424	0.040	129	7.8	47.7	32.1	2.5	0.41	2.8	6.2	3.4	5.2	0.3	10	10
401402	0.011	8029	0.043	121	22.2	40.9	44.9	1.6	0.59	3.2	4.5	2.5	3.6	0.5	15	15
402403	0.005	6138	0.043	107	8.7	57.1	46.0	2.1	0.31	2.0	2.6	1.5	2.0	0.7	20	20
403404	0.016	4256	0.045	102	12.4	31.5	32.4	1.5	0.62	3.4	3.9	2.1	3.3	0.3	9	9
500501	0.013	5972	0.035	159	22.0	34.6	31.4	1.4	0.82	4.9	8.3	4.3	7.5	0.2	6	6
501502	0.016	5021	0.035	200	29.0	39.1	31.6	1.3	0.86	5.4	8.4	4.2	7.9	0.2	5	5
502505	0.009	8775	0.040	247	86.0	88.0	97.7	1.6	0.57	3.1	4.9	2.7	3.9	0.5	15	15
503505	0.012	9136	0.047	36	3.4	19.2	13.8	2.5	0.30	2.0	3.3	1.9	2.6	0.8	23	23
504505	0.013	7754	0.043	30	54.4	17.1	23.1	1.5	0.39	1.9	3.2	1.8	2.6	0.7	20	20
505509	0.006	6213	0.047	219	150.9	123.6	168.6	0.9	0.41	2.0	2.5	1.4	1.9	0.7	21	21
506508	0.015	4023	0.045	50	10.3	18.0	16.2	2.2	0.49	2.9	4.8	2.5	4.2	0.2	7	7
507508	0.011	5400	0.045	64	10.9	26.6	25.0	1.7	0.44	2.6	4.1	2.2	3.4	0.4	11	11
508509	0.008	10349	0.041	117	14.8	39.3	32.9	2.4	0.51	3.1	4.1	2.3	3.2	0.7	21	21
509510	0.010	1958	0.043	225	26.3	73.8	66.4	1.6	0.54	3.2	4.1	2.0	4.1	0.1	3	4
510511	0.007	6722	0.044	231	14.4	71.9	43.9	2.6	0.46	3.3	4.3	2.4	3.5	0.4	13	13
511512	0.008	9226	0.044	232	19.5	92.6	72.8	2.7	0.41	2.6	3.5	2.0	2.8	0.7	22	22

Table D-6

Summary of the normal depth reach route hydraulic data for the existing condition 2-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	195	20.0	36.1	36.3	2.0	1.01	5.7	7.2	3.5	7.2	0.1	4	4
601602	0.027	6017	0.035	329	90.0	68.3	94.6	0.7	1.10	5.3	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	586	257.0	165.5	260.0	0.6	0.87	4.0	10.6	5.4	9.5	0.2	6	6
603604	0.019	7830	0.035	968	275.0	221.7	279.1	0.8	0.95	4.8	6.5	3.6	5.5	0.3	10	10
604605	0.007	1543	0.035	1032	85.0	220.7	110.3	2.3	0.60	4.8	12.9	3.8	19.3	0.0	2	1
605606	0.020	5520	0.035	1061	33.0	145.3	97.9	2.2	1.10	7.6	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	1158	87.0	174.7	113.8	1.7	0.99	7.0	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	147	48.0	31.3	49.9	0.6	1.16	5.2	7.2	4.0	5.8	0.4	14	13
608609	0.012	6518	0.035	1349	42.0	206.0	108.9	2.7	0.87	6.8	10.9	5.4	10.2	0.2	5	5
609611	0.003	6519	0.035	1396	180.0	406.9	207.6	2.1	0.45	3.6	6.0	3.3	5.1	0.3	9	9
610611	0.010	7981	0.035	265	9.0	59.6	18.2	4.4	0.44	4.5	9.5	5.0	8.3	0.2	7	7
611613	0.038	4445	0.035	1530	88.0	159.2	104.9	1.7	1.45	10.1	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	225	70.0	46.6	71.3	0.7	1.19	5.5	9.1	4.9	7.8	0.3	9	8
613614	0.011	5557	0.035	1637	80.0	248.6	95.7	2.8	0.74	6.8	11.6	5.5	11.6	0.1	4	4
614615	0.014	7995	0.035	1608	45.0	205.8	77.9	3.4	0.87	8.0	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.045	66	24.0	22.2	28.4	1.0	0.65	3.2	4.8	2.7	3.9	0.4	13	13
705OAF	0.008	2254	0.045	101	156.4	87.9	265.9	0.5	0.44	1.4	2.1	1.1	1.8	0.3	9	9
709710	0.026	2683	0.035	136	35.0	30.0	40.9	0.8	1.04	5.0	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	112	35.0	23.7	44.0	0.6	1.29	5.4	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	118	45.0	34.2	51.2	0.7	0.84	3.9	4.2	2.0	4.2	0.1	4	4
713714	0.042	831	0.035	53	25.0	13.4	27.6	0.5	1.17	4.6	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	224	30.0	50.7	59.7	1.1	0.91	4.8	5.9	3.0	5.3	0.2	6	6
717718	0.011	7146	0.045	220	95.0	87.3	112.9	0.8	0.55	2.7	4.0	2.2	3.2	0.5	15	15
721722	0.017	8812	0.035	78	35.0	24.9	41.5	0.7	0.81	3.6	4.3	2.4	3.5	0.6	17	17
726727	0.019	6228	0.035	94	55.0	31.2	60.4	0.5	0.85	3.5	3.7	2.1	3.0	0.5	14	14

Table D-7

Summary of the normal depth reach route hydraulic data for the existing condition 100-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.045	500	12.3	84.5	65.4	2.9	0.96	6.2	6.8	3.6	5.8	0.2667	8	8
101102	0.014	7254	0.040	353	14.0	54.7	27.3	2.7	0.83	6.7	10.1	5.2	9.1	0.2000	6	6
102103	0.012	8068	0.047	1450	17.6	190.1	89.8	4.0	0.95	7.8	9.6	5.0	8.4	0.2333	7	7
103104	0.016	8625	0.053	2409	22.0	241.0	53.9	6.6	0.85	10.1	12.0	6.1	10.8	0.2000	6	6
104105	0.012	6956	0.053	2663	21.8	393.3	115.2	5.6	0.66	6.9	8.3	4.3	7.3	0.2333	7	7
200201	0.023	3952	0.030	1058	21.0	79.2	30.3	3.1	1.49	13.7	33.0	9.9	49.5	0.0333	1	1
201203	0.016	3233	0.048	1385	32.1	200.8	101.0	3.1	0.89	7.1	9.0	4.0	10.1	0.1000	3	3
202203	0.017	2353	0.030	158	32.1	31.6	38.3	1.1	1.06	5.5	9.8	3.9	14.7	0.0667	2	2
203204	0.015	1325	0.048	2582	32.1	305.1	105.4	4.1	0.90	8.7	0.0	0.0	0.0	0.0000	1	1
204205	0.014	5007	0.045	2879	29.8	310.8	106.4	5.0	0.97	9.4	13.9	6.2	15.7	0.1000	3	3
205206	0.006	11893	0.044	3899	33.4	511.4	131.1	6.7	0.69	7.7	9.9	5.4	8.3	0.3333	10	10
206207	0.031	4972	0.045	4397	35.4	290.4	87.2	4.7	1.49	15.5	20.7	8.3	31.2	0.0667	2	2
207105	0.017	7176	0.044	4607	29.5	284.8	47.9	7.4	1.18	16.3	29.9	11.9	45.0	0.0667	2	2
300301	0.014	5117	0.044	1417	37.0	175.1	47.4	4.2	0.76	8.3	14.2	6.4	16.0	0.1000	3	3
301302	0.009	8124	0.046	1748	27.0	239.9	123.5	4.9	0.94	7.4	7.5	4.1	6.4	0.3000	9	9
302303	0.019	7304	0.050	2030	40.8	209.6	64.8	4.4	0.97	9.9	15.2	7.3	15.3	0.1333	4	4
400401	0.010	7424	0.040	453	7.8	106.9	47.4	4.0	0.51	4.3	6.9	3.7	5.8	0.3000	9	9
401402	0.011	8029	0.043	799	22.2	144.5	71.6	3.4	0.71	5.7	6.1	3.3	5.0	0.3667	11	11
402403	0.005	6138	0.043	1096	8.7	281.2	128.5	5.1	0.48	4.0	5.1	2.8	4.3	0.3333	10	10
403404	0.016	4256	0.045	1357	12.4	185.4	73.7	4.4	0.83	7.5	11.8	5.3	13.3	0.1000	3	3
500501	0.013	5972	0.036	725	22.0	91.1	43.3	3.0	1.00	8.2	12.4	6.0	12.5	0.1333	4	4
501502	0.016	5021	0.035	1035	29.0	104.1	35.5	3.2	1.05	10.2	20.9	8.4	31.5	0.0667	2	2
502505	0.009	8775	0.040	1815	86.0	296.0	117.2	3.6	0.70	6.3	10.4	5.5	9.2	0.2333	7	7
503505	0.012	9136	0.047	88	3.4	33.4	18.0	3.4	0.36	2.7	5.1	2.8	4.1	0.5000	15	15
504505	0.013	7754	0.043	84	54.4	33.4	32.3	2.1	0.47	2.7	5.0	2.8	4.0	0.4333	13	13
505509	0.006	6213	0.047	2394	150.9	540.2	215.4	3.1	0.51	4.6	5.2	2.8	4.3	0.3333	10	10
506508	0.015	4023	0.045	87	10.3	25.9	19.5	2.7	0.54	3.5	5.6	2.9	5.0	0.2000	6	6
507508	0.011	5400	0.045	95	10.9	34.2	27.8	2.0	0.46	2.9	5.0	2.7	4.2	0.3000	9	9
508509	0.008	10349	0.041	478	14.8	104.6	53.5	3.9	0.59	4.7	5.4	3.0	4.3	0.5333	16	16
509510	0.010	1958	0.044	3153	26.3	538.7	300.2	5.0	0.79	6.0	5.4	2.4	6.1	0.1000	3	3
510511	0.007	6722	0.045	3417	14.4	624.3	358.8	7.3	0.75	5.6	5.1	2.8	4.2	0.3667	11	11
511512	0.008	9226	0.044	3700	19.5	618.8	210.7	6.7	0.63	6.1	7.7	4.2	6.4	0.3333	10	10

Table D-7

Summary of the normal depth reach route hydraulic data for the existing condition 100-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1791	20.0	162.2	74.1	4.2	1.36	11.4	14.4	5.8	21.7	0.0667	2	2
601602	0.027	6017	0.035	2669	90.0	237.2	105.2	2.4	1.36	11.6	16.7	7.5	18.9	0.1000	3	3
602603	0.017	7614	0.035	4665	257.0	552.8	267.0	2.1	1.07	8.7	9.1	4.7	8.0	0.2333	7	7
603604	0.019	7830	0.035	7211	275.0	718.0	288.2	2.6	1.15	10.3	13.0	6.5	12.3	0.1667	4	5
604605	0.007	1543	0.035	7795	85.0	820.6	160.0	6.7	0.75	9.6	12.9	3.8	19.3	0.0333	1	1
605606	0.020	5520	0.042	7900	33.0	690.5	296.7	5.1	1.36	11.7	15.3	6.9	17.3	0.1000	3	3
606608	0.018	1141	0.035	8528	87.0	642.0	165.3	5.1	1.21	13.5	0.0	0.0	0.0	0.0000	1	1
607608	0.024	11167	0.030	681	48.0	77.0	52.6	1.5	1.36	9.4	15.5	8.0	14.0	0.2000	6	6
608609	0.012	6518	0.035	9794	42.0	839.6	207.1	6.7	1.04	11.8	13.6	6.5	13.6	0.1333	4	4
609611	0.003	6519	0.035	10158	180.0	1428.7	264.4	6.4	0.55	7.2	10.9	5.4	10.2	0.1667	5	5
610611	0.010	7981	0.035	1014	9.0	136.6	25.6	7.9	0.57	7.5	13.3	6.6	12.5	0.1667	5	5
611613	0.038	4445	0.035	11024	88.0	554.3	138.2	4.9	1.78	20.3	37.1	11.1	55.7	0.0333	1	1
612613	0.033	8752	0.035	1024	70.0	110.9	73.1	1.6	1.38	9.7	14.6	7.3	13.7	0.1667	5	5
613614	0.011	5557	0.035	11707	80.0	852.2	125.8	8.3	0.94	13.9	23.1	9.2	34.8	0.0667	2	2
614615	0.014	7995	0.035	11667	45.0	769.4	130.9	8.8	1.12	15.3	22.2	10.0	25.0	0.1000	4	3
704705	0.019	7534	0.041	455	24.0	80.4	60.2	2.4	0.90	5.9	9.0	4.7	7.9	0.2333	7	7
705OAF	0.008	2254	0.045	622	156.4	283.4	407.8	1.1	0.51	2.4	3.1	1.6	2.8	0.2000	8	6
709710	0.026	2683	0.035	362	35.0	53.6	45.1	1.3	1.15	7.1	7.5	3.3	8.4	0.1000	3	3
711712	0.044	1586	0.035	156	35.0	29.1	45.8	0.7	1.33	6.0	6.6	2.6	9.9	0.0667	1	2
712714	0.017	2032	0.035	206	45.0	47.2	53.4	1.0	0.89	4.8	8.5	3.4	12.7	0.0667	3	2
713714	0.042	831	0.035	131	25.0	22.5	29.2	0.8	1.28	6.4	6.9	2.1	10.4	0.0333	1	1
716717	0.018	4232	0.035	572	30.0	95.8	77.0	1.8	0.99	6.3	8.8	4.2	8.8	0.1333	4	4
717718	0.011	7146	0.045	705	95.0	180.5	129.2	1.6	0.61	4.1	5.4	3.0	4.5	0.3667	11	11
721722	0.017	8812	0.035	213	35.0	45.5	46.2	1.1	0.90	5.0	8.2	4.4	6.9	0.3000	9	9
726727	0.019	6228	0.035	469	55.0	81.3	68.2	1.3	0.99	6.2	10.4	5.2	9.8	0.1667	5	5

Table D-8

Summary of the normal depth reach route hydraulic data for the existing condition 50-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.044	405	12.3	71.3	61.2	2.6	0.97	6.0	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	286	14.0	47.7	26.0	2.4	0.81	6.2	8.6	4.5	7.6	0.2	7	7
102103	0.012	8068	0.046	1175	17.6	160.9	81.9	3.7	0.94	7.5	9.6	5.0	8.4	0.2	7	7
103104	0.016	8625	0.053	1948	22.0	209.5	50.9	6.0	0.82	9.5	12.0	6.1	10.8	0.2	6	6
104105	0.012	6956	0.053	2148	21.8	342.0	112.7	5.1	0.65	6.4	9.7	5.0	8.7	0.2	6	6
200201	0.023	3952	0.030	863	21.0	70.0	29.3	2.8	1.45	12.7	33.0	9.9	49.5	0.0	1	1
201203	0.016	3233	0.048	1124	32.1	174.7	99.9	2.8	0.89	6.7	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.030	131	32.1	28.1	37.6	1.0	1.04	5.1	9.8	3.9	14.7	0.1	2	2
203204	0.015	1325	0.048	2092	32.1	266.4	103.8	3.7	0.89	8.1	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.045	2326	29.8	267.7	103.9	4.6	0.98	8.9	13.9	6.2	15.7	0.1	3	3
205206	0.006	11893	0.044	3149	33.4	440.1	128.1	6.2	0.69	7.3	9.0	4.9	7.5	0.4	11	11
206207	0.031	4972	0.045	3541	35.4	250.0	84.5	4.3	1.49	14.5	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.043	3712	29.5	245.9	45.8	6.5	1.16	15.3	19.9	9.0	22.5	0.1	3	3
300301	0.014	5117	0.044	1148	37.0	154.0	46.3	3.7	0.74	7.6	10.7	5.1	10.7	0.1	4	4
301302	0.009	8124	0.045	1424	27.0	196.9	96.9	4.5	0.92	7.4	7.5	4.1	6.4	0.3	9	9
302303	0.019	7304	0.049	1686	40.8	185.5	62.3	4.0	0.95	9.3	15.2	7.3	15.3	0.1	4	4
400401	0.010	7424	0.040	417	7.8	101.3	46.1	3.9	0.50	4.2	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	680	22.2	129.2	68.3	3.2	0.70	5.4	6.7	3.6	5.6	0.3	11	10
402403	0.005	6138	0.043	907	8.7	242.1	101.7	4.7	0.44	3.8	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	1099	12.4	159.8	68.6	4.0	0.81	7.0	8.9	4.2	8.9	0.1	4	4
500501	0.013	5972	0.035	583	22.0	79.1	39.9	2.7	0.95	7.6	10.0	5.0	9.4	0.2	5	5
501502	0.016	5021	0.035	835	29.0	91.5	34.7	2.9	1.02	9.4	13.9	6.3	15.7	0.1	3	3
502505	0.009	8775	0.040	1560	86.0	270.4	115.4	3.3	0.69	6.0	9.1	4.9	7.9	0.3	8	8
503505	0.012	9136	0.047	84	3.4	32.3	17.7	3.3	0.35	2.7	5.4	3.0	4.4	0.5	14	14
504505	0.013	7754	0.043	78	54.4	31.8	31.5	2.0	0.46	2.6	3.4	1.9	2.7	0.6	19	19
505509	0.006	6213	0.047	2009	150.9	480.8	209.4	2.8	0.50	4.3	5.2	2.8	4.3	0.3	9	10
506508	0.015	4023	0.045	85	10.3	25.5	19.3	2.6	0.54	3.5	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	92	10.9	33.4	27.5	2.0	0.46	2.9	5.0	2.7	4.2	0.3	9	9
508509	0.008	10349	0.041	417	14.8	95.2	51.0	3.7	0.59	4.5	5.7	3.2	4.6	0.5	15	15
509510	0.010	1958	0.044	2605	26.3	451.8	270.9	4.7	0.81	5.9	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.045	2805	14.4	500.2	294.4	7.0	0.78	5.7	5.1	2.8	4.2	0.4	11	11
511512	0.008	9226	0.044	3018	19.5	542.4	181.0	6.3	0.58	5.7	8.5	4.6	7.2	0.3	9	9

Table D-8

Summary of the normal depth reach route hydraulic data for the existing condition 50-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1417	20.0	139.5	71.4	3.9	1.32	10.5	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	2137	90.0	206.9	103.4	2.1	1.33	10.7	16.7	7.5	18.9	0.1	3	3
602603	0.017	7614	0.035	3536	257.0	470.3	265.6	1.8	1.04	7.9	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	5540	275.0	614.6	286.3	2.2	1.12	9.3	13.0	6.5	12.3	0.2	5	5
604605	0.007	1543	0.035	6001	85.0	688.7	150.4	5.9	0.73	8.9	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.042	6084	33.0	560.7	293.2	4.7	1.42	11.1	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	6583	87.0	539.4	155.4	4.5	1.18	12.5	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	562	48.0	68.6	52.1	1.4	1.33	8.7	15.5	8.0	14.0	0.2	6	6
608609	0.012	6518	0.035	7568	42.0	696.8	189.5	6.0	1.01	11.0	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	7842	180.0	1206.2	253.1	5.6	0.53	6.6	10.9	5.4	10.2	0.2	5	5
610611	0.010	7981	0.035	849	9.0	122.4	24.4	7.3	0.55	7.0	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	8513	88.0	467.9	131.7	4.3	1.73	18.6	37.1	11.1	55.7	0.0	1	1
612613	0.033	8752	0.035	854	70.0	100.0	72.8	1.4	1.36	9.0	18.2	8.7	18.3	0.1	4	4
613614	0.011	5557	0.035	9022	80.0	720.7	119.9	7.2	0.91	12.7	23.1	9.2	34.8	0.1	2	2
614615	0.014	7995	0.035	8984	45.0	643.4	121.0	7.8	1.08	14.1	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.041	374	24.0	70.0	55.1	2.2	0.88	5.6	7.8	4.2	6.7	0.3	8	8
705OAF	0.008	2254	0.045	556	156.4	263.3	395.7	1.0	0.51	2.3	3.8	1.9	3.5	0.2	5	5
709710	0.026	2683	0.035	331	35.0	50.9	44.6	1.3	1.14	6.9	7.5	3.3	8.4	0.1	3	3
711712	0.044	1586	0.035	148	35.0	28.2	45.5	0.7	1.32	5.9	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	195	45.0	45.6	53.1	0.9	0.89	4.7	8.5	3.4	12.7	0.1	3	2
713714	0.042	831	0.035	118	25.0	21.3	29.0	0.8	1.27	6.2	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	541	30.0	91.9	75.7	1.7	0.99	6.2	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	621	95.0	166.4	126.9	1.5	0.61	3.9	3.7	2.1	3.0	0.5	16	16
721722	0.017	8812	0.035	191	35.0	42.3	45.5	1.1	0.89	4.8	8.2	4.4	6.9	0.3	9	9
726727	0.019	6228	0.035	394	55.0	73.2	67.0	1.2	0.98	5.8	10.4	5.2	9.8	0.2	5	5

Table D-9

Summary of the normal depth reach route hydraulic data for the existing condition 25-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.044	313	12.3	56.3	58.7	2.4	1.05	5.8	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	221	14.0	40.4	24.5	2.1	0.78	5.7	7.6	4.0	6.5	0.3	8	8
102103	0.012	8068	0.045	911	17.6	131.4	73.1	3.3	0.94	7.1	9.6	5.0	8.4	0.2	7	7
103104	0.016	8625	0.053	1501	22.0	177.0	47.5	5.4	0.79	8.6	12.0	6.1	10.8	0.2	6	6
104105	0.012	6956	0.053	1651	21.8	288.6	110.0	4.6	0.64	5.9	8.3	4.3	7.3	0.2	7	7
200201	0.023	3952	0.030	667	21.0	59.6	28.3	2.4	1.40	11.6	33.0	9.9	49.5	0.0	1	1
201203	0.016	3233	0.048	865	32.1	145.9	98.6	2.5	0.89	6.2	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.030	105	32.1	24.8	37.0	0.9	1.02	4.7	9.8	3.9	14.7	0.1	2	2
203204	0.015	1325	0.048	1599	32.1	223.2	102.0	3.3	0.88	7.4	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.045	1779	29.8	220.6	101.0	4.1	0.99	8.3	10.4	5.0	10.5	0.1	4	4
205206	0.006	11893	0.044	2405	33.4	361.7	124.7	5.6	0.70	6.8	8.3	4.6	6.8	0.4	12	12
206207	0.031	4972	0.045	2691	35.4	206.0	81.5	3.7	1.48	13.4	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.042	2817	29.5	204.4	43.5	5.6	1.14	14.0	19.9	9.0	22.5	0.1	3	3
300301	0.014	5117	0.044	879	37.0	130.8	45.0	3.2	0.71	6.9	10.7	5.1	10.7	0.1	4	4
301302	0.009	8124	0.042	1089	27.0	156.4	68.4	4.0	0.83	7.1	9.7	5.1	8.5	0.2	7	7
302303	0.019	7304	0.049	1303	40.8	157.4	59.7	3.6	0.92	8.5	12.2	6.1	11.4	0.2	5	5
400401	0.010	7424	0.040	369	7.8	93.6	44.4	3.7	0.49	4.1	6.2	3.4	5.2	0.3	10	10
401402	0.011	8029	0.043	564	22.2	113.8	64.8	2.9	0.69	5.2	6.7	3.6	5.6	0.3	11	10
402403	0.005	6138	0.043	725	8.7	206.5	86.2	4.4	0.41	3.6	4.3	2.4	3.5	0.4	12	12
403404	0.016	4256	0.045	860	12.4	134.7	63.2	3.7	0.79	6.6	8.9	4.2	8.9	0.1	4	4
500501	0.013	5972	0.035	445	22.0	66.3	37.7	2.4	0.92	7.0	8.3	4.3	7.5	0.2	6	6
501502	0.016	5021	0.035	637	29.0	77.7	33.9	2.5	0.99	8.5	13.9	6.3	15.7	0.1	3	3
502505	0.009	8775	0.040	1205	86.0	229.5	111.9	3.0	0.67	5.4	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	77	3.4	30.7	17.3	3.2	0.35	2.6	5.4	3.0	4.4	0.5	14	14
504505	0.013	7754	0.043	72	54.4	30.0	30.6	2.0	0.45	2.5	3.2	1.8	2.6	0.7	20	20
505509	0.006	6213	0.047	1577	150.9	412.9	202.2	2.5	0.49	4.0	5.8	3.1	4.9	0.3	9	9
506508	0.015	4023	0.045	78	10.3	24.2	18.8	2.6	0.53	3.4	5.6	2.9	5.0	0.2	5	6
507508	0.011	5400	0.045	88	10.9	32.6	27.2	2.0	0.46	2.9	5.0	2.7	4.2	0.3	9	9
508509	0.008	10349	0.041	354	14.8	84.8	48.2	3.5	0.58	4.3	5.4	3.0	4.3	0.5	16	16
509510	0.010	1958	0.044	2077	26.3	362.4	212.1	4.3	0.79	5.9	5.4	2.4	6.1	0.1	2	3
510511	0.007	6722	0.045	2237	14.4	384.8	218.2	6.5	0.79	5.9	5.1	2.8	4.2	0.4	11	11
511512	0.008	9226	0.044	2513	19.5	476.9	166.6	5.9	0.56	5.4	7.7	4.2	6.4	0.3	10	10

Table D-9

Summary of the normal depth reach route hydraulic data for the existing condition 25-year, 24-hour storm

Routing Reach	Reach: Slope ft/ft	Reach: Length feet	Reach: Average n value	Reach: Average Q cfs	Manning's Equation: Bottom Width feet	Manning's Equation: Flow Area sq. ft	Manning's Equation: Flow Top Width feet	Manning's Equation: Flow Depth feet	Manning's Equation: Froude Number	Manning's Equation: Average Velocity in fps	Computed Using HEC-1 Summary Data: Wave Celerity in fps	Computed Using HEC-1 Summary Data: Velocity Range in fps: Min.	Computed Using HEC-1 Summary Data: Velocity Range in fps: Max.	Computed Using HEC-1 Summary Data: Travel: Time in hrs	Computed Using HEC-1 Summary Data: Travel: NSTEPS Comp	NSTEPS in HEC-1 Input File
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1045	20.0	113.1	64.2	3.5	1.27	9.6	28.9	8.6	43.4	0.0	1	1
601602	0.027	6017	0.035	1610	90.0	174.2	101.4	1.8	1.29	9.6	16.7	7.5	18.9	0.1	3	3
602603	0.017	7614	0.035	2839	257.0	412.0	264.5	1.6	1.02	7.2	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	4373	275.0	534.7	284.9	1.9	1.10	8.5	13.0	6.5	12.3	0.2	5	5
604605	0.007	1543	0.035	4677	85.0	583.3	142.4	5.1	0.71	8.2	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.042	4754	33.0	452.8	290.4	4.3	1.52	10.8	15.3	6.9	17.3	0.1	4	3
606608	0.018	1141	0.035	5168	87.0	457.7	147.1	3.9	1.15	11.5	0.0	0.0	0.0	0.0	1	1
607608	0.024	11167	0.030	438	48.0	59.2	51.6	1.2	1.30	7.9	11.6	6.2	10.0	0.3	8	8
608609	0.012	6518	0.035	5966	42.0	587.5	174.8	5.4	0.99	10.3	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	6186	180.0	1034.7	244.1	4.9	0.52	6.1	9.1	4.6	8.2	0.2	6	6
610611	0.010	7981	0.035	688	9.0	107.4	23.1	6.7	0.53	6.5	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	6730	88.0	402.1	126.4	3.8	1.69	17.1	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	692	70.0	88.3	72.5	1.2	1.33	8.3	14.6	7.3	13.7	0.2	5	5
613614	0.011	5557	0.035	7156	80.0	621.9	115.3	6.4	0.88	11.6	23.1	9.2	34.8	0.1	2	2
614615	0.014	7995	0.035	7131	45.0	549.7	113.2	7.0	1.05	13.1	22.2	10.0	25.0	0.1	3	3
704705	0.019	7534	0.042	289	24.0	57.6	48.3	1.9	0.85	5.3	7.8	4.2	6.7	0.3	8	8
705OAF	0.008	2254	0.045	473	156.4	240.0	381.2	1.0	0.50	2.2	2.7	1.4	2.4	0.2	7	7
709710	0.026	2683	0.035	294	35.0	47.4	44.0	1.2	1.12	6.6	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	138	35.0	26.8	45.1	0.7	1.31	5.7	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	182	45.0	43.5	52.8	0.9	0.88	4.5	5.6	2.5	6.4	0.1	2	3
713714	0.042	831	0.035	102	25.0	19.3	28.6	0.7	1.25	5.8	3.5	1.4	5.2	0.1	2	2
716717	0.018	4232	0.035	498	30.0	87.4	74.1	1.7	0.98	6.0	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	541	95.0	152.6	124.5	1.4	0.60	3.8	3.5	2.0	2.8	0.6	17	17
721722	0.017	8812	0.035	169	35.0	39.6	44.9	1.0	0.88	4.7	6.7	3.7	5.5	0.4	11	11
726727	0.019	6228	0.035	319	55.0	63.9	65.6	1.1	0.95	5.3	8.7	4.4	7.8	0.2	6	6

Table D-10

Summary of the normal depth reach route hydraulic data for the existing condition 10-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	201	12.3	40.0	29.8	2.0	0.80	5.3	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	142	14.0	30.6	22.4	1.7	0.74	4.9	6.0	3.3	5.1	0.3	10	10
102103	0.012	8068	0.043	590	17.6	94.8	60.3	2.8	0.91	6.5	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	958	22.0	133.8	42.6	4.4	0.73	7.3	12.0	6.1	10.8	0.2	6	6
104105	0.012	6956	0.053	1048	21.8	212.9	106.1	3.9	0.63	5.1	6.4	3.5	5.4	0.3	9	9
200201	0.023	3952	0.030	435	21.0	45.8	26.8	1.9	1.33	9.9	16.5	6.6	24.8	0.1	2	2
201203	0.016	3233	0.047	563	32.1	107.8	96.9	2.1	0.92	5.5	6.7	3.2	6.8	0.1	4	4
202203	0.017	2353	0.030	71	32.1	19.7	35.9	0.7	0.98	4.1	6.5	2.9	7.4	0.1	3	3
203204	0.015	1325	0.048	1022	32.1	165.7	99.5	2.7	0.88	6.4	5.5	2.2	8.3	0.1	2	2
204205	0.014	5007	0.044	1134	29.8	156.2	96.9	3.4	1.04	7.5	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.044	1539	33.4	253.1	119.0	4.7	0.75	6.2	6.2	3.5	5.0	0.5	16	16
206207	0.031	4972	0.044	1726	35.4	150.4	77.5	3.0	1.50	11.9	13.8	6.2	15.6	0.1	3	3
207105	0.017	7176	0.041	1813	29.5	153.6	40.5	4.4	1.09	12.0	19.9	9.0	22.5	0.1	3	3
300301	0.014	5117	0.044	556	37.0	99.0	43.2	2.5	0.67	5.8	10.7	5.1	10.7	0.1	4	4
301302	0.009	8124	0.039	690	27.0	113.6	46.2	3.2	0.70	6.2	8.5	4.5	7.3	0.3	8	8
302303	0.019	7304	0.049	823	40.8	117.6	55.8	2.9	0.88	7.3	10.1	5.2	9.2	0.2	6	6
400401	0.010	7424	0.040	293	7.8	80.8	41.3	3.4	0.47	3.8	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	423	22.2	93.3	59.9	2.6	0.67	4.7	5.6	3.1	4.6	0.4	12	12
402403	0.005	6138	0.043	502	8.7	161.0	76.2	3.8	0.39	3.2	4.3	2.4	3.5	0.4	12	12
403404	0.016	4256	0.045	576	12.4	102.2	55.3	3.1	0.76	5.9	8.9	4.2	8.9	0.1	4	4
500501	0.013	5972	0.035	282	22.0	49.4	34.4	1.9	0.88	6.0	8.3	4.3	7.5	0.2	6	6
501502	0.016	5021	0.035	404	29.0	59.0	32.8	1.9	0.93	7.1	10.5	5.0	10.5	0.1	4	4
502505	0.009	8775	0.040	782	86.0	175.9	106.7	2.5	0.64	4.6	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	67	3.4	28.0	16.5	3.1	0.34	2.5	5.9	3.3	4.8	0.4	13	13
504505	0.013	7754	0.043	59	54.4	26.4	28.7	1.8	0.44	2.4	3.4	1.9	2.7	0.6	19	19
505509	0.006	6213	0.047	1022	150.9	312.5	191.2	2.0	0.47	3.4	5.2	2.8	4.3	0.3	10	10
506508	0.015	4023	0.045	70	10.3	22.5	18.1	2.5	0.52	3.3	4.8	2.5	4.2	0.2	7	7
507508	0.011	5400	0.045	82	10.9	31.2	26.7	1.9	0.45	2.8	4.1	2.2	3.4	0.4	11	11
508509	0.008	10349	0.041	273	14.8	70.5	44.0	3.2	0.56	4.0	5.4	3.0	4.3	0.5	16	16
509510	0.010	1958	0.043	1355	26.3	253.3	115.8	3.6	0.66	5.5	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.044	1442	14.4	254.8	79.7	5.6	0.57	5.8	6.2	3.4	5.3	0.3	9	9
511512	0.008	9226	0.044	1560	19.5	341.6	140.9	5.0	0.53	4.7	6.4	3.5	5.3	0.4	11	12

Table D-10

Summary of the normal depth reach route hydraulic data for the existing condition 10-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	612	20.0	78.3	53.5	2.9	1.19	8.2	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	983	90.0	130.2	98.6	1.4	1.23	8.0	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	1731	257.0	309.2	262.7	1.2	0.97	6.0	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	2719	275.0	404.2	282.5	1.5	1.05	7.1	13.0	6.5	12.3	0.2	5	5
604605	0.007	1543	0.035	2939	85.0	429.5	129.8	4.0	0.68	7.0	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	2986	33.0	304.2	137.4	3.6	1.20	10.1	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	3249	87.0	336.9	133.9	3.1	1.10	9.9	0.0	0.0	0.0	0.0	1	1
607608	0.024	11167	0.030	288	48.0	46.4	50.8	0.9	1.25	6.8	10.3	5.6	8.7	0.3	9	9
608609	0.012	6518	0.035	3743	42.0	422.0	149.8	4.4	0.95	9.1	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	3873	180.0	767.3	229.2	3.8	0.50	5.1	9.1	4.6	8.2	0.2	6	6
610611	0.010	7981	0.035	495	9.0	87.5	21.2	5.8	0.50	5.7	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	4226	88.0	298.3	117.7	2.9	1.61	14.5	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	491	70.0	72.4	72.0	1.0	1.28	7.3	10.4	5.5	9.1	0.2	7	7
613614	0.011	5557	0.035	4547	80.0	468.1	107.6	5.0	0.84	9.9	11.6	5.5	11.6	0.1	4	4
614615	0.014	7995	0.035	4522	45.0	404.9	99.9	5.6	0.99	11.3	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.043	179	24.0	41.3	37.6	1.6	0.78	4.6	7.0	3.8	5.9	0.3	9	9
705OAF	0.008	2254	0.045	262	156.4	162.1	327.4	0.8	0.47	1.9	2.7	1.4	2.4	0.2	7	7
709710	0.026	2683	0.035	245	35.0	42.6	43.2	1.1	1.10	6.2	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	126	35.0	25.5	44.6	0.6	1.30	5.6	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	161	45.0	40.4	52.3	0.8	0.87	4.3	8.5	3.4	12.7	0.1	2	2
713714	0.042	831	0.035	81	25.0	17.0	28.2	0.6	1.22	5.4	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	434	30.0	79.5	71.2	1.6	0.97	5.8	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	455	95.0	136.6	121.8	1.3	0.59	3.5	4.3	2.4	3.4	0.5	14	14
721722	0.017	8812	0.035	135	35.0	34.2	43.7	0.9	0.85	4.3	4.3	2.4	3.5	0.6	17	17
726727	0.019	6228	0.035	218	55.0	51.0	63.6	0.9	0.92	4.7	7.4	3.9	6.5	0.2	7	7

Table D-11

Summary of the normal depth reach route hydraulic data for the existing condition 5-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	130	12.3	29.9	26.5	1.6	0.76	4.6	6.1	3.3	5.1	0.3	9	9
101102	0.014	7254	0.040	93	14.0	23.5	20.8	1.4	0.70	4.2	6.0	3.3	5.1	0.3	10	10
102103	0.012	8068	0.041	380	17.6	69.5	49.6	2.3	0.85	5.7	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	612	22.0	99.8	38.4	3.6	0.69	6.3	9.0	4.8	7.7	0.3	8	8
104105	0.012	6956	0.053	664	21.8	153.4	101.5	3.4	0.64	4.5	4.8	2.7	4.0	0.4	12	12
200201	0.023	3952	0.030	284	21.0	35.4	25.6	1.5	1.26	8.4	16.5	6.6	24.8	0.1	2	2
201203	0.016	3233	0.047	366	32.1	75.4	82.9	1.8	0.95	5.1	5.4	2.7	5.1	0.2	5	5
202203	0.017	2353	0.030	48	32.1	15.8	35.1	0.6	0.94	3.6	4.9	2.3	4.9	0.1	4	4
203204	0.015	1325	0.048	654	32.1	121.4	97.6	2.3	0.89	5.7	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.042	722	29.8	104.6	66.2	2.8	1.00	7.1	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.040	1009	33.4	173.0	67.4	3.8	0.66	6.0	7.6	4.2	6.2	0.4	13	13
206207	0.031	4972	0.042	1153	35.4	112.1	64.1	2.5	1.43	10.7	13.8	6.2	15.6	0.1	3	3
207105	0.017	7176	0.040	1230	29.5	120.1	38.4	3.5	1.04	10.5	15.0	7.2	15.0	0.1	4	4
300301	0.014	5117	0.044	307	37.0	69.4	41.4	1.8	0.63	4.6	6.1	3.2	5.3	0.2	7	7
301302	0.009	8124	0.039	375	27.0	77.0	41.0	2.4	0.65	5.1	6.8	3.7	5.7	0.3	10	10
302303	0.019	7304	0.048	440	40.8	80.4	52.0	2.2	0.82	5.8	8.7	4.6	7.6	0.2	7	7
400401	0.010	7424	0.040	230	7.8	69.2	38.4	3.1	0.45	3.5	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	307	22.2	75.4	55.3	2.3	0.65	4.3	4.2	2.4	3.4	0.5	16	16
402403	0.005	6138	0.043	347	8.7	125.1	67.3	3.3	0.37	2.9	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	392	12.4	78.2	48.8	2.7	0.73	5.2	7.1	3.5	6.7	0.2	5	5
500501	0.013	5972	0.035	200	22.0	39.7	32.5	1.6	0.85	5.3	8.3	4.3	7.5	0.2	6	6
501502	0.016	5021	0.035	288	29.0	48.3	32.2	1.6	0.90	6.2	10.5	5.0	10.5	0.1	4	4
502505	0.009	8775	0.040	504	86.0	134.1	102.5	2.1	0.61	4.0	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	46	3.4	22.2	14.8	2.7	0.31	2.2	4.8	2.7	3.8	0.5	16	16
504505	0.013	7754	0.043	49	54.4	23.4	27.0	1.7	0.42	2.2	3.6	2.0	2.9	0.6	18	18
505509	0.006	6213	0.047	600	150.9	225.0	181.1	1.5	0.45	2.8	2.7	1.6	2.2	0.6	19	19
506508	0.015	4023	0.045	62	10.3	20.7	17.4	2.4	0.51	3.2	4.8	2.5	4.2	0.2	7	7
507508	0.011	5400	0.045	74	10.9	29.1	26.0	1.8	0.45	2.7	4.1	2.2	3.4	0.4	11	11
508509	0.008	10349	0.041	207	14.8	58.3	40.1	2.9	0.54	3.7	4.8	2.7	3.8	0.6	18	18
509510	0.010	1958	0.043	752	26.3	167.7	95.5	2.8	0.62	4.6	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.044	798	14.4	167.9	65.2	4.4	0.53	4.9	5.6	3.0	4.7	0.3	10	10
511512	0.008	9226	0.044	852	19.5	224.3	114.0	4.1	0.49	3.9	5.9	3.3	4.8	0.4	13	13

Table D-11

Summary of the normal depth reach route hydraulic data for the existing condition 5-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	348	20.0	53.4	44.2	2.4	1.10	6.9	9.6	4.3	10.8	0.1	3	3
601602	0.027	6017	0.035	584	90.0	95.1	96.4	1.0	1.17	6.6	10.0	5.0	9.4	0.2	5	5
602603	0.017	7614	0.035	1084	257.0	235.8	261.3	0.9	0.93	5.0	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	1789	275.0	316.9	280.9	1.1	1.01	6.1	6.5	3.6	5.5	0.3	10	10
604605	0.007	1543	0.035	1929	85.0	328.1	120.7	3.2	0.65	6.0	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	1972	33.0	225.8	119.6	3.0	1.16	9.0	15.3	6.9	17.3	0.1	3	3
606608	0.018	1141	0.035	2172	87.0	259.3	124.7	2.5	1.05	8.6	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	191	48.0	36.8	50.3	0.8	1.20	5.8	8.5	4.6	7.0	0.4	11	11
608609	0.012	6518	0.035	2543	42.0	320.5	132.2	3.7	0.92	8.1	10.9	5.4	10.2	0.2	5	5
609611	0.003	6519	0.035	2640	180.0	603.5	219.6	3.0	0.48	4.5	6.8	3.6	5.8	0.3	8	8
610611	0.010	7981	0.035	369	9.0	73.2	19.7	5.1	0.47	5.2	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	2920	88.0	236.2	112.2	2.4	1.55	12.8	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	358	70.0	60.2	71.7	0.9	1.24	6.5	10.4	5.5	9.1	0.2	7	7
613614	0.011	5557	0.035	3159	80.0	372.5	102.6	4.1	0.80	8.6	9.3	4.6	8.7	0.2	5	5
614615	0.014	7995	0.035	3152	45.0	319.0	91.0	4.7	0.95	10.1	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.045	107	24.0	29.8	29.7	1.2	0.68	3.9	5.2	2.9	4.3	0.4	12	12
705OAF	0.008	2254	0.045	228	156.4	146.0	315.1	0.7	0.46	1.8	2.3	1.2	2.0	0.3	8	8
709710	0.026	2683	0.035	199	35.0	37.5	42.3	1.0	1.08	5.8	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	117	35.0	24.6	44.3	0.6	1.29	5.5	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	144	45.0	38.3	51.9	0.8	0.86	4.2	8.5	3.4	12.7	0.1	2	2
713714	0.042	831	0.035	61	25.0	14.5	27.8	0.6	1.18	4.9	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	357	30.0	69.7	67.5	1.4	0.95	5.5	7.1	3.5	6.6	0.2	5	5
717718	0.011	7146	0.045	374	95.0	120.9	119.0	1.1	0.58	3.3	3.7	2.1	3.0	0.5	16	16
721722	0.017	8812	0.035	107	35.0	29.9	42.7	0.8	0.84	4.0	4.6	2.6	3.7	0.5	16	16
726727	0.019	6228	0.035	145	55.0	40.3	61.9	0.7	0.88	4.1	4.7	2.6	3.9	0.4	11	11

Table D-12

Summary of the normal depth reach route hydraulic data for the existing condition 2-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	47	12.3	15.4	20.9	1.0	0.68	3.3	4.5	2.5	3.7	0.4	12	12
101102	0.014	7254	0.040	41	14.0	14.1	18.4	0.9	0.63	3.1	5.0	2.8	4.1	0.4	12	12
102103	0.012	8068	0.039	147	17.6	37.0	36.1	1.5	0.74	4.2	5.2	2.9	4.2	0.4	13	13
103104	0.016	8625	0.053	214	22.0	51.0	31.3	2.2	0.60	4.4	6.5	3.6	5.4	0.4	11	11
104105	0.012	6956	0.053	226	21.8	65.4	43.3	2.1	0.52	3.6	5.3	2.9	4.4	0.4	11	11
200201	0.023	3952	0.030	127	21.0	22.0	23.9	1.0	1.15	6.3	11.0	4.9	12.4	0.1	3	3
201203	0.016	3233	0.042	166	32.1	39.5	47.6	1.2	0.87	4.5	5.4	2.7	5.1	0.2	5	5
202203	0.017	2353	0.030	21	32.1	10.3	33.9	0.5	0.88	2.7	3.9	2.0	3.7	0.2	5	5
203204	0.015	1325	0.046	301	32.1	64.4	73.9	1.7	0.93	5.0	5.5	2.2	8.3	0.1	2	2
204205	0.014	5007	0.039	325	29.8	61.1	41.3	1.9	0.81	5.6	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.039	472	33.4	105.6	50.5	2.6	0.56	4.6	6.6	3.7	5.3	0.5	15	15
206207	0.031	4972	0.039	532	35.4	68.4	49.7	1.7	1.23	8.2	10.4	5.0	10.4	0.1	4	4
207105	0.017	7176	0.039	558	29.5	74.1	35.2	2.3	0.95	7.8	12.0	6.0	11.2	0.2	5	5
300301	0.014	5117	0.044	156	37.0	46.6	40.0	1.2	0.58	3.6	5.3	2.8	4.6	0.3	8	8
301302	0.009	8124	0.039	189	27.0	49.8	36.6	1.7	0.60	4.0	5.6	3.1	4.6	0.4	12	12
302303	0.019	7304	0.048	207	40.8	50.7	48.6	1.6	0.75	4.3	6.1	3.3	5.1	0.3	10	10
400401	0.010	7424	0.040	94	7.8	39.1	29.3	2.2	0.39	2.5	3.9	2.2	3.1	0.5	16	16
401402	0.011	8029	0.043	107	22.2	37.7	43.9	1.5	0.58	3.1	4.5	2.5	3.6	0.5	15	15
402403	0.005	6138	0.043	114	8.7	59.4	46.8	2.1	0.32	2.0	2.8	1.6	2.3	0.6	18	18
403404	0.016	4256	0.045	126	12.4	36.2	34.4	1.6	0.63	3.7	7.1	3.5	6.7	0.2	5	5
500501	0.013	5972	0.035	109	22.0	27.3	29.7	1.2	0.79	4.3	7.1	3.7	6.2	0.2	7	7
501502	0.016	5021	0.035	149	29.0	32.8	31.2	1.1	0.84	4.9	8.4	4.2	7.9	0.2	5	5
502505	0.009	8775	0.040	229	86.0	84.1	97.3	1.6	0.56	3.0	3.2	1.8	2.5	0.8	23	23
503505	0.012	9136	0.047	12	3.4	9.8	10.1	1.7	0.24	1.3	3.2	1.8	2.5	0.8	24	24
504505	0.013	7754	0.043	14	54.4	10.5	18.1	1.2	0.34	1.5	3.2	1.8	2.6	0.7	20	20
505509	0.006	6213	0.047	221	150.9	123.6	168.6	0.9	0.41	2.0	2.7	1.6	2.2	0.6	19	19
506508	0.015	4023	0.045	24	10.3	11.2	12.8	1.8	0.43	2.3	3.4	1.8	2.8	0.3	10	10
507508	0.011	5400	0.045	43	10.9	20.8	22.8	1.5	0.41	2.2	4.1	2.2	3.4	0.4	11	11
508509	0.008	10349	0.041	90	14.8	32.7	30.0	2.2	0.49	2.9	4.1	2.3	3.2	0.7	21	21
509510	0.010	1958	0.043	240	26.3	77.1	67.7	1.7	0.55	3.3	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.044	251	14.4	75.9	45.0	2.7	0.47	3.4	4.7	2.6	3.8	0.4	12	12
511512	0.008	9226	0.044	261	19.5	100.0	75.7	2.8	0.42	2.7	5.5	3.1	4.4	0.5	14	14

Table D-12

Summary of the normal depth reach route hydraulic data for the existing condition 2-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	147	20.0	30.2	33.2	1.8	0.97	5.3	7.2	3.5	7.2	0.1	4	4
601602	0.027	6017	0.035	292	90.0	63.6	94.3	0.7	1.09	5.1	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	544	257.0	160.3	259.9	0.6	0.87	3.9	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	905	275.0	213.3	279.0	0.8	0.94	4.7	6.5	3.6	5.5	0.3	10	10
604605	0.007	1543	0.035	971	85.0	211.9	109.4	2.2	0.60	4.7	6.4	2.6	9.7	0.1	2	2
605606	0.020	5520	0.035	1004	33.0	140.5	96.5	2.2	1.10	7.5	9.2	4.6	8.6	0.2	5	5
606608	0.018	1141	0.035	1113	87.0	170.1	113.1	1.7	0.99	6.9	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	83	48.0	22.9	49.4	0.5	1.10	4.3	4.7	2.7	3.7	0.7	20	20
608609	0.012	6518	0.035	1298	42.0	200.5	107.7	2.7	0.86	6.7	10.9	5.4	10.2	0.2	5	5
609611	0.003	6519	0.035	1340	180.0	396.6	206.9	2.1	0.45	3.5	6.0	3.3	5.1	0.3	9	9
610611	0.010	7981	0.035	207	9.0	51.4	17.2	3.9	0.42	4.1	6.7	3.6	5.6	0.3	10	10
611613	0.038	4445	0.035	1489	88.0	156.0	104.6	1.6	1.45	10.0	12.3	5.5	13.9	0.1	3	3
612613	0.033	8752	0.035	172	70.0	40.2	71.1	0.6	1.16	4.9	4.6	2.6	3.7	0.5	16	16
613614	0.011	5557	0.035	1619	80.0	247.6	95.6	2.8	0.74	6.7	9.3	4.6	8.7	0.2	5	5
614615	0.014	7995	0.035	1596	45.0	204.3	77.7	3.3	0.87	8.0	9.5	5.0	8.3	0.2	8	7
704705	0.019	7534	0.045	25	24.0	12.9	26.6	0.6	0.58	2.3	2.3	1.3	1.8	0.9	27	27
705OAF	0.008	2254	0.045	69	156.4	69.9	248.7	0.4	0.42	1.3	1.7	0.9	1.4	0.4	11	11
709710	0.026	2683	0.035	118	35.0	27.5	40.5	0.7	1.02	4.8	7.5	3.3	8.4	0.1	3	3
711712	0.044	1586	0.035	83	35.0	19.8	42.7	0.5	1.25	4.8	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	96	45.0	30.1	50.5	0.6	0.83	3.6	4.2	2.0	4.2	0.1	4	4
713714	0.042	831	0.035	39	25.0	11.2	27.2	0.4	1.13	4.1	6.9	2.1	10.4	0.0	2	1
716717	0.018	4232	0.035	222	30.0	50.7	59.7	1.1	0.91	4.8	7.1	3.5	6.6	0.2	5	5
717718	0.011	7146	0.045	224	95.0	88.4	113.1	0.9	0.55	2.8	4.0	2.2	3.2	0.5	15	15
721722	0.017	8812	0.035	57	35.0	20.8	40.5	0.6	0.78	3.2	4.3	2.4	3.5	0.6	17	17
726727	0.019	6228	0.035	44	55.0	20.4	58.6	0.4	0.79	2.6	3.7	2.1	3.0	0.5	14	14

Table D-13

Summary of the normal depth reach route hydraulic data for the future watershed condition 100-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.046	743	12.3	114.9	75.8	3.3	0.96	6.7	7.8	4.1	6.8	0.2	7	7
101102	0.014	7254	0.040	683	14.0	83.1	32.1	3.6	0.92	8.4	12.1	6.0	11.4	0.2	5	5
102103	0.012	8068	0.048	1952	17.6	242.0	102.4	4.6	0.94	8.2	9.6	5.0	8.4	0.2	7	7
103104	0.016	8625	0.053	2992	22.0	279.4	57.5	7.3	0.87	10.9	18.0	8.6	18.0	0.1	4	4
104105	0.012	6956	0.053	3168	21.8	441.0	117.5	6.0	0.67	7.3	9.7	5.0	8.7	0.2	6	6
200201	0.023	3952	0.031	1362	21.0	92.5	31.6	3.5	1.55	15.1	33.0	9.9	49.5	0.0	1	1
201203	0.016	3233	0.048	1649	32.1	225.2	102.1	3.3	0.89	7.5	13.5	5.4	20.3	0.1	2	2
202203	0.017	2353	0.035	269	32.1	45.2	55.0	1.4	1.23	6.4	6.5	2.9	7.4	0.1	3	3
203204	0.015	1325	0.048	2644	32.1	310.4	105.6	4.1	0.90	8.7	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.045	2963	29.8	317.2	106.8	5.0	0.97	9.5	10.4	5.0	10.5	0.1	4	4
205206	0.006	11893	0.045	4043	33.4	524.5	131.7	6.8	0.69	7.8	9.9	5.4	8.3	0.3	10	10
206207	0.031	4972	0.045	4617	35.4	300.0	87.8	4.9	1.49	15.7	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.044	4791	29.5	292.5	48.3	7.5	1.18	16.5	29.9	11.9	45.0	0.1	2	2
300301	0.014	5117	0.044	2501	37.0	248.4	51.1	5.6	0.82	10.2	21.3	8.5	32.1	0.1	2	2
301302	0.009	8124	0.048	2791	27.0	389.8	188.8	5.9	0.90	7.3	6.8	3.7	5.7	0.3	10	10
302303	0.019	7304	0.050	3107	40.8	279.9	71.6	5.4	1.01	11.3	15.2	7.3	15.3	0.1	4	4
400401	0.010	7424	0.040	556	7.8	122.6	50.6	4.3	0.53	4.7	7.7	4.1	6.6	0.3	8	8
401402	0.011	8029	0.043	1210	22.2	196.5	100.1	4.0	0.79	6.3	6.7	3.6	5.6	0.3	10	10
402403	0.005	6138	0.044	1791	8.7	430.8	200.2	6.0	0.51	4.3	5.1	2.8	4.3	0.3	10	10
403404	0.016	4256	0.045	2046	12.4	248.9	85.1	5.2	0.87	8.4	11.8	5.3	13.3	0.1	3	3
500501	0.013	5972	0.039	1227	22.0	129.9	55.0	3.8	1.11	9.7	10.0	5.0	9.4	0.2	5	5
501502	0.016	5021	0.035	1768	29.0	144.3	37.7	4.3	1.13	12.5	20.9	8.4	31.5	0.1	2	2
502505	0.009	8775	0.040	2279	86.0	341.1	120.3	3.9	0.72	6.9	10.4	5.5	9.2	0.2	7	7
503505	0.012	9136	0.047	97	3.4	35.4	18.5	3.5	0.36	2.8	5.1	2.8	4.1	0.5	15	15
504505	0.013	7754	0.043	97	54.4	36.7	33.9	2.2	0.48	2.8	5.9	3.2	4.9	0.4	12	11
505509	0.006	6213	0.047	2776	150.9	594.8	220.8	3.3	0.52	4.8	6.5	3.4	5.6	0.3	8	8
506508	0.015	4023	0.045	95	10.3	27.5	20.0	2.7	0.55	3.6	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	100	10.9	35.3	28.1	2.1	0.47	3.0	5.0	2.7	4.2	0.3	9	9
508509	0.008	10349	0.041	845	14.8	156.2	65.2	4.8	0.63	5.5	7.2	4.0	5.9	0.4	12	12
509510	0.010	1958	0.045	3574	26.3	596.5	308.5	5.2	0.78	6.2	8.2	3.3	12.3	0.1	2	2
510511	0.007	6722	0.046	3831	14.4	703.4	394.4	7.6	0.73	5.6	5.6	3.0	4.7	0.3	10	10
511512	0.008	9226	0.044	3971	19.5	651.3	222.2	6.8	0.64	6.2	8.5	4.6	7.2	0.3	9	9

Table D-13

Summary of the normal depth reach route hydraulic data for the future watershed condition 100-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1833	20.0	164.4	74.3	4.3	1.36	11.5	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	2611	90.0	234.0	105.0	2.4	1.36	11.5	16.7	7.5	18.9	0.1	3	3
602603	0.017	7614	0.035	4336	257.0	528.8	266.6	2.0	1.06	8.5	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	6459	275.0	672.0	287.3	2.4	1.14	9.9	16.3	7.8	16.4	0.1	4	4
604605	0.007	1543	0.035	6987	85.0	762.2	155.8	6.3	0.74	9.3	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.042	7065	33.0	634.3	295.2	4.9	1.38	11.5	15.3	6.9	17.3	0.1	3	3
606608	0.018	1141	0.035	7465	87.0	586.7	160.0	4.8	1.19	13.0	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	1018	48.0	97.7	53.8	1.9	1.42	10.9	18.6	9.3	17.5	0.2	5	5
608609	0.012	6518	0.035	8575	42.0	762.6	197.8	6.4	1.02	11.4	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	8894	180.0	1311.1	258.5	6.0	0.54	6.9	9.1	4.6	8.2	0.2	6	6
610611	0.010	7981	0.035	1300	9.0	159.4	27.4	8.8	0.60	8.2	13.3	6.6	12.5	0.2	5	5
611613	0.038	4445	0.035	9469	88.0	501.1	134.2	4.5	1.75	19.2	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	1364	70.0	131.4	73.7	1.8	1.42	10.8	18.2	8.7	18.3	0.1	4	4
613614	0.011	5557	0.035	10129	80.0	776.4	122.5	7.7	0.92	13.2	23.1	9.2	34.8	0.1	2	2
614615	0.014	7995	0.035	10051	45.0	693.9	125.1	8.2	1.10	14.6	22.2	10.0	25.0	0.1	3	3
704705	0.019	7534	0.040	883	24.0	128.8	72.1	3.1	0.94	7.1	10.5	5.4	9.4	0.2	6	6
705OAF	0.008	2254	0.045	781	156.4	325.4	431.9	1.2	0.53	2.6	3.1	1.6	2.8	0.2	6	6
709710	0.026	2683	0.035	436	35.0	60.5	46.2	1.5	1.17	7.6	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	183	35.0	31.9	46.7	0.8	1.35	6.3	13.2	4.0	19.9	0.0	1	1
712714	0.017	2032	0.035	259	45.0	53.7	54.5	1.1	0.91	5.1	8.5	3.4	12.7	0.1	2	2
713714	0.042	831	0.035	185	25.0	27.5	30.0	1.0	1.33	7.2	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	654	30.0	105.2	80.1	1.9	1.00	6.5	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	1095	95.0	239.4	138.6	2.1	0.64	4.8	7.4	4.0	6.4	0.3	8	8
721722	0.017	8812	0.035	276	35.0	53.5	47.9	1.3	0.92	5.5	8.2	4.4	6.9	0.3	9	9
726727	0.019	6228	0.035	968	55.0	127.0	74.6	2.0	1.07	7.9	13.0	6.2	13.0	0.1	4	4

Table D-14

Summary of the normal depth reach route hydraulic data for the future watershed condition 50-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.045	597	12.3	96.7	69.8	3.0	0.96	6.4	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	552	14.0	72.8	30.4	3.3	0.89	7.8	10.1	5.2	9.1	0.2	6	6
102103	0.012	8068	0.047	1573	17.6	202.9	93.1	4.2	0.95	7.9	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	2426	22.0	242.0	54.0	6.7	0.85	10.2	14.4	7.2	13.5	0.2	5	5
104105	0.012	6956	0.053	2558	21.8	384.1	114.7	5.5	0.66	6.8	9.7	5.0	8.7	0.2	6	6
200201	0.023	3952	0.030	1103	21.0	81.3	30.5	3.2	1.50	13.9	16.5	6.6	24.8	0.1	2	2
201203	0.016	3233	0.048	1342	32.1	196.8	100.9	3.0	0.89	7.1	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.034	224	32.1	39.5	47.8	1.2	1.18	6.1	9.8	3.9	14.7	0.1	2	2
203204	0.015	1325	0.048	1993	32.1	257.1	103.4	3.6	0.89	7.9	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.045	2236	29.8	260.4	103.4	4.5	0.98	8.8	10.4	5.0	10.5	0.1	4	4
205206	0.006	11893	0.044	3087	33.4	433.7	127.8	6.1	0.69	7.3	9.0	4.9	7.5	0.4	11	11
206207	0.031	4972	0.045	3410	35.4	243.3	84.1	4.2	1.49	14.3	13.8	6.2	15.6	0.1	2	3
207105	0.017	7176	0.043	3501	29.5	236.4	45.3	6.3	1.16	15.0	19.9	9.0	22.5	0.1	3	3
300301	0.014	5117	0.044	2092	37.0	222.7	49.8	5.1	0.80	9.6	14.2	6.4	16.0	0.1	3	3
301302	0.009	8124	0.047	2332	27.0	323.0	162.9	5.5	0.92	7.4	6.8	3.7	5.7	0.3	10	10
302303	0.019	7304	0.050	2583	40.8	246.9	68.5	5.0	0.99	10.7	15.2	7.3	15.3	0.1	4	4
400401	0.010	7424	0.040	527	7.8	118.6	49.8	4.2	0.52	4.6	7.7	4.1	6.6	0.3	8	8
401402	0.011	8029	0.043	1016	22.2	171.5	85.5	3.7	0.76	6.1	6.7	3.6	5.6	0.3	10	10
402403	0.005	6138	0.044	1491	8.7	367.2	173.4	5.7	0.50	4.2	5.1	2.8	4.3	0.3	10	10
403404	0.016	4256	0.045	1701	12.4	217.6	79.7	4.8	0.85	8.0	11.8	5.3	13.3	0.1	3	3
500501	0.013	5972	0.038	994	22.0	112.1	49.9	3.4	1.07	9.1	10.0	5.0	9.4	0.2	5	5
501502	0.016	5021	0.035	1437	29.0	127.2	36.7	3.9	1.09	11.5	20.9	8.4	31.5	0.1	2	2
502505	0.009	8775	0.040	2062	86.0	320.8	118.9	3.8	0.71	6.6	10.4	5.5	9.2	0.2	7	7
503505	0.012	9136	0.047	93	3.4	34.4	18.3	3.5	0.36	2.8	5.1	2.8	4.1	0.5	15	15
504505	0.013	7754	0.043	94	54.4	35.7	33.4	2.1	0.47	2.8	5.4	3.0	4.4	0.4	12	12
505509	0.006	6213	0.047	2433	150.9	544.5	215.8	3.1	0.51	4.6	5.2	2.8	4.3	0.3	10	10
506508	0.015	4023	0.045	93	10.3	26.9	19.8	2.7	0.55	3.6	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	98	10.9	34.8	28.0	2.0	0.47	3.0	5.6	3.0	4.8	0.3	8	8
508509	0.008	10349	0.041	741	14.8	142.8	62.4	4.6	0.62	5.3	6.6	3.7	5.4	0.4	13	13
509510	0.010	1958	0.044	3025	26.3	520.8	297.5	4.9	0.80	6.0	8.2	3.3	12.3	0.1	2	2
510511	0.007	6722	0.045	3203	14.4	579.1	336.8	7.2	0.76	5.7	5.6	3.0	4.7	0.3	10	10
511512	0.008	9226	0.044	3305	19.5	574.3	194.0	6.4	0.60	5.9	8.5	4.6	7.2	0.3	9	9

Table D-14

Summary of the normal depth reach route hydraulic data for the future watershed condition 50-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1409	20.0	139.5	71.4	3.9	1.32	10.5	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	2045	90.0	201.8	103.1	2.1	1.33	10.5	16.7	7.5	18.9	0.1	3	3
602603	0.017	7614	0.035	3405	257.0	459.7	265.4	1.8	1.04	7.8	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	5047	275.0	580.3	285.7	2.1	1.11	9.0	13.0	6.5	12.3	0.2	5	5
604605	0.007	1543	0.035	5463	85.0	647.0	147.3	5.6	0.72	8.6	6.4	2.6	9.7	0.1	2	2
605606	0.020	5520	0.042	5536	33.0	519.7	292.2	4.5	1.45	11.0	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	5860	87.0	498.0	151.3	4.2	1.17	12.0	0.0	0.0	0.0	0.0	1	1
607608	0.024	11167	0.030	835	48.0	86.5	53.1	1.7	1.39	10.1	15.5	8.0	14.0	0.2	6	6
608609	0.012	6518	0.035	6758	42.0	642.9	182.4	5.7	1.00	10.7	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	7014	180.0	1123.4	248.8	5.2	0.53	6.3	9.1	4.6	8.2	0.2	6	6
610611	0.010	7981	0.035	1082	9.0	142.3	26.1	8.1	0.58	7.7	13.3	6.6	12.5	0.2	5	5
611613	0.038	4445	0.035	7473	88.0	430.1	128.7	4.0	1.71	17.7	37.1	11.1	55.7	0.0	1	1
612613	0.033	8752	0.035	1142	70.0	118.2	73.3	1.7	1.40	10.1	14.6	7.3	13.7	0.2	5	5
613614	0.011	5557	0.035	7972	80.0	666.1	117.4	6.8	0.90	12.1	23.1	9.2	34.8	0.1	2	2
614615	0.014	7995	0.035	7895	45.0	588.8	116.5	7.3	1.06	13.6	22.2	10.0	25.0	0.1	3	3
704705	0.019	7534	0.040	737	24.0	114.5	70.9	2.9	0.93	6.7	7.8	4.2	6.7	0.3	8	8
705OAF	0.008	2254	0.045	722	156.4	312.6	424.7	1.2	0.52	2.6	3.1	1.6	2.8	0.2	6	6
709710	0.026	2683	0.035	412	35.0	58.2	45.8	1.4	1.17	7.5	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	180	35.0	31.9	46.7	0.8	1.35	6.3	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	244	45.0	52.1	54.2	1.1	0.91	5.0	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	177	25.0	26.9	29.9	1.0	1.33	7.1	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	622	30.0	101.2	78.8	1.9	1.00	6.4	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	990	95.0	224.3	136.2	1.9	0.63	4.6	6.6	3.6	5.6	0.3	9	9
721722	0.017	8812	0.035	261	35.0	51.6	47.5	1.3	0.92	5.4	8.2	4.4	6.9	0.3	9	9
726727	0.019	6228	0.035	837	55.0	115.9	73.1	1.8	1.05	7.5	10.4	5.2	9.8	0.2	5	5

Table D-15

Summary of the normal depth reach route hydraulic data for the future watershed condition 25-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.044	451	12.3	77.5	62.7	2.7	0.96	6.1	6.1	3.3	5.1	0.3	9	9
101102	0.014	7254	0.040	424	14.0	61.6	28.5	2.9	0.85	7.1	10.1	5.2	9.1	0.2	7	6
102103	0.012	8068	0.046	1199	17.6	163.4	82.6	3.7	0.95	7.5	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	1842	22.0	201.9	50.1	5.9	0.81	9.3	14.4	7.2	13.5	0.2	6	5
104105	0.012	6956	0.053	1930	21.8	319.6	111.6	4.9	0.64	6.2	9.7	5.0	8.7	0.2	6	6
200201	0.023	3952	0.030	845	21.0	69.1	29.3	2.8	1.45	12.6	16.5	6.6	24.8	0.1	2	2
201203	0.016	3233	0.048	1023	32.1	163.7	99.4	2.7	0.89	6.5	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.031	177	32.1	33.9	39.3	1.1	1.08	5.7	9.8	3.9	14.7	0.1	2	2
203204	0.015	1325	0.048	1601	32.1	223.2	102.0	3.3	0.88	7.4	11.1	3.3	16.6	0.0	2	1
204205	0.014	5007	0.045	1783	29.8	220.6	101.0	4.1	0.99	8.3	10.4	5.0	10.5	0.1	4	4
205206	0.006	11893	0.044	2395	33.4	360.5	124.6	5.6	0.70	6.8	8.3	4.6	6.8	0.4	12	12
206207	0.031	4972	0.045	2713	35.4	207.7	81.6	3.8	1.48	13.4	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.042	2761	29.5	201.8	43.4	5.5	1.13	13.9	19.9	9.0	22.5	0.1	2	3
300301	0.014	5117	0.044	1659	37.0	192.8	48.3	4.5	0.77	8.8	14.2	6.4	16.0	0.1	3	3
301302	0.009	8124	0.046	1846	27.0	253.9	131.0	5.0	0.94	7.4	6.8	3.7	5.7	0.3	10	10
302303	0.019	7304	0.050	2030	40.8	209.6	64.8	4.4	0.97	9.9	15.2	7.3	15.3	0.1	4	4
400401	0.010	7424	0.040	488	7.8	112.7	48.6	4.1	0.52	4.5	6.2	3.4	5.2	0.3	10	10
401402	0.011	8029	0.043	823	22.2	147.4	72.2	3.4	0.71	5.8	6.7	3.6	5.6	0.3	10	10
402403	0.005	6138	0.043	1170	8.7	297.2	138.0	5.2	0.48	4.0	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	1326	12.4	182.4	73.1	4.4	0.83	7.4	11.8	5.3	13.3	0.1	3	3
500501	0.013	5972	0.036	759	22.0	93.8	44.2	3.0	1.01	8.4	10.0	5.0	9.4	0.2	5	5
501502	0.016	5021	0.035	1096	29.0	107.7	35.7	3.3	1.05	10.4	13.9	6.3	15.7	0.1	3	3
502505	0.009	8775	0.040	1700	86.0	284.3	116.4	3.5	0.69	6.2	10.4	5.5	9.2	0.2	7	7
503505	0.012	9136	0.047	88	3.4	33.4	18.0	3.4	0.36	2.7	5.1	2.8	4.1	0.5	15	15
504505	0.013	7754	0.043	90	54.4	34.7	32.9	2.1	0.47	2.7	5.4	3.0	4.4	0.4	12	12
505509	0.006	6213	0.047	1982	150.9	476.6	208.9	2.8	0.50	4.3	5.2	2.8	4.3	0.3	10	10
506508	0.015	4023	0.045	89	10.3	26.3	19.6	2.7	0.54	3.6	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	96	10.9	34.5	27.9	2.0	0.47	2.9	5.0	2.7	4.2	0.3	9	9
508509	0.008	10349	0.041	632	14.8	127.7	59.0	4.3	0.61	5.1	6.6	3.7	5.4	0.4	13	13
509510	0.010	1958	0.044	2430	26.3	422.9	253.4	4.6	0.81	5.9	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.045	2558	14.4	449.9	264.0	6.8	0.79	5.8	5.1	2.8	4.2	0.4	11	11
511512	0.008	9226	0.044	2607	19.5	490.3	169.0	6.0	0.56	5.4	7.7	4.2	6.4	0.3	10	10

Table D-15

Summary of the normal depth reach route hydraulic data for the future watershed condition 25-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1001	20.0	109.9	63.3	3.5	1.27	9.5	9.6	4.3	10.8	0.1	3	3
601602	0.027	6017	0.035	1486	90.0	166.1	100.9	1.7	1.28	9.3	16.7	7.5	18.9	0.1	3	3
602603	0.017	7614	0.035	2459	257.0	380.3	263.9	1.5	1.01	6.8	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	3628	275.0	477.8	283.8	1.7	1.08	7.9	13.0	6.5	12.3	0.2	5	5
604605	0.007	1543	0.035	3929	85.0	520.3	137.4	4.7	0.70	7.7	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.042	3982	33.0	380.4	288.4	4.1	1.66	10.8	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	4229	87.0	401.5	141.1	3.5	1.13	10.8	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	652	48.0	74.9	52.5	1.5	1.36	9.2	13.3	7.0	11.7	0.2	7	7
608609	0.012	6518	0.035	4895	42.0	509.7	163.5	5.0	0.98	9.8	10.9	5.4	10.2	0.2	5	5
609611	0.003	6519	0.035	5069	180.0	911.9	237.4	4.4	0.51	5.7	7.8	4.1	6.8	0.2	7	7
610611	0.010	7981	0.035	869	9.0	124.1	24.5	7.4	0.56	7.1	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	5412	88.0	349.9	122.1	3.3	1.65	15.9	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	910	70.0	103.6	72.9	1.5	1.37	9.2	14.6	7.3	13.7	0.2	5	5
613614	0.011	5557	0.035	5779	80.0	543.7	111.4	5.7	0.86	10.8	23.1	9.2	34.8	0.1	2	2
614615	0.014	7995	0.035	5728	45.0	475.0	106.5	6.3	1.02	12.3	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.040	575	24.0	95.7	67.0	2.6	0.92	6.2	9.0	4.7	7.9	0.2	7	7
705OAF	0.008	2254	0.045	653	156.4	291.6	412.6	1.1	0.52	2.5	3.8	1.9	3.5	0.2	5	5
709710	0.026	2683	0.035	384	35.0	55.9	45.4	1.4	1.16	7.3	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	169	35.0	30.5	46.3	0.8	1.34	6.2	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	228	45.0	49.9	53.8	1.0	0.90	4.9	8.5	3.4	12.7	0.1	3	2
713714	0.042	831	0.035	155	25.0	24.8	29.6	0.9	1.31	6.8	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	582	30.0	97.3	77.5	1.8	0.99	6.3	7.1	3.5	6.6	0.2	5	5
717718	0.011	7146	0.045	864	95.0	205.4	133.3	1.8	0.63	4.4	6.0	3.2	5.0	0.3	10	10
721722	0.017	8812	0.035	247	35.0	49.7	47.1	1.2	0.91	5.3	8.2	4.4	6.9	0.3	10	9
726727	0.019	6228	0.035	702	55.0	103.6	71.4	1.6	1.03	7.1	10.4	5.2	9.8	0.2	5	5

Table D-16

Summary of the normal depth reach route hydraulic data for the future watershed condition 10-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.044	296	12.3	52.8	58.2	2.3	1.08	5.9	6.1	3.3	5.1	0.3	9	9
101102	0.014	7254	0.040	285	14.0	47.7	26.0	2.4	0.81	6.2	7.6	4.0	6.5	0.3	8	8
102103	0.012	8068	0.044	756	17.6	113.9	67.3	3.1	0.93	6.9	9.6	5.0	8.4	0.2	7	7
103104	0.016	8625	0.053	1149	22.0	149.5	44.4	4.8	0.75	7.8	10.3	5.4	9.0	0.2	7	7
104105	0.012	6956	0.053	1193	21.8	232.1	107.1	4.1	0.63	5.3	6.4	3.5	5.4	0.3	9	9
200201	0.023	3952	0.030	563	21.0	53.7	27.6	2.2	1.37	10.9	11.0	4.9	12.4	0.1	3	3
201203	0.016	3233	0.048	673	32.1	122.4	97.6	2.3	0.91	5.8	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.030	123	32.1	27.0	37.4	0.9	1.03	5.0	6.5	2.9	7.4	0.1	3	3
203204	0.015	1325	0.048	1001	32.1	162.7	99.4	2.7	0.88	6.4	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.044	1112	29.8	153.3	96.8	3.4	1.05	7.5	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.044	1496	33.4	247.2	118.7	4.6	0.76	6.2	6.6	3.7	5.3	0.5	15	15
206207	0.031	4972	0.044	1701	35.4	148.0	77.4	3.0	1.51	11.8	13.8	6.2	15.6	0.1	3	3
207105	0.017	7176	0.041	1740	29.5	149.6	40.2	4.3	1.08	11.9	15.0	7.2	15.0	0.1	4	4
300301	0.014	5117	0.044	1135	37.0	153.1	46.2	3.7	0.74	7.6	10.7	5.1	10.7	0.1	4	4
301302	0.009	8124	0.044	1253	27.0	175.6	80.6	4.3	0.87	7.3	7.5	4.1	6.4	0.3	9	9
302303	0.019	7304	0.049	1333	40.8	159.2	59.9	3.6	0.93	8.6	12.2	6.1	11.4	0.2	5	5
400401	0.010	7424	0.040	429	7.8	103.7	46.6	3.9	0.51	4.3	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	591	22.2	117.1	65.6	3.0	0.69	5.2	6.7	3.6	5.6	0.3	10	10
402403	0.005	6138	0.043	755	8.7	212.6	87.5	4.4	0.41	3.6	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	936	12.4	143.1	65.0	3.8	0.80	6.7	8.9	4.2	8.9	0.1	4	4
500501	0.013	5972	0.035	506	22.0	72.1	38.7	2.5	0.94	7.3	10.0	5.0	9.4	0.2	5	5
501502	0.016	5021	0.035	713	29.0	83.2	34.3	2.6	1.00	8.8	13.9	6.3	15.7	0.1	3	3
502505	0.009	8775	0.040	1157	86.0	223.9	111.4	2.9	0.66	5.3	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	83	3.4	31.9	17.6	3.3	0.35	2.7	5.4	3.0	4.4	0.5	14	14
504505	0.013	7754	0.043	79	54.4	31.8	31.5	2.0	0.46	2.6	3.6	2.0	2.9	0.6	19	18
505509	0.006	6213	0.047	1335	150.9	370.9	197.7	2.3	0.48	3.7	5.8	3.1	4.9	0.3	9	9
506508	0.015	4023	0.045	85	10.3	25.5	19.3	2.6	0.54	3.5	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	91	10.9	33.1	27.4	2.0	0.46	2.9	5.0	2.7	4.2	0.3	9	9
508509	0.008	10349	0.041	501	14.8	108.4	54.4	4.0	0.60	4.8	5.7	3.2	4.6	0.5	15	15
509510	0.010	1958	0.044	1666	26.3	296.4	154.8	3.9	0.74	5.8	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.045	1729	14.4	293.0	128.4	6.0	0.70	6.0	6.2	3.4	5.3	0.3	9	9
511512	0.008	9226	0.044	1727	19.5	365.9	145.9	5.2	0.54	4.8	8.5	4.6	7.2	0.3	9	9

Table D-16

Summary of the normal depth reach route hydraulic data for the future watershed condition 10-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	557	20.0	73.6	51.8	2.8	1.17	7.9	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	850	90.0	119.3	97.9	1.3	1.21	7.6	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	1439	257.0	277.7	262.1	1.1	0.95	5.6	10.6	5.4	9.5	0.2	6	6
603604	0.019	7830	0.035	2216	275.0	359.0	281.7	1.3	1.03	6.6	8.2	4.3	7.0	0.3	8	8
604605	0.007	1543	0.035	2380	85.0	374.7	124.9	3.6	0.66	6.5	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	2412	33.0	260.4	127.8	3.2	1.18	9.5	15.3	6.9	17.3	0.1	3	3
606608	0.018	1141	0.035	2565	87.0	289.7	128.4	2.7	1.07	9.1	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	447	48.0	59.8	51.6	1.2	1.30	8.0	11.6	6.2	10.0	0.3	8	8
608609	0.012	6518	0.035	2993	42.0	359.8	139.3	4.0	0.93	8.5	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	3114	180.0	669.9	223.6	3.3	0.49	4.8	6.0	3.3	5.1	0.3	9	9
610611	0.010	7981	0.035	614	9.0	100.2	22.4	6.4	0.52	6.2	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	3362	88.0	258.9	114.2	2.6	1.57	13.4	12.3	5.5	13.9	0.1	3	3
612613	0.033	8752	0.035	629	70.0	84.0	72.4	1.2	1.32	8.0	12.2	6.2	11.0	0.2	6	6
613614	0.011	5557	0.035	3630	80.0	406.6	104.4	4.4	0.81	9.1	11.6	5.5	11.6	0.1	4	4
614615	0.014	7995	0.035	3604	45.0	348.6	94.2	5.0	0.97	10.5	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.041	383	24.0	71.1	55.7	2.2	0.88	5.7	7.8	4.2	6.7	0.3	8	8
705OAF	0.008	2254	0.045	541	156.4	259.4	393.3	1.0	0.51	2.3	3.1	1.6	2.8	0.2	5	6
709710	0.026	2683	0.035	340	35.0	51.8	44.8	1.3	1.14	7.0	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	154	35.0	28.6	45.7	0.7	1.33	6.0	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	205	45.0	46.7	53.3	1.0	0.89	4.7	8.5	3.4	12.7	0.1	3	2
713714	0.042	831	0.035	128	25.0	22.2	29.1	0.8	1.28	6.3	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	527	30.0	90.4	75.2	1.7	0.98	6.1	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	687	95.0	176.6	128.6	1.6	0.61	4.1	3.3	1.9	2.6	0.6	18	18
721722	0.017	8812	0.035	217	35.0	45.9	46.3	1.1	0.90	5.1	8.2	4.4	6.9	0.3	10	9
726727	0.019	6228	0.035	524	55.0	86.8	69.0	1.4	1.00	6.4	8.7	4.4	7.8	0.2	6	6

Table D-17

Summary of the normal depth reach route hydraulic data for the future watershed condition 5-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	205	12.3	40.6	30.0	2.0	0.80	5.3	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	202	14.0	38.2	24.1	2.0	0.77	5.5	6.7	3.6	5.7	0.3	9	9
102103	0.012	8068	0.042	481	17.6	81.5	54.9	2.5	0.89	6.1	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	721	22.0	110.7	39.8	3.9	0.70	6.7	9.0	4.8	7.7	0.3	8	8
104105	0.012	6956	0.053	740	21.8	166.8	103.6	3.5	0.64	4.6	5.8	3.2	4.8	0.3	10	10
200201	0.023	3952	0.030	389	21.0	42.9	26.4	1.8	1.31	9.5	11.0	4.9	12.4	0.1	3	3
201203	0.016	3233	0.047	462	32.1	92.3	95.1	2.0	0.94	5.3	6.7	3.2	6.8	0.1	4	4
202203	0.017	2353	0.030	87	32.1	22.2	36.4	0.8	1.00	4.4	6.5	2.9	7.4	0.1	3	3
203204	0.015	1325	0.048	659	32.1	122.4	97.6	2.3	0.89	5.7	5.5	2.2	8.3	0.1	2	2
204205	0.014	5007	0.042	736	29.8	105.9	67.5	2.9	1.01	7.2	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.040	998	33.4	171.7	66.0	3.8	0.65	5.9	7.6	4.2	6.2	0.4	13	13
206207	0.031	4972	0.042	1152	35.4	111.5	63.8	2.5	1.42	10.7	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.040	1189	29.5	117.4	38.2	3.5	1.04	10.3	15.0	7.2	15.0	0.1	4	4
300301	0.014	5117	0.044	788	37.0	122.7	44.5	3.0	0.70	6.6	10.7	5.1	10.7	0.1	4	4
301302	0.009	8124	0.040	855	27.0	130.8	50.9	3.6	0.74	6.7	8.5	4.5	7.3	0.3	8	8
302303	0.019	7304	0.049	861	40.8	120.9	56.2	2.9	0.89	7.4	10.1	5.2	9.2	0.2	6	6
400401	0.010	7424	0.040	374	7.8	94.5	44.6	3.7	0.49	4.1	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	449	22.2	97.5	60.9	2.7	0.67	4.8	5.6	3.1	4.6	0.4	12	12
402403	0.005	6138	0.043	506	8.7	161.7	76.4	3.8	0.39	3.2	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	681	12.4	114.7	58.5	3.3	0.77	6.1	7.1	3.5	6.7	0.2	5	5
500501	0.013	5972	0.035	353	22.0	57.1	36.0	2.1	0.90	6.4	8.3	4.3	7.5	0.2	6	6
501502	0.016	5021	0.035	483	29.0	65.6	33.2	2.1	0.95	7.6	13.9	6.3	15.7	0.1	3	3
502505	0.009	8775	0.040	696	86.0	164.3	105.6	2.4	0.63	4.5	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	73	3.4	29.7	17.0	3.2	0.34	2.6	5.1	2.8	4.1	0.5	15	15
504505	0.013	7754	0.043	72	54.4	30.0	30.6	2.0	0.45	2.5	3.2	1.8	2.6	0.7	20	20
505509	0.006	6213	0.047	821	150.9	272.8	186.7	1.8	0.46	3.1	4.3	2.4	3.5	0.4	12	12
506508	0.015	4023	0.045	80	10.3	24.3	18.9	2.6	0.53	3.4	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	86	10.9	32.0	27.0	1.9	0.46	2.8	5.0	2.7	4.2	0.3	9	9
508509	0.008	10349	0.041	407	14.8	93.2	50.5	3.7	0.58	4.5	5.4	3.0	4.3	0.5	16	16
509510	0.010	1958	0.043	1002	26.3	204.7	104.8	3.2	0.64	5.0	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.044	1024	14.4	199.8	70.9	4.9	0.55	5.2	6.2	3.4	5.3	0.3	9	9
511512	0.008	9226	0.044	1175	19.5	279.8	127.5	4.6	0.51	4.3	5.1	2.9	4.1	0.5	15	15

Table D-17

Summary of the normal depth reach route hydraulic data for the future watershed condition 5-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	343	20.0	53.0	44.0	2.4	1.10	6.8	9.6	4.3	10.8	0.1	3	3
601602	0.027	6017	0.035	538	90.0	91.2	96.1	1.0	1.16	6.4	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	959	257.0	220.2	261.0	0.9	0.92	4.8	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	1546	275.0	291.6	280.4	1.1	0.99	5.7	6.5	3.6	5.5	0.3	10	10
604605	0.007	1543	0.035	1662	85.0	298.3	117.9	2.9	0.64	5.7	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	1692	33.0	202.5	113.7	2.8	1.14	8.7	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	1818	87.0	232.2	121.3	2.2	1.04	8.1	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	315	48.0	49.0	51.0	1.0	1.26	7.0	10.3	5.6	8.7	0.3	9	9
608609	0.012	6518	0.035	2147	42.0	284.4	125.3	3.4	0.91	7.7	10.9	5.4	10.2	0.2	5	5
609611	0.003	6519	0.035	2232	180.0	542.5	216.0	2.7	0.47	4.2	6.8	3.6	5.8	0.3	8	8
610611	0.010	7981	0.035	449	9.0	82.5	20.7	5.6	0.49	5.5	9.5	5.0	8.3	0.2	7	7
611613	0.038	4445	0.035	2444	88.0	211.8	109.9	2.1	1.52	12.0	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	448	70.0	68.8	71.9	1.0	1.27	7.1	9.1	4.9	7.8	0.3	8	8
613614	0.011	5557	0.035	2656	80.0	334.9	100.5	3.7	0.78	8.1	11.6	5.5	11.6	0.1	4	4
614615	0.014	7995	0.035	2633	45.0	283.3	87.1	4.3	0.93	9.5	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.042	262	24.0	53.8	46.0	1.9	0.84	5.1	7.0	3.8	5.9	0.3	9	9
705OAF	0.008	2254	0.045	435	156.4	225.0	371.5	0.9	0.49	2.2	3.1	1.6	2.8	0.2	6	6
709710	0.026	2683	0.035	291	35.0	47.0	43.9	1.2	1.12	6.6	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	143	35.0	27.7	45.4	0.7	1.32	5.9	4.4	2.0	5.0	0.1	3	3
712714	0.017	2032	0.035	188	45.0	44.6	53.0	0.9	0.88	4.6	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	107	25.0	20.2	28.8	0.8	1.26	6.0	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	478	30.0	84.5	73.1	1.6	0.98	6.0	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	577	95.0	158.8	125.6	1.4	0.60	3.9	3.1	1.8	2.5	0.6	19	19
721722	0.017	8812	0.035	189	35.0	42.3	45.5	1.1	0.89	4.8	7.3	4.0	6.1	0.3	10	10
726727	0.019	6228	0.035	398	55.0	73.2	67.0	1.2	0.98	5.8	8.7	4.4	7.8	0.2	6	6

Table D-18

Summary of the normal depth reach route hydraulic data for the future watershed condition 2-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	92	12.3	23.8	24.3	1.4	0.73	4.1	5.4	3.0	4.5	0.3	10	10
101102	0.014	7254	0.040	96	14.0	23.9	20.9	1.4	0.70	4.3	6.0	3.3	5.1	0.3	10	10
102103	0.012	8068	0.039	191	17.6	44.1	38.7	1.7	0.75	4.6	6.1	3.4	5.1	0.4	11	11
103104	0.016	8625	0.053	274	22.0	59.7	32.6	2.5	0.62	4.8	7.2	3.9	6.0	0.3	10	10
104105	0.012	6956	0.053	282	21.8	75.7	46.5	2.3	0.53	3.9	5.3	2.9	4.4	0.4	11	11
200201	0.023	3952	0.030	183	21.0	27.4	24.6	1.2	1.20	7.2	11.0	4.9	12.4	0.1	3	3
201203	0.016	3233	0.044	224	32.1	49.7	59.8	1.4	0.92	4.8	5.4	2.7	5.1	0.2	5	5
202203	0.017	2353	0.030	40	32.1	14.4	34.8	0.6	0.93	3.4	4.9	2.3	4.9	0.1	4	4
203204	0.015	1325	0.046	348	32.1	73.0	81.0	1.8	0.94	5.0	5.5	2.2	8.3	0.1	2	2
204205	0.014	5007	0.039	389	29.8	68.2	42.5	2.1	0.83	5.9	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.039	545	33.4	115.9	51.9	2.8	0.57	4.9	7.1	4.0	5.7	0.5	14	14
206207	0.031	4972	0.039	622	35.4	75.4	50.9	1.9	1.25	8.6	13.8	6.2	15.6	0.1	3	3
207105	0.017	7176	0.039	641	29.5	80.5	35.7	2.5	0.96	8.2	12.0	6.0	11.2	0.2	5	5
300301	0.014	5117	0.044	391	37.0	80.3	42.1	2.0	0.65	5.1	7.1	3.6	6.4	0.2	6	6
301302	0.009	8124	0.039	420	27.0	82.4	41.8	2.5	0.66	5.3	7.5	4.1	6.4	0.3	9	9
302303	0.019	7304	0.048	405	40.8	76.2	51.5	2.1	0.81	5.6	7.6	4.0	6.5	0.3	8	8
400401	0.010	7424	0.040	262	7.8	75.1	39.9	3.3	0.46	3.6	6.2	3.4	5.2	0.3	10	10
401402	0.011	8029	0.043	283	22.2	71.0	54.1	2.2	0.64	4.2	4.5	2.5	3.6	0.5	15	15
402403	0.005	6138	0.043	280	8.7	108.2	62.7	3.0	0.36	2.7	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	324	12.4	68.7	45.9	2.5	0.71	4.9	7.1	3.5	6.7	0.2	5	5
500501	0.013	5972	0.035	173	22.0	36.5	31.8	1.5	0.83	5.1	7.1	3.7	6.2	0.2	7	7
501502	0.016	5021	0.035	231	29.0	42.6	31.8	1.4	0.88	5.8	10.5	5.0	10.5	0.1	4	4
502505	0.009	8775	0.040	347	86.0	107.8	99.8	1.8	0.59	3.5	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	46	3.4	22.1	14.7	2.7	0.31	2.2	4.5	2.5	3.6	0.6	17	17
504505	0.013	7754	0.043	54	54.4	25.0	27.9	1.8	0.43	2.3	3.6	2.0	2.9	0.6	18	18
505509	0.006	6213	0.047	401	150.9	176.9	175.3	1.2	0.43	2.4	2.9	1.6	2.3	0.6	18	18
506508	0.015	4023	0.045	68	10.3	22.1	18.0	2.5	0.52	3.3	4.8	2.5	4.2	0.2	7	7
507508	0.011	5400	0.045	77	10.9	29.9	26.3	1.9	0.45	2.7	4.1	2.2	3.4	0.4	11	11
508509	0.008	10349	0.041	264	14.8	69.2	43.6	3.2	0.56	4.0	5.4	3.0	4.3	0.5	16	16
509510	0.010	1958	0.043	485	26.3	123.9	83.2	2.3	0.59	4.1	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.044	493	14.4	120.7	55.8	3.6	0.51	4.2	6.2	3.4	5.3	0.3	9	9
511512	0.008	9226	0.044	565	19.5	169.0	98.8	3.6	0.47	3.5	4.8	2.7	3.9	0.5	16	16

Table D-18

Summary of the normal depth reach route hydraulic data for the future watershed condition 2-year, 6-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	195	20.0	36.1	36.3	2.0	1.01	5.7	7.2	3.5	7.2	0.1	4	4
601602	0.027	6017	0.035	329	90.0	68.3	94.6	0.7	1.10	5.3	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	586	257.0	165.5	260.0	0.6	0.87	4.0	10.6	5.4	9.5	0.2	6	6
603604	0.019	7830	0.035	968	275.0	221.7	279.1	0.8	0.95	4.8	6.5	3.6	5.5	0.3	10	10
604605	0.007	1543	0.035	1035	85.0	220.7	110.3	2.3	0.60	4.8	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	1058	33.0	145.3	97.9	2.2	1.10	7.6	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	1137	87.0	172.4	113.4	1.7	0.99	6.9	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	147	48.0	31.3	49.9	0.6	1.16	5.2	7.2	4.0	5.8	0.4	14	13
608609	0.012	6518	0.035	1341	42.0	206.0	108.9	2.7	0.87	6.8	10.9	5.4	10.2	0.2	5	5
609611	0.003	6519	0.035	1393	180.0	406.9	207.6	2.1	0.45	3.6	6.0	3.3	5.1	0.3	9	9
610611	0.010	7981	0.035	265	9.0	59.6	18.2	4.4	0.44	4.5	9.5	5.0	8.3	0.2	7	7
611613	0.038	4445	0.035	1517	88.0	158.1	104.8	1.6	1.45	10.1	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	225	70.0	46.6	71.3	0.7	1.19	5.5	9.1	4.9	7.8	0.3	9	8
613614	0.011	5557	0.035	1628	80.0	247.6	95.6	2.8	0.74	6.7	11.6	5.5	11.6	0.1	4	4
614615	0.014	7995	0.035	1603	45.0	205.0	77.8	3.3	0.87	8.0	16.7	8.0	16.7	0.1	5	4
704705	0.019	7534	0.045	106	24.0	29.5	29.7	1.2	0.68	3.9	4.8	2.7	3.9	0.4	13	13
705OAF	0.008	2254	0.045	241	156.4	152.4	320.0	0.7	0.46	1.8	2.3	1.2	2.0	0.3	8	8
709710	0.026	2683	0.035	200	35.0	37.5	42.3	1.0	1.08	5.8	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	125	35.0	25.5	44.6	0.6	1.30	5.6	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	153	45.0	39.3	52.1	0.8	0.87	4.3	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	68	25.0	15.3	27.9	0.6	1.20	5.0	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	348	30.0	68.4	67.0	1.4	0.95	5.4	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	390	95.0	124.5	119.7	1.2	0.58	3.4	3.7	2.1	3.0	0.5	16	16
721722	0.017	8812	0.035	144	35.0	35.6	44.0	0.9	0.86	4.4	4.3	2.4	3.5	0.6	17	17
726727	0.019	6228	0.035	207	55.0	49.7	63.4	0.8	0.92	4.6	5.8	3.1	4.9	0.3	9	9

Table D-19

Summary of the normal depth reach route hydraulic data for the future watershed condition 100-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.045	510	12.3	85.8	65.9	2.9	0.96	6.2	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	458	14.0	65.1	29.1	3.0	0.86	7.3	12.1	6.0	11.4	0.2	5	5
102103	0.012	8068	0.047	1699	17.6	216.2	96.3	4.3	0.95	8.0	9.6	5.0	8.4	0.2	7	7
103104	0.016	8625	0.053	2757	22.0	264.1	56.1	7.1	0.86	10.6	14.4	7.2	13.5	0.2	5	5
104105	0.012	6956	0.053	2938	21.8	419.9	116.5	5.8	0.66	7.1	11.6	5.8	10.9	0.2	5	5
200201	0.023	3952	0.030	1058	21.0	79.2	30.3	3.1	1.49	13.7	33.0	9.9	49.5	0.0	1	1
201203	0.016	3233	0.048	1385	32.1	200.8	101.0	3.1	0.89	7.1	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.030	158	32.1	31.6	38.3	1.1	1.06	5.5	9.8	3.9	14.7	0.1	2	2
203204	0.015	1325	0.048	2587	32.1	305.1	105.4	4.1	0.90	8.7	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.045	2896	29.8	312.9	106.5	5.0	0.97	9.5	13.9	6.2	15.7	0.1	3	3
205206	0.006	11893	0.045	4087	33.4	528.5	131.8	6.9	0.69	7.8	9.9	5.4	8.3	0.3	10	10
206207	0.031	4972	0.045	4678	35.4	302.7	88.0	4.9	1.49	15.7	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.044	4869	29.5	295.9	48.5	7.6	1.19	16.6	19.9	9.0	22.5	0.1	3	3
300301	0.014	5117	0.044	2138	37.0	225.7	50.0	5.2	0.80	9.6	21.3	8.5	32.1	0.1	2	2
301302	0.009	8124	0.048	2542	27.0	353.4	175.2	5.7	0.91	7.3	7.5	4.1	6.4	0.3	9	9
302303	0.019	7304	0.050	3010	40.8	273.4	71.0	5.4	1.00	11.2	15.2	7.3	15.3	0.1	4	4
400401	0.010	7424	0.040	517	7.8	117.1	49.5	4.2	0.52	4.6	6.2	3.4	5.2	0.3	10	10
401402	0.011	8029	0.043	1034	22.2	174.1	87.1	3.8	0.76	6.1	7.4	4.0	6.3	0.3	9	9
402403	0.005	6138	0.044	1548	8.7	379.6	178.9	5.7	0.51	4.2	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	1816	12.4	228.0	81.5	5.0	0.86	8.1	11.8	5.3	13.3	0.1	3	3
500501	0.013	5972	0.038	995	22.0	112.1	49.9	3.4	1.07	9.1	12.4	6.0	12.5	0.1	4	4
501502	0.016	5021	0.035	1528	29.0	132.0	37.0	4.0	1.10	11.8	13.9	6.3	15.7	0.1	3	3
502505	0.009	8775	0.040	2231	86.0	336.3	120.0	3.9	0.72	6.8	9.1	4.9	7.9	0.3	8	8
503505	0.012	9136	0.047	89	3.4	33.4	18.0	3.4	0.36	2.7	5.4	3.0	4.4	0.5	14	14
504505	0.013	7754	0.043	90	54.4	34.7	32.9	2.1	0.47	2.7	5.9	3.2	4.9	0.4	12	11
505509	0.006	6213	0.047	2676	150.9	579.4	219.3	3.3	0.51	4.7	7.4	3.9	6.5	0.2	7	7
506508	0.015	4023	0.045	89	10.3	26.3	19.6	2.7	0.54	3.6	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	97	10.9	34.8	28.0	2.0	0.47	3.0	5.6	3.0	4.8	0.3	8	8
508509	0.008	10349	0.041	635	14.8	127.7	59.0	4.3	0.61	5.1	6.6	3.7	5.4	0.4	13	13
509510	0.010	1958	0.044	3363	26.3	565.9	304.1	5.1	0.79	6.1	8.2	3.3	12.3	0.1	2	2
510511	0.007	6722	0.046	3530	14.4	646.1	369.0	7.4	0.75	5.6	6.2	3.4	5.3	0.3	9	9
511512	0.008	9226	0.044	3619	19.5	610.5	207.7	6.6	0.62	6.1	8.5	4.6	7.2	0.3	9	9

Table D-19

Summary of the normal depth reach route hydraulic data for the future watershed condition 100-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1791	20.0	162.2	74.1	4.2	1.36	11.4	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	2669	90.0	237.2	105.2	2.4	1.36	11.6	16.7	7.5	18.9	0.1	3	3
602603	0.017	7614	0.035	4665	257.0	552.8	267.0	2.1	1.07	8.7	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	7225	275.0	718.0	288.2	2.6	1.15	10.3	16.3	7.8	16.4	0.1	5	4
604605	0.007	1543	0.035	7822	85.0	822.2	160.1	6.7	0.75	9.6	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.042	7895	33.0	690.5	296.7	5.1	1.36	11.7	15.3	6.9	17.3	0.1	3	3
606608	0.018	1141	0.035	8287	87.0	628.8	164.0	5.0	1.21	13.4	0.0	0.0	0.0	0.0	1	1
607608	0.024	11167	0.030	681	48.0	77.0	52.6	1.5	1.36	9.4	15.5	8.0	14.0	0.2	6	6
608609	0.012	6518	0.035	9482	42.0	821.0	204.9	6.7	1.03	11.7	18.1	8.1	20.4	0.1	3	3
609611	0.003	6519	0.035	9835	180.0	1399.7	263.0	6.3	0.54	7.1	10.9	5.4	10.2	0.2	5	5
610611	0.010	7981	0.035	1014	9.0	136.6	25.6	7.9	0.57	7.5	13.3	6.6	12.5	0.2	5	5
611613	0.038	4445	0.035	10485	88.0	536.4	136.9	4.8	1.77	19.9	37.1	11.1	55.7	0.0	1	1
612613	0.033	8752	0.035	1024	70.0	110.9	73.1	1.6	1.38	9.7	14.6	7.3	13.7	0.2	5	5
613614	0.011	5557	0.035	11217	80.0	828.4	124.8	8.1	0.94	13.7	15.4	6.9	17.4	0.1	3	3
614615	0.014	7995	0.035	11167	45.0	746.0	129.1	8.6	1.11	15.1	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.041	530	24.0	90.4	64.7	2.5	0.91	6.1	10.5	5.4	9.4	0.2	6	6
705OAF	0.008	2254	0.045	697	156.4	304.1	419.9	1.1	0.52	2.5	3.8	1.9	3.5	0.2	5	5
709710	0.026	2683	0.035	379	35.0	55.4	45.4	1.4	1.16	7.3	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	165	35.0	30.0	46.1	0.7	1.34	6.1	13.2	4.0	19.9	0.0	1	1
712714	0.017	2032	0.035	223	45.0	49.4	53.8	1.0	0.90	4.9	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	142	25.0	23.6	29.4	0.9	1.29	6.6	0.0	0.0	0.0	0.0	1	1
716717	0.018	4232	0.035	605	30.0	99.6	78.3	1.8	1.00	6.4	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	955	95.0	218.9	135.4	1.9	0.63	4.6	7.4	4.0	6.4	0.3	9	8
721722	0.017	8812	0.035	242	35.0	49.2	47.0	1.2	0.91	5.3	7.3	4.0	6.1	0.3	10	10
726727	0.019	6228	0.035	552	55.0	89.6	69.4	1.4	1.01	6.5	13.0	6.2	13.0	0.1	4	4

Table D-20

Summary of the normal depth reach route hydraulic data for the future watershed condition 50-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.044	416	12.3	72.5	61.3	2.7	0.97	6.0	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	375	14.0	56.9	27.7	2.7	0.83	6.8	8.6	4.5	7.6	0.2	7	7
102103	0.012	8068	0.047	1396	17.6	184.7	88.4	4.0	0.95	7.8	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	2261	22.0	231.3	53.0	6.5	0.84	9.9	14.4	7.2	13.5	0.2	5	5
104105	0.012	6956	0.053	2405	21.8	368.1	114.0	5.4	0.65	6.7	9.7	5.0	8.7	0.2	6	6
200201	0.023	3952	0.030	863	21.0	70.0	29.3	2.8	1.45	12.7	33.0	9.9	49.5	0.0	1	1
201203	0.016	3233	0.048	1124	32.1	174.7	99.9	2.8	0.89	6.7	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.030	131	32.1	28.1	37.6	1.0	1.04	5.1	9.8	3.9	14.7	0.1	2	2
203204	0.015	1325	0.048	2094	32.1	266.4	103.8	3.7	0.89	8.1	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.045	2339	29.8	268.7	103.9	4.6	0.98	8.9	13.9	6.2	15.7	0.1	3	3
205206	0.006	11893	0.044	3300	33.4	454.2	128.7	6.3	0.69	7.4	9.9	5.4	8.3	0.3	10	10
206207	0.031	4972	0.045	3765	35.4	260.2	85.2	4.4	1.49	14.7	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.043	3896	29.5	254.2	46.3	6.7	1.17	15.5	19.9	9.0	22.5	0.1	2	3
300301	0.014	5117	0.044	1813	37.0	204.0	48.9	4.8	0.78	9.1	14.2	6.4	16.0	0.1	3	3
301302	0.009	8124	0.047	2162	27.0	299.3	152.7	5.3	0.93	7.4	6.8	3.7	5.7	0.3	10	10
302303	0.019	7304	0.050	2565	40.8	245.6	68.4	5.0	0.99	10.6	15.2	7.3	15.3	0.1	4	4
400401	0.010	7424	0.040	488	7.8	112.7	48.6	4.1	0.52	4.5	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	878	22.2	154.0	73.5	3.5	0.71	5.9	7.4	4.0	6.3	0.3	9	9
402403	0.005	6138	0.044	1280	8.7	320.3	150.6	5.4	0.49	4.1	5.1	2.8	4.3	0.3	10	10
403404	0.016	4256	0.045	1520	12.4	201.2	76.7	4.6	0.84	7.7	11.8	5.3	13.3	0.1	3	3
500501	0.013	5972	0.037	814	22.0	97.8	45.5	3.1	1.03	8.6	12.4	6.0	12.5	0.1	4	4
501502	0.016	5021	0.035	1241	29.0	116.3	36.1	3.6	1.07	10.9	20.9	8.4	31.5	0.1	2	2
502505	0.009	8775	0.040	1994	86.0	313.7	118.4	3.7	0.71	6.5	10.4	5.5	9.2	0.2	7	7
503505	0.012	9136	0.047	85	3.4	32.6	17.8	3.4	0.35	2.7	5.1	2.8	4.1	0.5	15	15
504505	0.013	7754	0.043	84	54.4	33.4	32.3	2.1	0.47	2.7	5.0	2.8	4.0	0.4	13	13
505509	0.006	6213	0.047	2368	150.9	535.9	215.0	3.1	0.51	4.5	5.8	3.1	4.9	0.3	9	9
506508	0.015	4023	0.045	87	10.3	25.9	19.5	2.7	0.54	3.5	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	95	10.9	34.2	27.8	2.0	0.46	2.9	5.6	3.0	4.8	0.3	8	8
508509	0.008	10349	0.041	562	14.8	117.3	56.6	4.1	0.60	4.9	6.2	3.4	5.0	0.5	14	14
509510	0.010	1958	0.044	2914	26.3	506.0	295.4	4.9	0.80	6.0	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.045	3041	14.4	549.4	321.6	7.1	0.77	5.7	5.6	3.0	4.7	0.3	10	10
511512	0.008	9226	0.044	3091	19.5	549.7	184.1	6.3	0.59	5.7	8.5	4.6	7.2	0.3	9	9

Table D-20

Summary of the normal depth reach route hydraulic data for the future watershed condition 50-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1417	20.0	139.5	71.4	3.9	1.32	10.5	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	2137	90.0	206.9	103.4	2.1	1.33	10.7	16.7	7.5	18.9	0.1	3	3
602603	0.017	7614	0.035	3536	257.0	470.3	265.6	1.8	1.04	7.9	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	5540	275.0	614.6	286.3	2.2	1.12	9.3	13.0	6.5	12.3	0.2	5	5
604605	0.007	1543	0.035	6004	85.0	688.7	150.4	5.9	0.73	8.9	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.042	6057	33.0	560.7	293.2	4.7	1.42	11.1	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	6370	87.0	527.0	154.2	4.4	1.18	12.3	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	562	48.0	68.6	52.1	1.4	1.33	8.7	15.5	8.0	14.0	0.2	6	6
608609	0.012	6518	0.035	7301	42.0	679.8	187.3	5.9	1.01	10.9	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	7579	180.0	1181.0	251.8	5.5	0.53	6.5	9.1	4.6	8.2	0.2	6	6
610611	0.010	7981	0.035	849	9.0	122.4	24.4	7.3	0.55	7.0	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	8090	88.0	452.2	130.4	4.1	1.72	18.2	37.1	11.1	55.7	0.0	1	1
612613	0.033	8752	0.035	854	70.0	100.0	72.8	1.4	1.36	9.0	18.2	8.7	18.3	0.1	4	4
613614	0.011	5557	0.035	8619	80.0	700.4	119.0	7.0	0.90	12.5	23.1	9.2	34.8	0.1	2	2
614615	0.014	7995	0.035	8557	45.0	621.8	119.3	7.6	1.07	13.9	22.2	10.0	25.0	0.1	3	3
704705	0.019	7534	0.041	446	24.0	79.8	59.9	2.4	0.90	5.9	9.0	4.7	7.9	0.2	7	7
705OAF	0.008	2254	0.045	646	156.4	287.5	410.2	1.1	0.52	2.5	3.8	1.9	3.5	0.2	5	5
709710	0.026	2683	0.035	358	35.0	53.6	45.1	1.3	1.15	7.1	7.5	3.3	8.4	0.1	3	3
711712	0.044	1586	0.035	156	35.0	29.1	45.8	0.7	1.33	6.0	13.2	4.0	19.9	0.0	1	1
712714	0.017	2032	0.035	208	45.0	47.2	53.4	1.0	0.89	4.8	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	129	25.0	22.5	29.2	0.8	1.28	6.4	0.0	0.0	0.0	0.0	1	1
716717	0.018	4232	0.035	575	30.0	96.5	77.3	1.8	0.99	6.3	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	870	95.0	205.4	133.3	1.8	0.63	4.4	6.6	3.6	5.6	0.3	9	9
721722	0.017	8812	0.035	224	35.0	46.9	46.5	1.2	0.90	5.1	8.2	4.4	6.9	0.3	9	9
726727	0.019	6228	0.035	476	55.0	82.0	68.3	1.3	1.00	6.2	10.4	5.2	9.8	0.2	5	5

Table D-21

Summary of the normal depth reach route hydraulic data for the future watershed condition 25-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.044	322	12.3	57.5	58.9	2.4	1.04	5.8	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	293	14.0	48.5	26.1	2.4	0.81	6.3	8.6	4.5	7.6	0.2	7	7
102103	0.012	8068	0.046	1085	17.6	151.2	79.1	3.6	0.94	7.4	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	1768	22.0	197.0	49.6	5.8	0.81	9.1	12.0	6.1	10.8	0.2	6	6
104105	0.012	6956	0.053	1885	21.8	315.1	111.3	4.9	0.64	6.1	8.3	4.3	7.3	0.2	7	7
200201	0.023	3952	0.030	667	21.0	59.6	28.3	2.4	1.40	11.6	33.0	9.9	49.5	0.0	1	1
201203	0.016	3233	0.048	865	32.1	145.9	98.6	2.5	0.89	6.2	9.0	4.0	10.1	0.1	3	3
202203	0.017	2353	0.030	105	32.1	24.8	37.0	0.9	1.02	4.7	9.8	3.9	14.7	0.1	2	2
203204	0.015	1325	0.048	1603	32.1	223.2	102.0	3.3	0.88	7.4	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.045	1789	29.8	221.6	101.1	4.1	0.99	8.3	10.4	5.0	10.5	0.1	4	4
205206	0.006	11893	0.044	2534	33.4	375.5	125.3	5.7	0.70	6.9	8.3	4.6	6.8	0.4	12	12
206207	0.031	4972	0.045	2898	35.4	217.5	82.3	3.9	1.48	13.7	13.8	6.2	15.6	0.1	3	3
207105	0.017	7176	0.043	3011	29.5	213.6	44.0	5.8	1.14	14.3	19.9	9.0	22.5	0.1	4	3
300301	0.014	5117	0.044	1462	37.0	178.4	47.6	4.2	0.76	8.3	14.2	6.4	16.0	0.1	3	3
301302	0.009	8124	0.046	1731	27.0	237.5	122.1	4.9	0.94	7.4	7.5	4.1	6.4	0.3	9	9
302303	0.019	7304	0.050	2058	40.8	211.6	65.0	4.4	0.97	9.9	12.2	6.1	11.4	0.2	5	5
400401	0.010	7424	0.040	451	7.8	106.9	47.4	4.0	0.51	4.3	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	717	22.2	134.0	69.3	3.2	0.70	5.5	7.4	4.0	6.3	0.3	9	9
402403	0.005	6138	0.043	1016	8.7	264.0	117.5	4.9	0.46	3.9	5.1	2.8	4.3	0.3	10	10
403404	0.016	4256	0.045	1222	12.4	172.3	71.1	4.2	0.82	7.3	8.9	4.2	8.9	0.1	4	4
500501	0.013	5972	0.035	632	22.0	83.6	40.7	2.8	0.96	7.8	10.0	5.0	9.4	0.2	5	5
501502	0.016	5021	0.035	959	29.0	99.5	35.2	3.1	1.04	9.9	13.9	6.3	15.7	0.1	3	3
502505	0.009	8775	0.040	1679	86.0	282.0	116.2	3.4	0.69	6.1	10.4	5.5	9.2	0.2	7	7
503505	0.012	9136	0.047	80	3.4	31.2	17.4	3.3	0.35	2.6	5.4	3.0	4.4	0.5	14	14
504505	0.013	7754	0.043	78	54.4	31.8	31.5	2.0	0.46	2.6	3.4	1.9	2.7	0.6	19	19
505509	0.006	6213	0.047	2000	150.9	480.8	209.4	2.8	0.50	4.3	5.2	2.8	4.3	0.3	10	10
506508	0.015	4023	0.045	84	10.3	25.3	19.2	2.6	0.54	3.5	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	91	10.9	33.1	27.4	2.0	0.46	2.9	5.6	3.0	4.8	0.3	8	8
508509	0.008	10349	0.041	493	14.8	106.7	54.0	3.9	0.60	4.8	5.7	3.2	4.6	0.5	15	15
509510	0.010	1958	0.044	2445	26.3	425.5	255.0	4.6	0.81	5.9	8.2	3.3	12.3	0.1	2	2
510511	0.007	6722	0.045	2522	14.4	442.1	258.9	6.8	0.79	5.8	5.6	3.0	4.7	0.3	10	10
511512	0.008	9226	0.044	2538	19.5	480.2	167.2	5.9	0.56	5.4	8.5	4.6	7.2	0.3	9	9

Table D-21

Summary of the normal depth reach route hydraulic data for the future watershed condition 25-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	1045	20.0	113.1	64.2	3.5	1.27	9.6	28.9	8.6	43.4	0.0	1	1
601602	0.027	6017	0.035	1610	90.0	174.2	101.4	1.8	1.29	9.6	16.7	7.5	18.9	0.1	3	3
602603	0.017	7614	0.035	2839	257.0	412.0	264.5	1.6	1.02	7.2	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	4373	275.0	534.7	284.9	1.9	1.10	8.5	13.0	6.5	12.3	0.2	5	5
604605	0.007	1543	0.035	4757	85.0	590.4	143.0	5.2	0.71	8.2	6.4	2.6	9.7	0.1	2	2
605606	0.020	5520	0.042	4818	33.0	458.6	290.5	4.3	1.52	10.8	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	5125	87.0	456.2	147.0	3.9	1.15	11.5	0.0	0.0	0.0	0.0	1	1
607608	0.024	11167	0.030	438	48.0	59.2	51.6	1.2	1.30	7.9	11.6	6.2	10.0	0.3	8	8
608609	0.012	6518	0.035	5924	42.0	585.8	174.5	5.4	0.99	10.3	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	6152	180.0	1032.2	243.9	4.9	0.52	6.1	9.1	4.6	8.2	0.2	6	6
610611	0.010	7981	0.035	688	9.0	107.4	23.1	6.7	0.53	6.5	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	6567	88.0	395.8	125.9	3.7	1.69	17.0	37.1	11.1	55.7	0.0	1	1
612613	0.033	8752	0.035	692	70.0	88.3	72.5	1.2	1.33	8.3	14.6	7.3	13.7	0.2	5	5
613614	0.011	5557	0.035	7014	80.0	615.0	114.9	6.3	0.88	11.6	23.1	9.2	34.8	0.1	2	2
614615	0.014	7995	0.035	6972	45.0	541.8	112.5	6.9	1.05	13.0	22.2	10.0	25.0	0.1	3	3
704705	0.019	7534	0.041	359	24.0	67.8	54.0	2.1	0.87	5.6	7.8	4.2	6.7	0.3	8	8
705OAF	0.008	2254	0.045	586	156.4	271.3	400.5	1.1	0.51	2.4	3.1	1.6	2.8	0.2	6	6
709710	0.026	2683	0.035	325	35.0	50.5	44.5	1.3	1.14	6.9	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	147	35.0	28.2	45.5	0.7	1.32	5.9	4.4	2.0	5.0	0.1	3	3
712714	0.017	2032	0.035	196	45.0	45.6	53.1	0.9	0.89	4.7	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	115	25.0	21.0	28.9	0.8	1.27	6.1	0.0	0.0	0.0	0.0	1	1
716717	0.018	4232	0.035	545	30.0	92.7	75.9	1.8	0.99	6.2	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	774	95.0	190.9	130.9	1.7	0.62	4.2	5.4	3.0	4.5	0.4	10	11
721722	0.017	8812	0.035	202	35.0	44.1	45.9	1.1	0.89	5.0	7.3	4.0	6.1	0.3	10	10
726727	0.019	6228	0.035	396	55.0	73.2	67.0	1.2	0.98	5.8	10.4	5.2	9.8	0.2	5	5

Table D-22

Summary of the normal depth reach route hydraulic data for the future watershed condition 10-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	210	12.3	41.2	30.2	2.0	0.81	5.3	6.8	3.6	5.8	0.3	8	8
101102	0.014	7254	0.040	193	14.0	37.0	23.8	2.0	0.77	5.4	7.6	4.0	6.5	0.3	8	8
102103	0.012	8068	0.044	698	17.6	107.3	65.0	3.0	0.92	6.7	8.4	4.5	7.2	0.3	8	8
103104	0.016	8625	0.053	1157	22.0	150.4	44.6	4.8	0.75	7.9	10.3	5.4	9.0	0.2	7	7
104105	0.012	6956	0.053	1232	21.8	237.5	107.4	4.2	0.63	5.3	7.2	3.9	6.2	0.3	8	8
200201	0.023	3952	0.030	435	21.0	45.8	26.8	1.9	1.33	9.9	16.5	6.6	24.8	0.1	2	2
201203	0.016	3233	0.047	563	32.1	107.8	96.9	2.1	0.92	5.5	6.7	3.2	6.8	0.1	4	4
202203	0.017	2353	0.030	71	32.1	19.7	35.9	0.7	0.98	4.1	6.5	2.9	7.4	0.1	3	3
203204	0.015	1325	0.048	1025	32.1	165.7	99.5	2.7	0.88	6.4	11.1	3.3	16.6	0.0	1	1
204205	0.014	5007	0.044	1144	29.8	157.2	97.0	3.5	1.04	7.5	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.044	1624	33.4	265.0	119.8	4.8	0.74	6.3	6.2	3.5	5.0	0.5	16	16
206207	0.031	4972	0.044	1853	35.4	158.1	78.1	3.1	1.50	12.1	13.8	6.2	15.6	0.1	3	3
207105	0.017	7176	0.041	1921	29.5	159.3	40.8	4.5	1.10	12.3	19.9	9.0	22.5	0.1	3	3
300301	0.014	5117	0.044	1026	37.0	143.9	45.7	3.5	0.73	7.3	10.7	5.1	10.7	0.1	4	4
301302	0.009	8124	0.043	1199	27.0	168.6	75.3	4.2	0.86	7.3	7.5	4.1	6.4	0.3	9	9
302303	0.019	7304	0.049	1402	40.8	164.6	60.4	3.7	0.93	8.7	15.2	7.3	15.3	0.1	4	4
400401	0.010	7424	0.040	294	7.8	81.2	41.4	3.4	0.47	3.8	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	400	22.2	89.7	59.0	2.5	0.66	4.6	5.1	2.9	4.2	0.4	13	13
402403	0.005	6138	0.043	656	8.7	192.9	83.4	4.2	0.41	3.5	4.6	2.6	3.8	0.4	11	11
403404	0.016	4256	0.045	884	12.4	137.3	63.7	3.7	0.80	6.6	8.9	4.2	8.9	0.1	4	4
500501	0.013	5972	0.035	416	22.0	63.7	37.2	2.3	0.92	6.8	8.3	4.3	7.5	0.2	6	6
501502	0.016	5021	0.035	631	29.0	77.4	33.9	2.5	0.99	8.4	13.9	6.3	15.7	0.1	3	3
502505	0.009	8775	0.040	1173	86.0	226.1	111.6	2.9	0.66	5.4	7.3	4.0	6.1	0.3	10	10
503505	0.012	9136	0.047	69	3.4	28.7	16.7	3.1	0.34	2.5	5.4	3.0	4.4	0.5	14	14
504505	0.013	7754	0.043	69	54.4	29.4	30.3	1.9	0.45	2.5	3.4	1.9	2.7	0.6	19	19
505509	0.006	6213	0.047	1399	150.9	382.8	199.0	2.3	0.48	3.8	5.8	3.1	4.9	0.3	9	9
506508	0.015	4023	0.045	76	10.3	23.6	18.6	2.5	0.53	3.4	5.6	2.9	5.0	0.2	6	6
507508	0.011	5400	0.045	85	10.9	31.7	26.9	1.9	0.46	2.8	4.1	2.2	3.4	0.4	11	11
508509	0.008	10349	0.041	401	14.8	92.7	50.4	3.7	0.58	4.5	5.4	3.0	4.3	0.5	16	16
509510	0.010	1958	0.044	1753	26.3	309.3	167.6	4.0	0.75	5.8	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.045	1812	14.4	306.6	145.4	6.1	0.73	6.0	5.1	2.8	4.2	0.4	11	11
511512	0.008	9226	0.044	1811	19.5	379.2	148.5	5.3	0.54	4.9	8.5	4.6	7.2	0.3	9	9

Table D-22

Summary of the normal depth reach route hydraulic data for the future watershed condition 10-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	612	20.0	78.3	53.5	2.9	1.19	8.2	14.4	5.8	21.7	0.1	2	2
601602	0.027	6017	0.035	983	90.0	130.2	98.6	1.4	1.23	8.0	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	1731	257.0	309.2	262.7	1.2	0.97	6.0	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	2719	275.0	404.2	282.5	1.5	1.05	7.1	13.0	6.5	12.3	0.2	5	5
604605	0.007	1543	0.035	2946	85.0	430.8	129.9	4.0	0.68	7.0	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	2972	33.0	302.8	137.1	3.6	1.20	10.1	11.5	5.5	11.5	0.1	4	4
606608	0.018	1141	0.035	3138	87.0	330.2	133.1	3.0	1.10	9.8	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	288	48.0	46.4	50.8	0.9	1.25	6.8	10.3	5.6	8.7	0.3	9	9
608609	0.012	6518	0.035	3624	42.0	411.5	148.1	4.3	0.95	9.0	13.6	6.5	13.6	0.1	4	4
609611	0.003	6519	0.035	3762	180.0	753.6	228.4	3.7	0.49	5.1	9.1	4.6	8.2	0.2	6	6
610611	0.010	7981	0.035	495	9.0	87.5	21.2	5.8	0.50	5.7	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	4042	88.0	290.1	117.0	2.8	1.60	14.3	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	491	70.0	72.4	72.0	1.0	1.28	7.3	10.4	5.5	9.1	0.2	7	7
613614	0.011	5557	0.035	4352	80.0	455.2	107.0	4.9	0.83	9.7	11.6	5.5	11.6	0.1	4	4
614615	0.014	7995	0.035	4324	45.0	392.9	98.7	5.5	0.99	11.2	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.043	242	24.0	50.7	44.1	1.8	0.82	5.0	7.8	4.2	6.7	0.3	8	8
705OAF	0.008	2254	0.045	476	156.4	240.0	381.2	1.0	0.50	2.2	3.1	1.6	2.8	0.2	6	6
709710	0.026	2683	0.035	279	35.0	46.1	43.8	1.2	1.12	6.5	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	134	35.0	26.4	44.9	0.7	1.31	5.7	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	178	45.0	43.0	52.7	0.9	0.88	4.5	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	93	25.0	18.4	28.5	0.7	1.24	5.6	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	491	30.0	86.0	73.6	1.7	0.98	6.0	7.1	3.5	6.6	0.2	4	5
717718	0.011	7146	0.045	651	95.0	171.5	127.7	1.5	0.61	4.0	3.7	2.1	3.0	0.5	16	16
721722	0.017	8812	0.035	173	35.0	40.0	45.0	1.0	0.88	4.7	6.7	3.7	5.5	0.4	11	11
726727	0.019	6228	0.035	295	55.0	61.3	65.2	1.0	0.95	5.2	8.7	4.4	7.8	0.2	6	6

Table D-23

Summary of the normal depth reach route hydraulic data for the future watershed condition 5-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	138	12.3	31.2	27.0	1.6	0.77	4.7	6.1	3.3	5.1	0.3	9	9
101102	0.014	7254	0.040	128	14.0	28.6	22.0	1.6	0.73	4.7	6.0	3.3	5.1	0.3	10	10
102103	0.012	8068	0.042	424	17.6	75.1	52.1	2.4	0.87	5.9	9.6	5.0	8.4	0.2	7	7
103104	0.016	8625	0.053	719	22.0	110.7	39.8	3.9	0.70	6.7	9.0	4.8	7.7	0.3	8	8
104105	0.012	6956	0.053	765	21.8	170.9	103.9	3.5	0.64	4.6	5.8	3.2	4.8	0.3	10	10
200201	0.023	3952	0.030	284	21.0	35.4	25.6	1.5	1.26	8.4	16.5	6.6	24.8	0.1	2	2
201203	0.016	3233	0.047	366	32.1	75.4	82.9	1.8	0.95	5.1	5.4	2.7	5.1	0.2	5	5
202203	0.017	2353	0.030	48	32.1	15.8	35.1	0.6	0.94	3.6	4.9	2.3	4.9	0.1	4	4
203204	0.015	1325	0.048	660	32.1	122.4	97.6	2.3	0.89	5.7	5.5	2.2	8.3	0.1	2	2
204205	0.014	5007	0.042	744	29.8	107.3	68.8	2.9	1.01	7.2	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.041	1064	33.4	180.8	74.8	4.0	0.68	6.0	7.6	4.2	6.2	0.4	13	13
206207	0.031	4972	0.042	1239	35.4	117.3	66.7	2.6	1.45	10.9	20.7	8.3	31.2	0.1	2	2
207105	0.017	7176	0.041	1306	29.5	124.7	38.7	3.7	1.05	10.7	19.9	9.0	22.5	0.1	3	3
300301	0.014	5117	0.044	712	37.0	115.2	44.1	2.8	0.69	6.4	8.5	4.3	8.0	0.2	5	5
301302	0.009	8124	0.039	820	27.0	127.3	48.1	3.5	0.71	6.6	8.5	4.5	7.3	0.3	8	8
302303	0.019	7304	0.049	928	40.8	126.6	56.7	3.0	0.89	7.6	12.2	6.1	11.4	0.2	6	5
400401	0.010	7424	0.040	343	7.8	89.3	43.4	3.6	0.49	4.0	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	429	22.2	94.5	60.2	2.6	0.67	4.8	6.1	3.3	5.0	0.4	12	11
402403	0.005	6138	0.043	489	8.7	157.9	75.5	3.8	0.39	3.2	1.5	0.9	1.2	1.1	11	34
403404	0.016	4256	0.045	675	12.4	114.1	58.3	3.3	0.77	6.1	8.9	4.2	8.9	0.1	4	4
500501	0.013	5972	0.035	280	22.0	49.4	34.4	1.9	0.88	6.0	7.1	3.7	6.2	0.2	7	7
501502	0.016	5021	0.035	422	29.0	60.7	32.9	2.0	0.94	7.2	10.5	5.0	10.5	0.1	4	4
502505	0.009	8775	0.040	799	86.0	178.1	106.9	2.5	0.64	4.7	6.6	3.6	5.5	0.4	11	11
503505	0.012	9136	0.047	57	3.4	25.3	15.7	2.9	0.32	2.3	5.1	2.8	4.1	0.5	15	15
504505	0.013	7754	0.043	59	54.4	26.7	28.9	1.9	0.44	2.4	3.4	1.9	2.7	0.6	19	19
505509	0.006	6213	0.047	973	150.9	304.9	190.4	1.9	0.47	3.4	5.2	2.8	4.3	0.3	10	10
506508	0.015	4023	0.045	70	10.3	22.3	18.1	2.5	0.52	3.3	4.8	2.5	4.2	0.2	7	7
507508	0.011	5400	0.045	81	10.9	30.9	26.6	1.9	0.45	2.8	3.8	2.1	3.1	0.4	12	12
508509	0.008	10349	0.041	334	14.8	81.4	47.3	3.4	0.57	4.3	5.4	3.0	4.3	0.5	16	16
509510	0.010	1958	0.043	1217	26.3	235.1	111.8	3.4	0.65	5.3	8.2	3.3	12.3	0.1	2	2
510511	0.007	6722	0.044	1224	14.4	226.9	75.3	5.2	0.56	5.5	7.0	3.7	6.0	0.3	8	8
511512	0.008	9226	0.044	1201	19.5	285.0	128.6	4.6	0.51	4.3	5.5	3.1	4.4	0.5	14	14

Table D-23

Summary of the normal depth reach route hydraulic data for the future watershed condition 5-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	348	20.0	53.4	44.2	2.4	1.10	6.9	9.6	4.3	10.8	0.1	3	3
601602	0.027	6017	0.035	584	90.0	95.1	96.4	1.0	1.17	6.6	10.0	5.0	9.4	0.2	5	5
602603	0.017	7614	0.035	1084	257.0	235.8	261.3	0.9	0.93	5.0	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	1789	275.0	316.9	280.9	1.1	1.01	6.1	6.5	3.6	5.5	0.3	10	10
604605	0.007	1543	0.035	1935	85.0	328.1	120.7	3.2	0.65	6.0	12.9	3.8	19.3	0.0	1	1
605606	0.020	5520	0.035	1966	33.0	224.6	119.3	3.0	1.16	9.0	15.3	6.9	17.3	0.1	3	3
606608	0.018	1141	0.035	2104	87.0	254.3	124.1	2.4	1.05	8.5	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	191	48.0	36.8	50.3	0.8	1.20	5.8	8.5	4.6	7.0	0.4	11	11
608609	0.012	6518	0.035	2499	42.0	316.5	131.4	3.7	0.92	8.1	10.9	5.4	10.2	0.2	5	5
609611	0.003	6519	0.035	2609	180.0	599.1	219.4	3.0	0.48	4.5	6.0	3.3	5.1	0.3	9	9
610611	0.010	7981	0.035	369	9.0	73.2	19.7	5.1	0.47	5.2	11.1	5.7	10.0	0.2	6	6
611613	0.038	4445	0.035	2882	88.0	235.1	112.1	2.4	1.55	12.7	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	358	70.0	60.2	71.7	0.9	1.24	6.5	10.4	5.5	9.1	0.2	7	7
613614	0.011	5557	0.035	3131	80.0	370.4	102.5	4.1	0.80	8.6	9.3	4.6	8.7	0.2	5	5
614615	0.014	7995	0.035	3116	45.0	316.2	90.7	4.7	0.95	10.0	16.7	8.0	16.7	0.1	4	4
704705	0.019	7534	0.044	163	24.0	38.7	35.6	1.5	0.76	4.5	7.0	3.8	5.9	0.3	9	9
705OAF	0.008	2254	0.045	388	156.4	210.3	361.8	0.9	0.48	2.1	2.7	1.4	2.4	0.2	7	7
709710	0.026	2683	0.035	244	35.0	42.2	43.1	1.1	1.10	6.2	7.5	3.3	8.4	0.1	3	3
711712	0.044	1586	0.035	125	35.0	25.5	44.6	0.6	1.30	5.6	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	162	45.0	40.9	52.4	0.8	0.87	4.4	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	75	25.0	16.5	28.1	0.6	1.21	5.3	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	451	30.0	81.6	72.0	1.6	0.97	5.9	7.1	3.5	6.6	0.2	5	5
717718	0.011	7146	0.045	550	95.0	153.8	124.8	1.4	0.60	3.8	3.5	2.0	2.8	0.6	17	17
721722	0.017	8812	0.035	153	35.0	37.3	44.4	0.9	0.87	4.5	4.3	2.4	3.5	0.6	17	17
726727	0.019	6228	0.035	219	55.0	51.0	63.6	0.9	0.92	4.7	8.7	4.4	7.8	0.2	6	6

Table D-24

Summary of the normal depth reach route hydraulic data for the future watershed condition 2-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
	Slope ft/ft	Length feet	Average n value	Average Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Velocity Range in fps Min.	Velocity Range in fps Max.	Travel Time in hrs	Travel NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
100102	0.014	6535	0.039	52	12.3	16.5	21.3	1.0	0.69	3.4	5.0	2.7	4.1	0.4	11	11
101102	0.014	7254	0.040	52	14.0	16.3	19.0	1.0	0.65	3.4	4.7	2.6	3.8	0.4	13	13
102103	0.012	8068	0.039	162	17.6	39.5	37.1	1.6	0.74	4.3	5.2	2.9	4.2	0.4	13	13
103104	0.016	8625	0.053	275	22.0	59.7	32.6	2.5	0.62	4.8	7.2	3.9	6.0	0.3	10	10
104105	0.012	6956	0.053	292	21.8	77.6	48.6	2.4	0.54	3.9	5.3	2.9	4.4	0.4	11	11
200201	0.023	3952	0.030	127	21.0	22.0	23.9	1.0	1.15	6.3	11.0	4.9	12.4	0.1	3	3
201203	0.016	3233	0.042	166	32.1	39.5	47.6	1.2	0.87	4.5	5.4	2.7	5.1	0.2	5	5
202203	0.017	2353	0.030	21	32.1	10.3	33.9	0.5	0.88	2.7	3.9	2.0	3.7	0.2	5	5
203204	0.015	1325	0.046	304	32.1	65.2	74.6	1.7	0.93	5.0	5.5	2.2	8.3	0.1	2	2
204205	0.014	5007	0.039	347	29.8	63.6	41.7	2.0	0.82	5.7	8.3	4.2	7.8	0.2	5	5
205206	0.006	11893	0.039	502	33.4	109.7	51.1	2.7	0.57	4.7	6.6	3.7	5.3	0.5	15	15
206207	0.031	4972	0.039	583	35.4	72.4	50.4	1.8	1.24	8.5	10.4	5.0	10.4	0.1	4	4
207105	0.017	7176	0.039	614	29.5	78.4	35.5	2.4	0.96	8.1	12.0	6.0	11.2	0.2	5	5
300301	0.014	5117	0.044	315	37.0	70.7	41.5	1.8	0.63	4.7	7.1	3.6	6.4	0.2	6	6
301302	0.009	8124	0.039	355	27.0	74.1	40.6	2.3	0.65	5.0	6.8	3.7	5.7	0.3	10	10
302303	0.019	7304	0.048	372	40.8	72.6	51.1	2.0	0.80	5.4	8.7	4.6	7.6	0.2	8	7
400401	0.010	7424	0.040	235	7.8	70.0	38.6	3.1	0.46	3.5	6.9	3.7	5.8	0.3	9	9
401402	0.011	8029	0.043	267	22.2	68.4	53.3	2.2	0.64	4.1	4.5	2.5	3.6	0.5	15	15
402403	0.005	6138	0.043	282	8.7	108.8	62.9	3.0	0.36	2.7	5.1	2.8	4.3	0.3	10	10
403404	0.016	4256	0.045	311	12.4	66.9	45.4	2.4	0.71	4.9	7.1	3.5	6.7	0.2	5	5
500501	0.013	5972	0.035	116	22.0	28.5	30.0	1.2	0.80	4.4	6.2	3.3	5.3	0.3	8	8
501502	0.016	5021	0.035	170	29.0	35.3	31.3	1.2	0.85	5.1	8.4	4.2	7.9	0.2	5	5
502505	0.009	8775	0.040	297	86.0	97.9	98.8	1.7	0.58	3.3	6.1	3.4	5.0	0.4	12	12
503505	0.012	9136	0.047	19	3.4	12.9	11.4	2.0	0.26	1.6	3.2	1.8	2.5	0.8	24	24
504505	0.013	7754	0.043	39	54.4	20.2	25.1	1.6	0.41	2.1	3.6	2.0	2.9	0.6	18	18
505509	0.006	6213	0.047	352	150.9	163.0	173.5	1.2	0.42	2.3	2.6	1.5	2.0	0.7	20	20
506508	0.015	4023	0.045	45	10.3	16.9	15.7	2.2	0.48	2.8	4.8	2.5	4.2	0.2	7	7
507508	0.011	5400	0.045	64	10.9	26.6	25.0	1.7	0.44	2.6	4.1	2.2	3.4	0.4	11	11
508509	0.008	10349	0.041	206	14.8	57.9	39.9	2.9	0.54	3.7	4.8	2.7	3.8	0.6	18	18
509510	0.010	1958	0.043	427	26.3	113.3	80.0	2.2	0.58	3.9	5.4	2.4	6.1	0.1	3	3
510511	0.007	6722	0.044	474	14.4	117.4	55.0	3.6	0.50	4.2	6.2	3.4	5.3	0.3	9	9
511512	0.008	9226	0.044	582	19.5	172.9	100.0	3.6	0.47	3.5	4.8	2.7	3.9	0.5	16	16

Table D-24

Summary of the normal depth reach route hydraulic data for the future watershed condition 2-year, 24-hour storm

Routing Reach	Reach				Manning's Equation						Computed Using HEC-1 Summary Data					NSTEPS in HEC-1 Input File
			Average									Velocity Range in fps		Travel		
	Slope ft/ft	Length feet	n value	Q cfs	Bottom Width feet	Flow Area sq. ft	Flow Top Width feet	Flow Depth feet	Froude Number	Average Velocity in fps	Wave Celerity in fps	Min.	Max.	Time in hrs	NSTEPS Comp	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
600601	0.033	3463	0.035	147	20.0	30.2	33.2	1.8	0.97	5.3	7.2	3.5	7.2	0.1	4	4
601602	0.027	6017	0.035	292	90.0	63.6	94.3	0.7	1.09	5.1	8.4	4.3	7.5	0.2	6	6
602603	0.017	7614	0.035	544	257.0	160.3	259.9	0.6	0.87	3.9	9.1	4.7	8.0	0.2	7	7
603604	0.019	7830	0.035	905	275.0	213.3	279.0	0.8	0.94	4.7	6.5	3.6	5.5	0.3	10	10
604605	0.007	1543	0.035	975	85.0	213.0	109.5	2.2	0.60	4.8	6.4	2.6	9.7	0.1	2	2
605606	0.020	5520	0.035	1002	33.0	139.5	96.2	2.2	1.09	7.5	9.2	4.6	8.6	0.2	5	5
606608	0.018	1141	0.035	1093	87.0	167.9	112.8	1.7	0.98	6.8	9.5	2.8	14.3	0.0	1	1
607608	0.024	11167	0.030	83	48.0	22.9	49.4	0.5	1.10	4.3	4.7	2.7	3.7	0.7	20	20
608609	0.012	6518	0.035	1297	42.0	200.5	107.7	2.7	0.86	6.7	9.1	4.6	8.2	0.2	6	6
609611	0.003	6519	0.035	1343	180.0	396.6	206.9	2.1	0.45	3.5	6.0	3.3	5.1	0.3	9	9
610611	0.010	7981	0.035	207	9.0	51.4	17.2	3.9	0.42	4.1	6.7	3.6	5.6	0.3	10	10
611613	0.038	4445	0.035	1482	88.0	156.0	104.6	1.6	1.45	10.0	18.5	7.4	27.9	0.1	2	2
612613	0.033	8752	0.035	172	70.0	40.2	71.1	0.6	1.16	4.9	4.6	2.6	3.7	0.5	16	16
613614	0.011	5557	0.035	1618	80.0	246.7	95.6	2.8	0.74	6.7	9.3	4.6	8.7	0.2	5	5
614615	0.014	7995	0.035	1596	45.0	204.3	77.7	3.3	0.87	8.0	9.5	5.0	8.3	0.2	7	7
704705	0.019	7534	0.045	49	24.0	18.9	27.7	0.8	0.63	2.9	4.2	2.3	3.4	0.5	15	15
705OAF	0.008	2254	0.045	199	156.4	133.6	305.3	0.7	0.46	1.7	2.1	1.1	1.8	0.3	9	9
709710	0.026	2683	0.035	163	35.0	33.3	41.5	0.9	1.06	5.4	11.2	4.5	16.8	0.1	2	2
711712	0.044	1586	0.035	108	35.0	23.3	43.9	0.6	1.28	5.3	6.6	2.6	9.9	0.1	2	2
712714	0.017	2032	0.035	128	45.0	35.7	51.5	0.7	0.85	4.0	5.6	2.5	6.4	0.1	3	3
713714	0.042	831	0.035	47	25.0	12.6	27.4	0.5	1.15	4.4	6.9	2.1	10.4	0.0	1	1
716717	0.018	4232	0.035	327	30.0	65.7	66.0	1.4	0.94	5.3	8.8	4.2	8.8	0.1	4	4
717718	0.011	7146	0.045	382	95.0	122.1	119.2	1.1	0.58	3.3	3.1	1.8	2.5	0.6	19	19
721722	0.017	8812	0.035	111	35.0	30.8	42.9	0.8	0.84	4.0	4.6	2.6	3.7	0.5	17	16
726727	0.019	6228	0.035	109	55.0	34.2	60.9	0.6	0.86	3.7	4.3	2.4	3.5	0.4	12	12

1 through D-24

Data Summary Descriptions for Tables D-~~4 and D-5~~

Column 1: Reach name consisting of top and bottom concentration point numbers.

Column 2: Average slope of reach, in ft/ft.

Column 3: Length of the reach, in feet.

Column 4: Average Manning's n value for the reach cross section. Weighting for averaging calculations are based on the horizontal width of the left and right overbanks and channel.

Column 5: Average discharge for the reach, in cfs. Value is a numeric average of the peak discharge entering(pre-route) and exiting(post-route) discharges reported by HEC-1.

Column 6: Channel base width, in feet.

Column 7: Average cross sectional flow area for the reach, in square feet. Flow area is calculated using Manning's equation, the channel slope in column 2, the average discharge from column 5, and the average n value for the left and right overbanks and channel.

Column 8: Flow top width, in feet. Calculated using the cross section geometry and flow depth from column 9.

Column 9: Flow depth, in feet. Calculated using Manning's equation, the channel slope in column 2, the average discharge from column 5, and the average n value for the left and right overbanks and channel.

Column 10: Froude number, calculated as follows:

$$[10] = [11] / (32.2 * [7] / [8])^{0.5}$$

Column 11: Average velocity, in fps. Calculated by dividing column 5 by column 7. This value is compared to the velocity ranges calculated in columns 13 and 14, to check reasonableness of routing operational timing.

Column 12: Wave celerity, in fps. Calculated by dividing the column 3 by column 15 and converting the units appropriately. This wave celerity is considered to be accurate within plus or minus one HEC-1 computational time step.

Column 13: Minimum check velocity, in fps. This value is calculated using the reach length, HEC-1 calculated travel time, HEC-1 computational time step and a factor relating maximum wave celerity to average velocity. The formula is as follows:

$$[13] = [3] / (([15] + NMIN)(3600)(1.67))$$

where: NMIN is the HEC-1 computational time step;

3600 is the conversion factor from hours to seconds; and

1.67 is the factor relating maximum wave celerity to average velocity.

NOTE: If the HEC-1 travel time from column 15 is zero, the minimum average velocity is set to zero.

Column 14: Maximum check velocity, in fps. This value is calculated using the reach length, HEC-1 calculated travel time, HEC-1 computational time step and a factor relating minimum wave celerity to average velocity.

$$[14] = [3] / (([15] - NMIN)(3600)(1.33))$$

where: NMIN is the HEC-1 computational time step;

3600 is the conversion factor from hours to seconds; and

1.33 is the factor relating minimum wave celerity to average velocity.

NOTE: If the HEC-1 travel time from column 15 is zero, the maximum average velocity is set to zero. If the HEC-1 travel time is equal to the HEC-1 computational time step, one-half NMIN is used.

Column 15: Travel time through the reach, in hours. Calculated by subtracting the time to peak reported by HEC-1 at the end of the routing from the time to peak reported by HEC-1 at the beginning of the routing.

Column 16: Value of NSTEPS from the HEC-1 output file is calculated as follows:

$$[16] = [15] / NMIN$$

If the HEC-1 travel time from column 15 is zero, NSTEPS is set to one.

Column 17: NSTEPS value coded in RS record of the HEC-1 input model.

APPENDIX E: STORAGE ROUTING PARAMETERS

Table E-1
Total rating curve for C400O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1508.00	0.00	1508.00	0.00
1511.00	62.00	1516.00	5.20
1514.00	200.00	1520.00	18.60
1520.00	400.00	1524.00	40.70
1526.00	540.00	1528.00	71.70
1532.00	625.00	1532.00	115.50
1540.00	**750.00**	**1536.00**	**178.10**
		1540.00	**266.30**

Note: The crest elevation of the C.A.P. Canal is 1535.5.
Data taken directly from the CAP Overchute study, "EACAP".

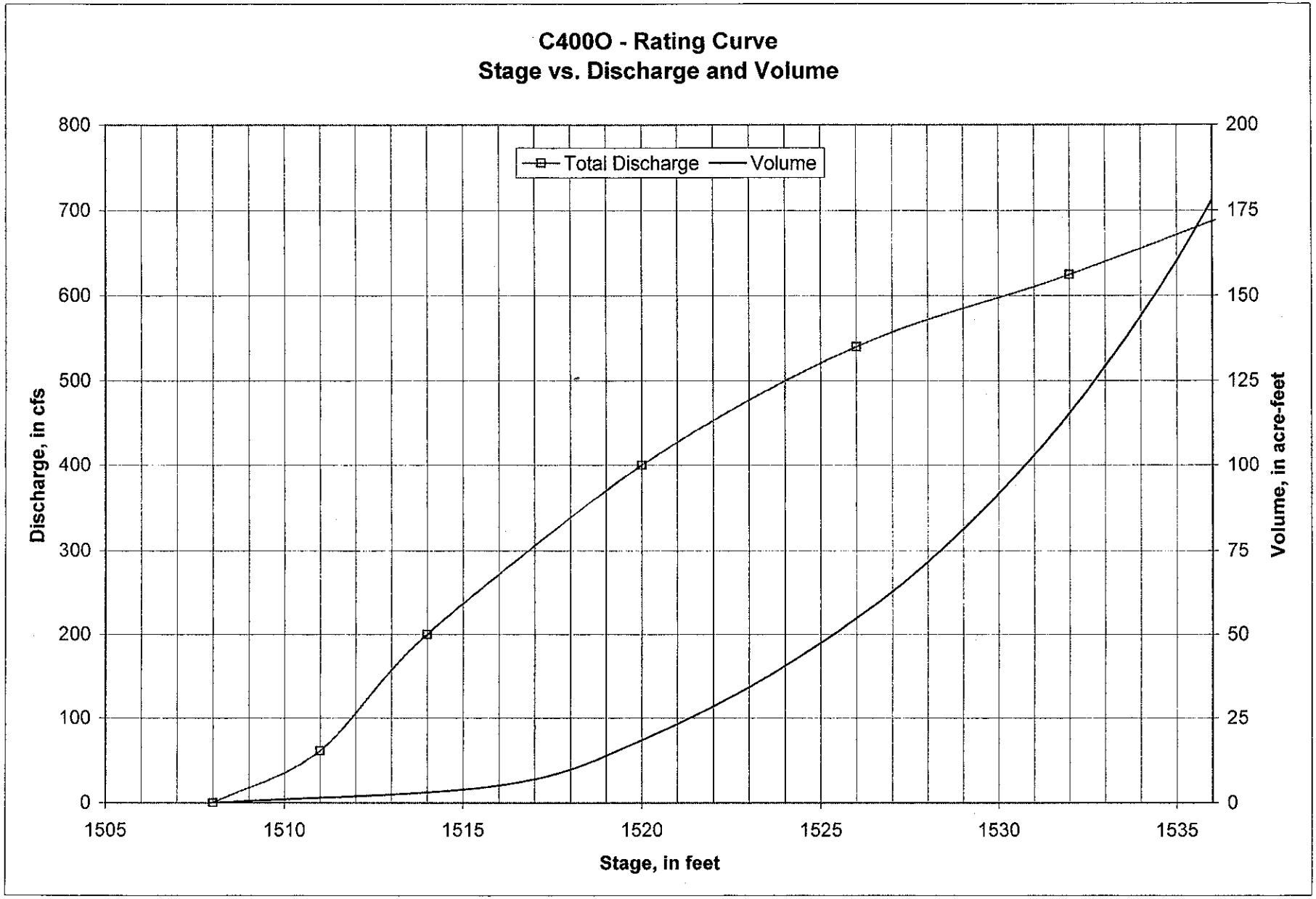

C400O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
100
200
300
400
500
600
700
800
0
25
50
75
100
125
150
175
200
1505
1510
1515
1520
1525
1530
1535

Table E-2
Total rating curve for C502O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1500.00	0.00	1500.00	0.00
1503.00	248.00	1508.00	2.37
1506.00	800.00	1512.00	9.23
1512.00	1600.00	1516.00	20.95
1518.00	2160.00	1520.00	37.67
1524.00	2500.00	1528.00	122.58
1530.00	2900.00	1532.00	212.70
1536.00	3200.00	**1540.00**	**516.24**

Note: The crest elevation of the C.A.P. Canal is 1536.1.
Data taken directly from the CAP Overchute study, "CCAP".

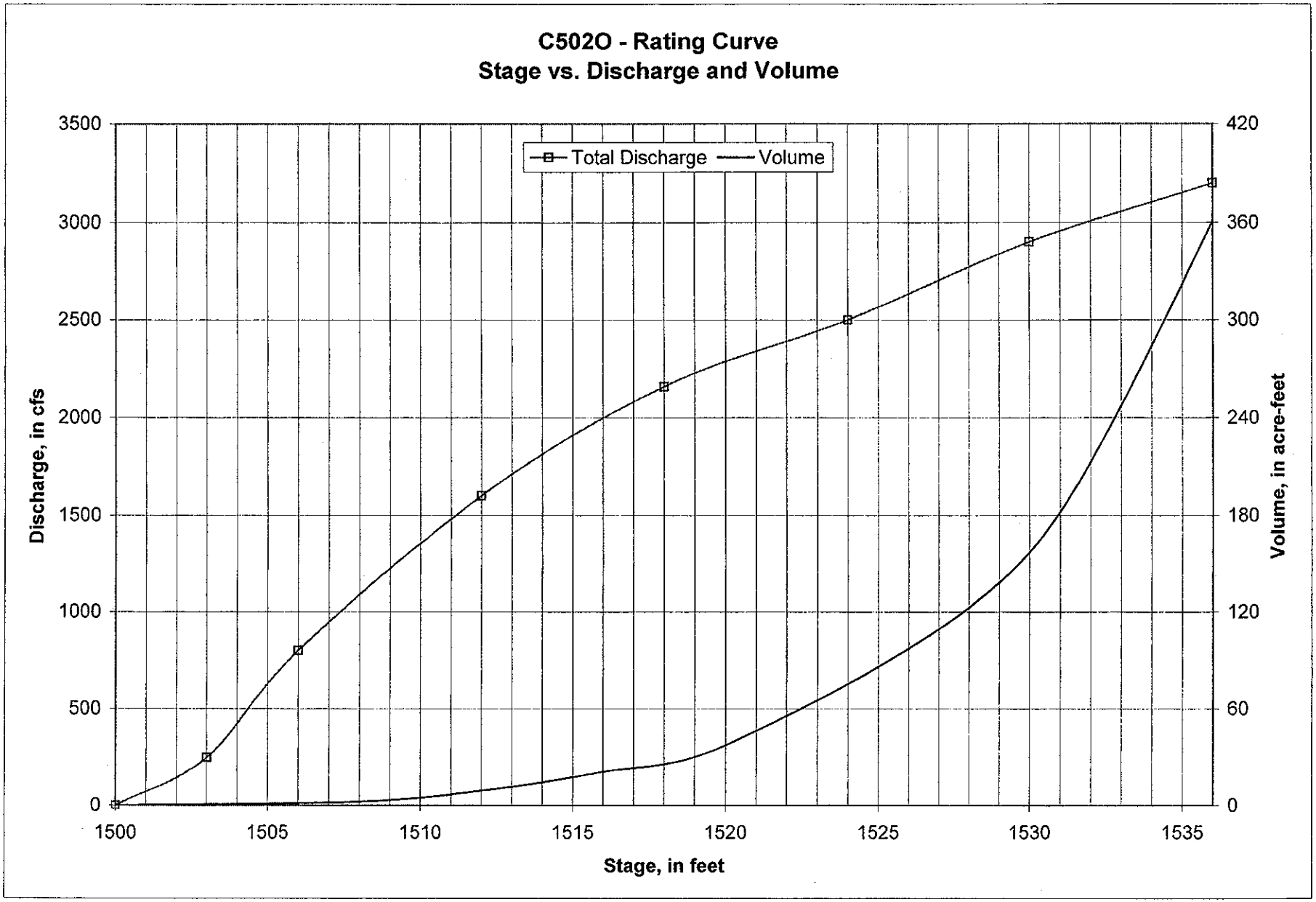

C502O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
3500
3000
2500
2000
1500
1000
500
0
420
360
300
240
180
120
60
0
1500
1505
1510
1515
1520
1525
1530
1535

Table E-3
Total rating curve for C503O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1519.00	0.00	1519.00	0.00
1520.25	7.50	1528.00	0.61
1521.50	22.00	1532.00	2.78
1524.00	45.00	**1536.00**	**8.03**
1529.00	71.00	**1540.00**	**18.24**
1534.00	93.00		
1540.00	**110.00**		

Note: The crest elevation of the C.A.P. Canal is 1535.7.
Data taken directly from the CAP Overchute study, "PCAP".

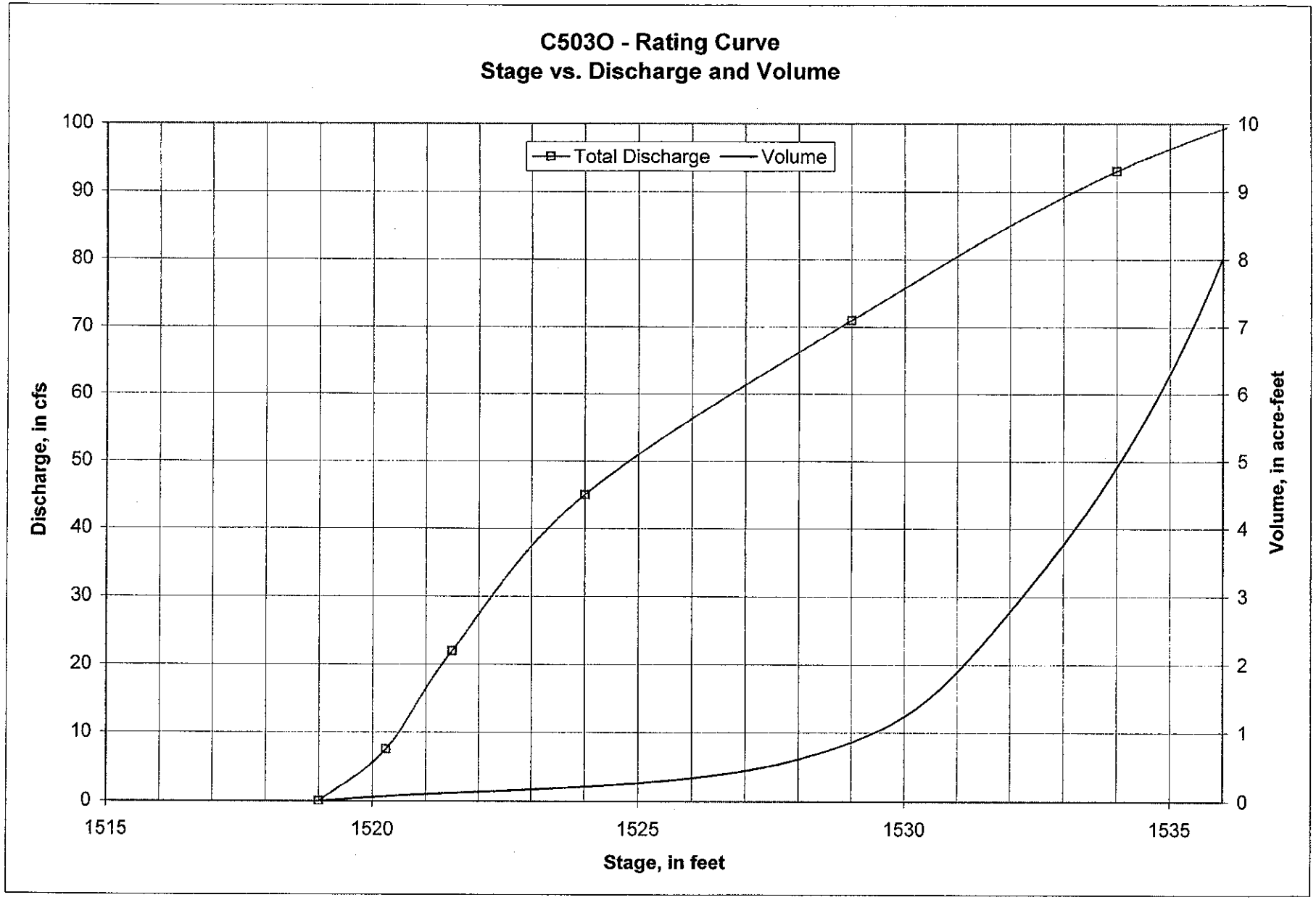

C503O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
10
20
30
40
50
60
70
80
90
100
0
1
2
3
4
5
6
7
8
9
10
1515
1520
1525
1530
1535

Table E-4
Total rating curve for C504O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1513.90	0.00	1513.90	0.00
1515.20	7.50	1517.80	0.10
1516.40	22.00	1520.00	0.18
1520.20	52.00	1524.00	1.89
1524.20	72.00	1528.00	5.34
1528.20	90.00	1532.00	11.99
1532.20	103.00	**1536.00**	**24.05**
1540.00	**115.00**	**1540.00**	**43.40**

Note: The crest elevation of the C.A.P. Canal is 1535.6.
Data taken directly from the CAP Overchute study, "QCAP".

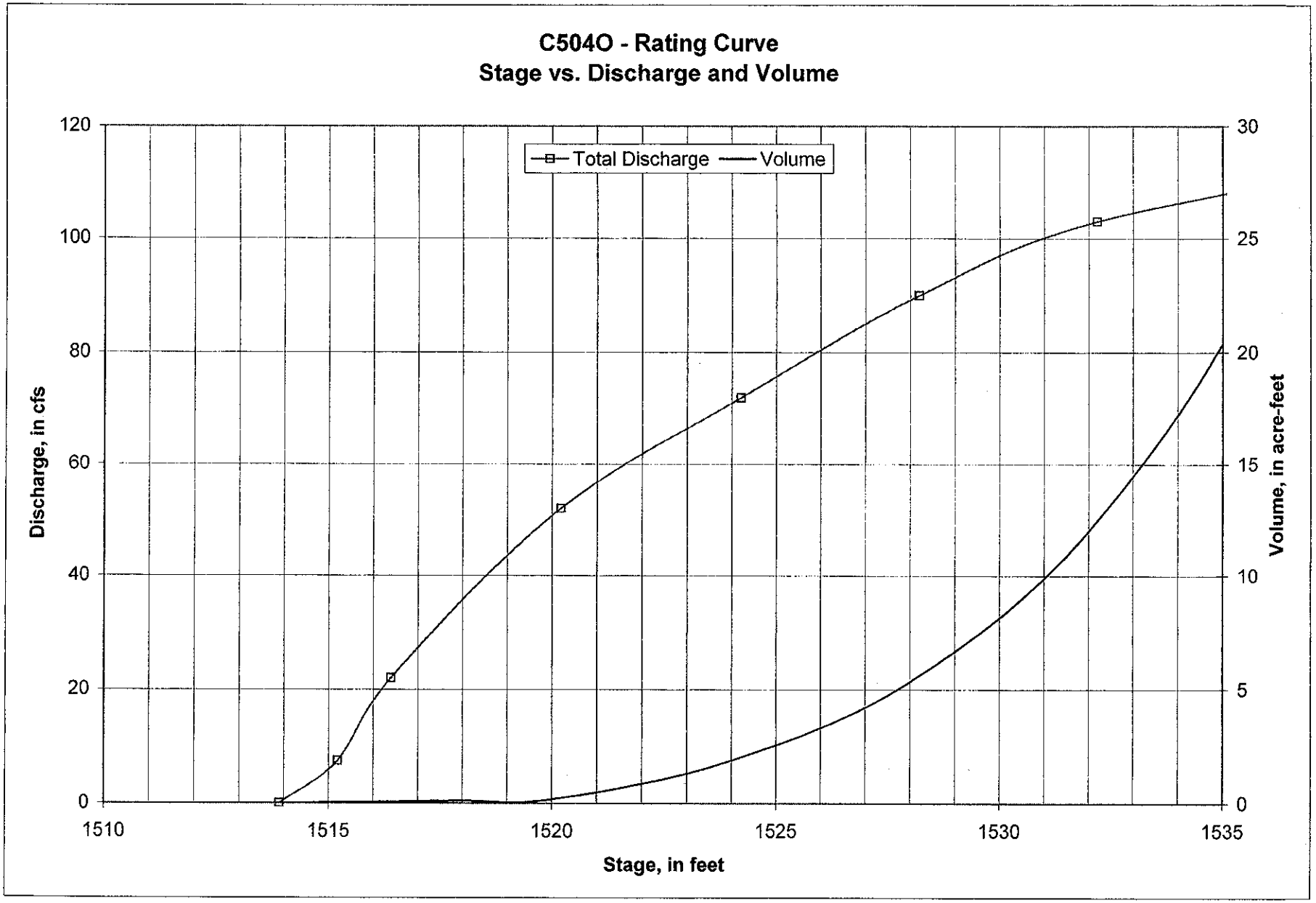

C504O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
20
40
60
80
100
120
0
5
10
15
20
25
30
1510
1515
1520
1525
1530
1535

Table E-5
Total rating curve for C506O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1519.00	0.00	1519.00	0.00
1520.25	7.50	1528.00	0.77
1521.50	22.00	1532.00	4.36
1524.00	45.00	1536.00	15.19
1529.00	71.00	**1540.00**	**35.89**
1534.00	93.00		
1540.00	**110.00**		

Note: The crest elevation of the C.A.P. Canal is 1536.3.
Data taken directly from the CAP Overchute study, "GCAP".

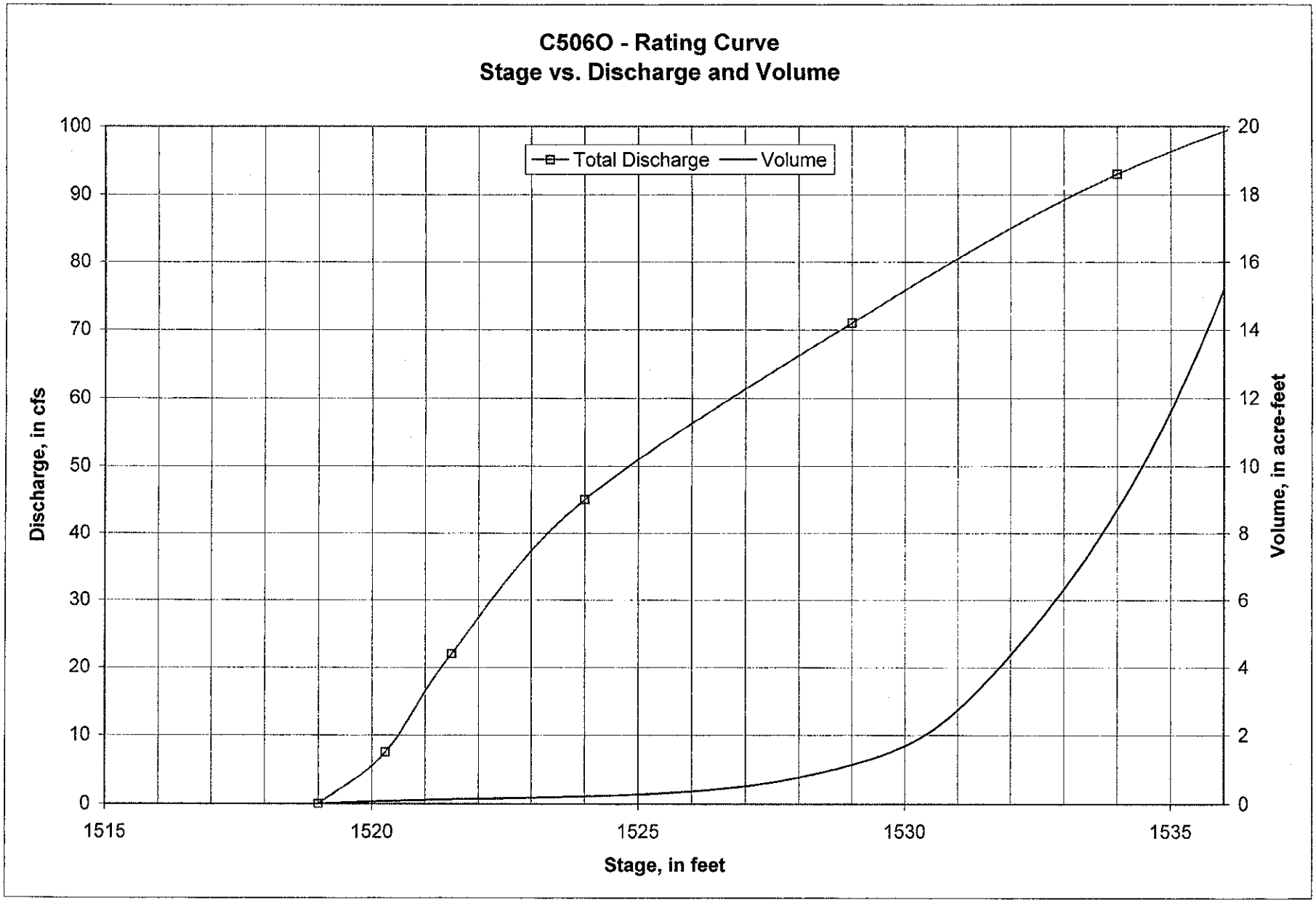

C506O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
10
20
30
40
50
60
70
80
90
100
0
2
4
6
8
10
12
14
16
18
20
1515
1520
1525
1530
1535

Table E-6
Total rating curve for C507O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1516.00	0.00	1520.00	0.00
1517.25	7.50	1524.00	0.78
1518.50	22.00	1528.00	4.47
1521.00	45.00	1532.00	19.99
1526.00	71.00	1536.00	60.85
1531.00	93.00	**1540.00**	**133.63**
1536.00	108.00		
1540.00	**115.00**		

Note: The crest elevation of the C.A.P. Canal is 1536.1.
Data taken directly from the CAP Overchute study, "FCAP".

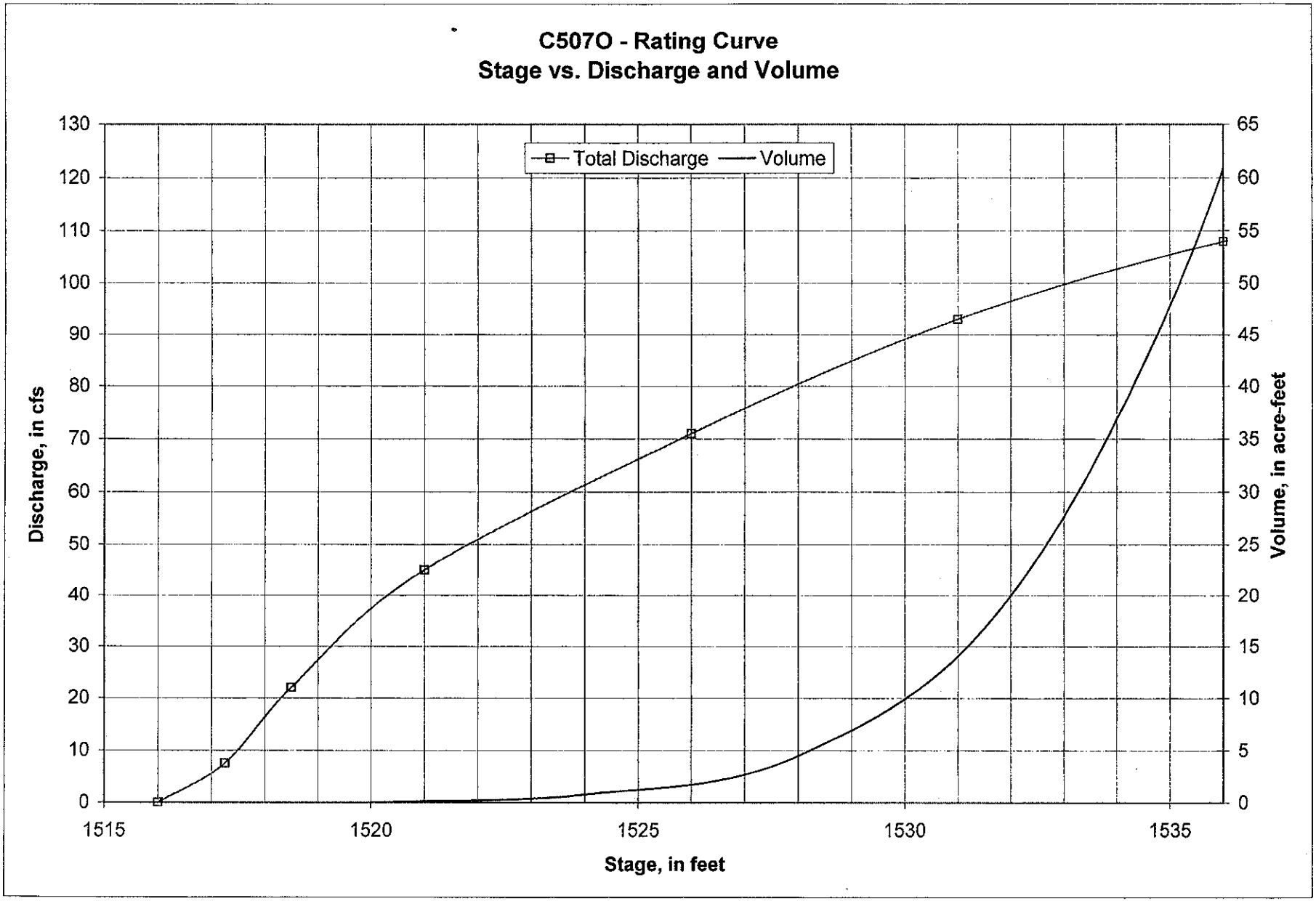
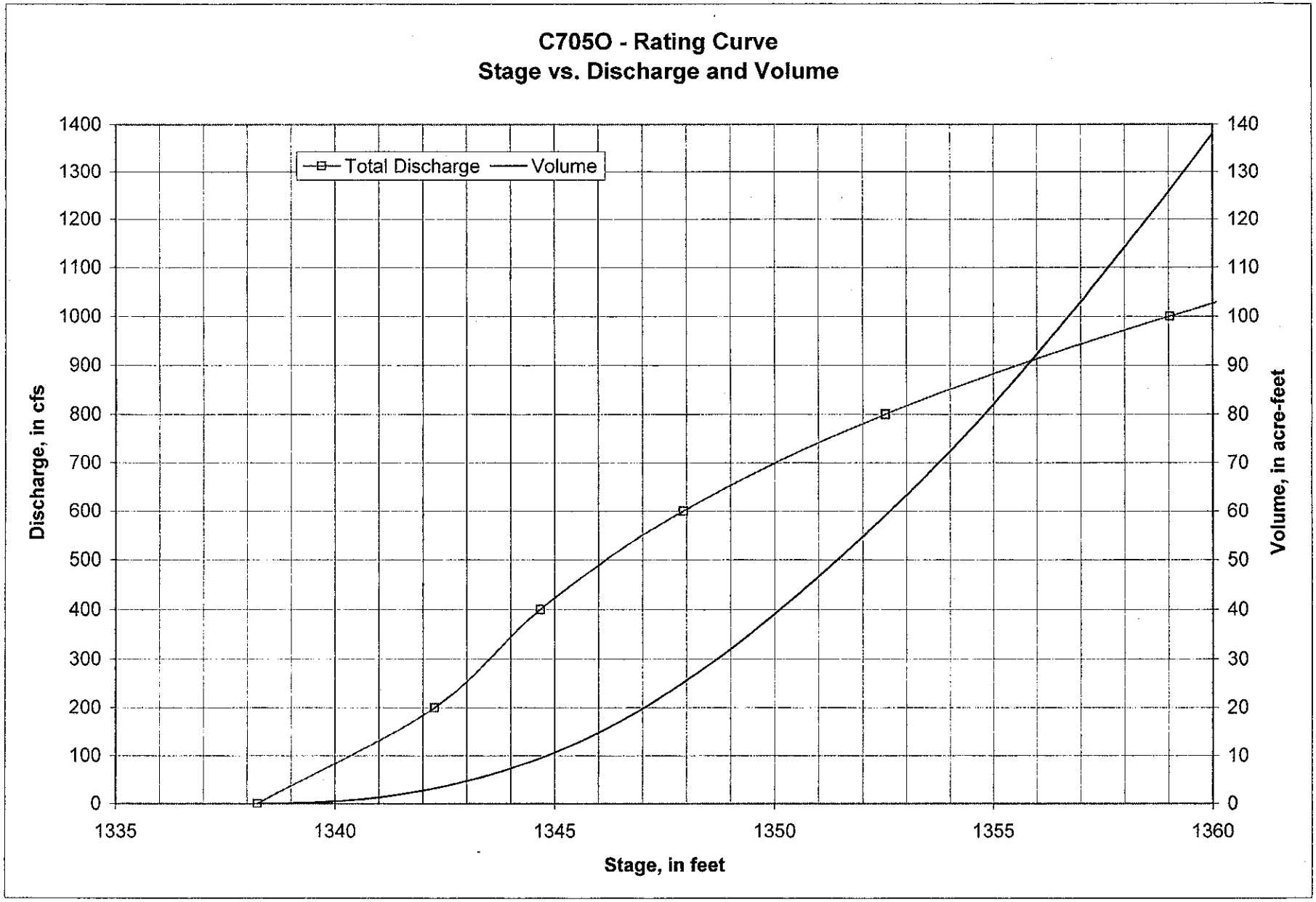

C507O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
130
120
110
100
90
80
70
60
50
40
30
20
10
0
65
60
55
50
45
40
35
30
25
20
15
10
5
0
1515
1520
1525
1530
1535

Table E-7
Total rating curve for C705O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1338.24	0.00	1338.24	0.00
1342.26	200.00	1339.00	0.08
1344.68	400.00	1340.00	0.46
1347.93	600.00	1341.00	1.29
1352.52	**800.00**	1342.00	2.71
1359.03	**1000.00**	1343.00	4.72
1367.08	**1200.00**	1344.00	7.32
1376.59	**1400.00**	1345.00	10.63
1377.62	**1420.00**	1346.00	14.77
1400.00	**1800.00**	1347.00	19.75
1413.90	**2000.00**	1348.00	25.57
		1349.00	32.07
		1350.00	39.09
		1351.00	46.63
		1352.00	54.70
		1353.00	**63.28**
		1354.00	**72.40**
		1355.00	**82.03**
		1356.00	**92.19**
		1357.00	**102.87**
		1358.00	**114.07**
		1359.00	**125.79**
		1360.00	**138.04**

Note: The crest elevation of the Beardsley Canal is 1352.


C705O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
1335
1340
1345
1350
1355
1360

CURRENT DATE: 11-30-2000 FILE DATE: 11-30-2000
CURRENT TIME: 12:53:29 FILE NAME: C705-C

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 6.1 **********
****

CULV NO.	SITE DATA: INLET ELEV. (ft)	OUTLET ELEV. (ft)	CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	1338.24	1338.00	120.00	2 RCB	5.00	5.00	.015	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (cfs) FILE: C705-C DATE: 11-30-2000

ELEV (ft)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
1338.24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1342.26	200.0	200.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1344.68	400.0	400.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1347.93	600.0	600.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1352.52	800.0	800.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1359.03	1000.0	1000.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1367.08	1200.0	1200.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1376.59	1400.0	1400.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1377.62	1420.0	1420.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1400.00	1800.0	1800.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1413.90	2000.0	2000.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1420.00	2081.6	2081.6	0.0	0.0	0.0	0.0	0.0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: C705-C DATE: 11-30-2000

HEAD ELEV (ft)	HEAD ERROR (ft)	TOTAL FLOW (cfs)	FLOW ERROR (cfs)	% FLOW ERROR
1338.24	0.000	0.00	0.00	0.00
1342.26	0.000	200.00	0.00	0.00
1344.68	0.000	400.00	0.00	0.00
1347.93	0.000	600.00	0.00	0.00
1352.52	0.000	800.00	0.00	0.00
1359.03	0.000	1000.00	0.00	0.00
1367.08	0.000	1200.00	0.00	0.00
1376.59	0.000	1400.00	0.00	0.00
1377.62	0.000	1420.00	0.00	0.00
1400.00	0.000	1800.00	0.00	0.00
1413.90	0.000	2000.00	0.00	0.00

****

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 11-30-2000 FILE DATE: 11-30-2000
CURRENT TIME: 12:53:29 FILE NAME: C705-C

PERFORMANCE CURVE FOR CULVERT 1 - 2(5.00 (ft) BY 5.00 (ft)) RCB

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	1338.24	0.00	0.00	0-NF	0.00	0.00	0.00	-6.00	0.00	0.00
200.00	1342.26	3.92	4.02	2-M2c	3.50	2.32	2.32	-3.86	8.62	5.51
400.00	1344.68	6.44	6.36	2-M2c	5.00	3.68	3.68	-3.24	10.86	6.54
600.00	1347.93	9.69	9.41	2-M2c	5.00	4.83	4.83	-2.78	12.43	7.24
800.00	1352.52	14.28	13.03	6-S2n	5.00	5.00	4.90	-2.41	16.33	7.78
1000.00	1359.03	20.79	17.69	6-S2n	5.00	5.00	4.90	-2.10	20.41	8.23
1200.00	1367.08	28.84	23.38	6-S2n	5.00	5.00	4.90	-1.30	24.49	2.53
1400.00	1376.59	38.35	30.10	6-S2n	5.00	5.00	4.90	-1.03	28.57	3.15
1420.00	1377.62	39.38	30.83	6-S2n	5.00	5.00	4.90	-1.00	28.98	3.21
1800.00	1400.00	61.76	46.65	6-S2n	5.00	5.00	4.90	-0.54	36.73	4.13
2000.00	1413.90	75.66	56.47	6-S2n	5.00	5.00	4.90	-0.31	40.82	4.54

El. inlet face invert 1338.24 ft El. outlet invert 1338.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	100.00 ft
INLET ELEVATION	1338.24 ft
OUTLET STATION	220.00 ft
OUTLET ELEVATION	1338.00 ft
NUMBER OF BARRELS	2
SLOPE (V/H)	0.0020
CULVERT LENGTH ALONG SLOPE	120.00 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	BOX
BARREL SPAN	5.00 ft
BARREL RISE	5.00 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.015
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE (90-45 DEG.)
INLET DEPRESSION	NONE

CURRENT DATE: 11-30-2000 FILE DATE: 11-30-2000
CURRENT TIME: 12:53:29 FILE NAME: C705-C

****
********** TAILWATER **********
****

***** USER DEFINED CHANNEL CROSS-SECTION FILE NAME: C705-TW
MAIN CHANNEL AND LT & RT OVER BANKS FILE DATE: 11-29-00
LEFT CHANNEL BOUNDARY 2
RIGHT CHANNEL BOUNDARY 4
MANNING n LEFT OVER BANK 0.025
MANNING n MAIN CHANNEL 0.035
MANNING n RIGHT OVER BANK 0.050
SLOPE OF CHANNEL 0.0156 ft/ft

CROSS-SECTION COORD. NO.	X (ft)	Y (ft)
1	0.00	1340.00
2	11.15	1336.00
3	51.42	1332.00
4	75.27	1336.00
5	89.78	1338.00

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	1332.00	0.000	-6.00	0.00	0.00
200.00	1334.14	0.940	-3.86	5.51	1.03
400.00	1334.76	0.981	-3.24	6.54	1.33
600.00	1335.22	1.006	-2.78	7.24	1.55
800.00	1335.59	1.024	-2.41	7.78	1.73
1000.00	1335.90	1.039	-2.10	8.23	1.88
1200.00	1336.70	0.754	-1.30	2.53	0.32
1400.00	1336.97	0.796	-1.03	3.15	0.45
1420.00	1337.00	0.800	-1.00	3.21	0.46
1800.00	1337.46	0.851	-0.54	4.13	0.67
2000.00	1337.69	0.872	-0.31	4.54	0.77

Note: Shear stress was calculated using R.

****
********** ROADWAY OVERTOPPING DATA **********
****

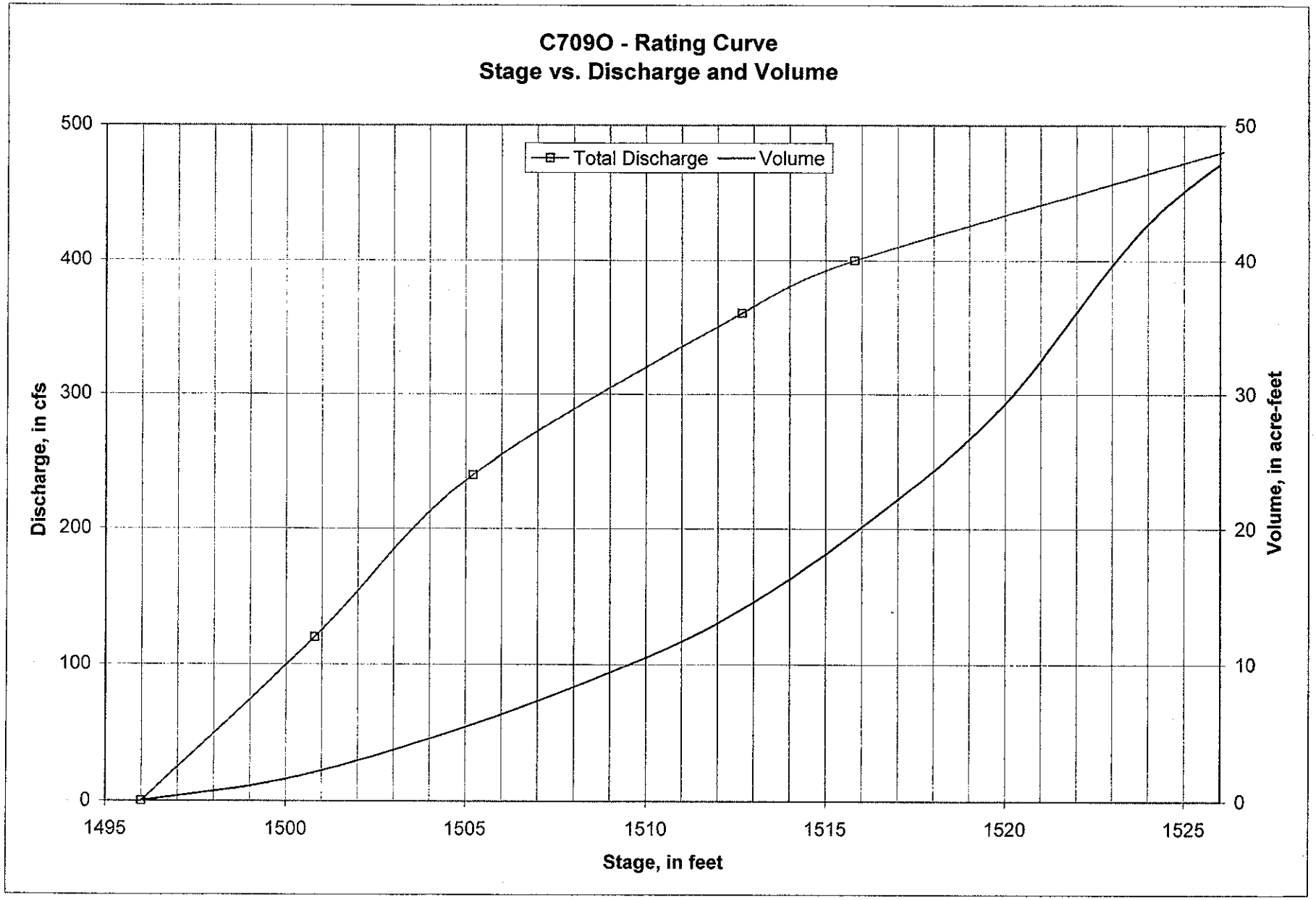
WEIR COEFFICIENT 2.70
EMBANKMENT TOP WIDTH 40.00 ft
CREST LENGTH 608.54 ft
OVERTOPPING CREST ELEVATION 1420.00 ft

****

Table E-8
Total rating curve for C709O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1496.00	0.00	1496.00	0.00
1500.80	120.00	1500.00	1.59
1505.20	240.00	1504.00	4.55
1512.68	360.00	1508.00	8.36
1515.80	400.00	1512.00	13.04
1539.80	**600.00**	1516.00	20.12
1540.12	**720.00**	1520.00	29.31
1540.18	**840.00**	1524.00	42.75
1540.24	**960.00**	**1528.00**	**51.34**
1540.29	**1080.00**	**1532.00**	**63.40**
1540.34	**1200.00**	**1536.00**	**78.92**
		1540.00	**97.91**

Note: The crest elevation of the C.A.P. Canal is 1525.
Data calculated from the Agua Fria FIS topo.


C709O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
100
200
300
400
500
0
10
20
30
40
50
1495
1500
1505
1510
1515
1520
1525

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:18:39 FILE NAME: C709O

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 6.1 **********
****

C U L V NO.	SITE DATA INLET ELEV. (ft)	OUTLET ELEV. (ft)	CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	1496.00	1492.00	270.03	1 RCP	5.00	5.00	.015	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (cfs) FILE: C709O DATE: 08-11-2000

ELEV (ft)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
1496.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1500.80	120.0	120.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1505.20	240.0	240.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1512.68	360.0	360.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1515.80	400.0	400.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1539.80	600.0	597.8	0.0	0.0	0.0	0.0	0.0	0.00	26
1540.12	720.0	599.4	0.0	0.0	0.0	0.0	0.0	116.61	11
1540.18	840.0	599.8	0.0	0.0	0.0	0.0	0.0	232.96	5
1540.24	960.0	600.0	0.0	0.0	0.0	0.0	0.0	355.43	5
1540.29	1080.0	600.3	0.0	0.0	0.0	0.0	0.0	472.26	4
1540.34	1200.0	600.5	0.0	0.0	0.0	0.0	0.0	593.52	4
1540.00	598.8	598.8	0.0	0.0	0.0	0.0	0.0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: C709O DATE: 08-11-2000

HEAD ELEV (ft)	HEAD ERROR (ft)	TOTAL FLOW (cfs)	FLOW ERROR (cfs)	% FLOW ERROR
1496.00	0.000	0.00	0.00	0.00
1500.80	0.000	120.00	0.00	0.00
1505.20	0.000	240.00	0.00	0.00
1512.68	0.000	360.00	0.00	0.00
1515.80	0.000	400.00	0.00	0.00
1539.80	1.000	600.00	2.20	0.37
1540.12	-0.003	720.00	3.96	0.55
1540.18	-0.004	840.00	7.28	0.87
1540.24	-0.003	960.00	4.53	0.47
1540.29	-0.005	1080.00	7.47	0.69
1540.34	-0.004	1200.00	5.96	0.50

****

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:18:39 FILE NAME: C709O

PERFORMANCE CURVE FOR CULVERT 1 - 1(5.00 (ft) BY 5.00 (ft)) RCP

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	1496.00	0.00	0.00	0-NF	0.00	0.00	0.00	0.00	0.00	0.00
120.00	1500.80	4.80	4.80	1-S2n	2.30	3.12	2.22	0.75	14.22	4.07
240.00	1505.20	9.20	9.20	5-S2n	3.62	4.33	3.67	1.11	15.58	5.18
360.00	1512.68	16.68	15.66	6-S2n	5.00	5.00	4.90	1.40	18.53	5.92
400.00	1515.80	19.80	19.10	6-S2n	5.00	5.00	4.90	1.49	20.59	6.13
597.80	1539.80	43.80	41.42	6-S2n	5.00	5.00	4.90	1.86	30.77	6.97
599.42	1540.12	44.12	41.64	6-S2n	5.00	5.00	4.90	2.06	30.85	7.38
599.76	1540.18	44.18	41.69	6-S2n	5.00	5.00	4.90	2.24	30.87	7.73
600.04	1540.24	44.24	41.73	6-S2n	5.00	5.00	4.90	2.41	30.88	8.05
600.27	1540.28	44.28	41.76	6-S2n	5.00	5.00	4.90	2.57	30.89	8.34
600.52	1540.33	44.33	41.79	6-S2n	5.00	5.00	4.90	2.72	30.91	8.61

El. inlet face invert 1496.00 ft El. outlet invert 1492.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	100.00 ft
INLET ELEVATION	1496.00 ft
OUTLET STATION	370.00 ft
OUTLET ELEVATION	1492.00 ft
NUMBER OF BARRELS	1
SLOPE (V/H)	0.0148
CULVERT LENGTH ALONG SLOPE	270.03 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	CIRCULAR
BARREL DIAMETER	5.00 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.015
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE WITH HEADWALL
INLET DEPRESSION	NONE

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:18:39 FILE NAME: C709O

****
********** TAILWATER **********
****

******* REGULAR CHANNEL CROSS SECTION **********

BOTTOM WIDTH	35.00 ft
SIDE SLOPE H/V (X:1)	6.0
CHANNEL SLOPE V/H (ft/ft)	0.026
MANNING'S n (.01-0.1)	0.045
CHANNEL INVERT ELEVATION	1492.00 ft
CULVERT NO.1 OUTLET INVERT ELEVATION	1492.00 ft

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	1492.00	0.000	0.00	0.00	0.00
120.00	1492.75	0.831	0.75	4.07	1.22
240.00	1493.11	0.865	1.11	5.18	1.81
360.00	1493.40	0.881	1.40	5.92	2.28
400.00	1493.49	0.885	1.49	6.13	2.42
600.00	1493.86	0.899	1.86	6.97	3.04
720.00	1494.06	0.905	2.06	7.38	3.36
840.00	1494.24	0.910	2.24	7.73	3.65
960.00	1494.41	0.914	2.41	8.05	3.93
1080.00	1494.57	0.917	2.57	8.34	4.18
1200.00	1494.72	0.920	2.72	8.61	4.43

****
********** ROADWAY OVERTOPPING DATA **********
****

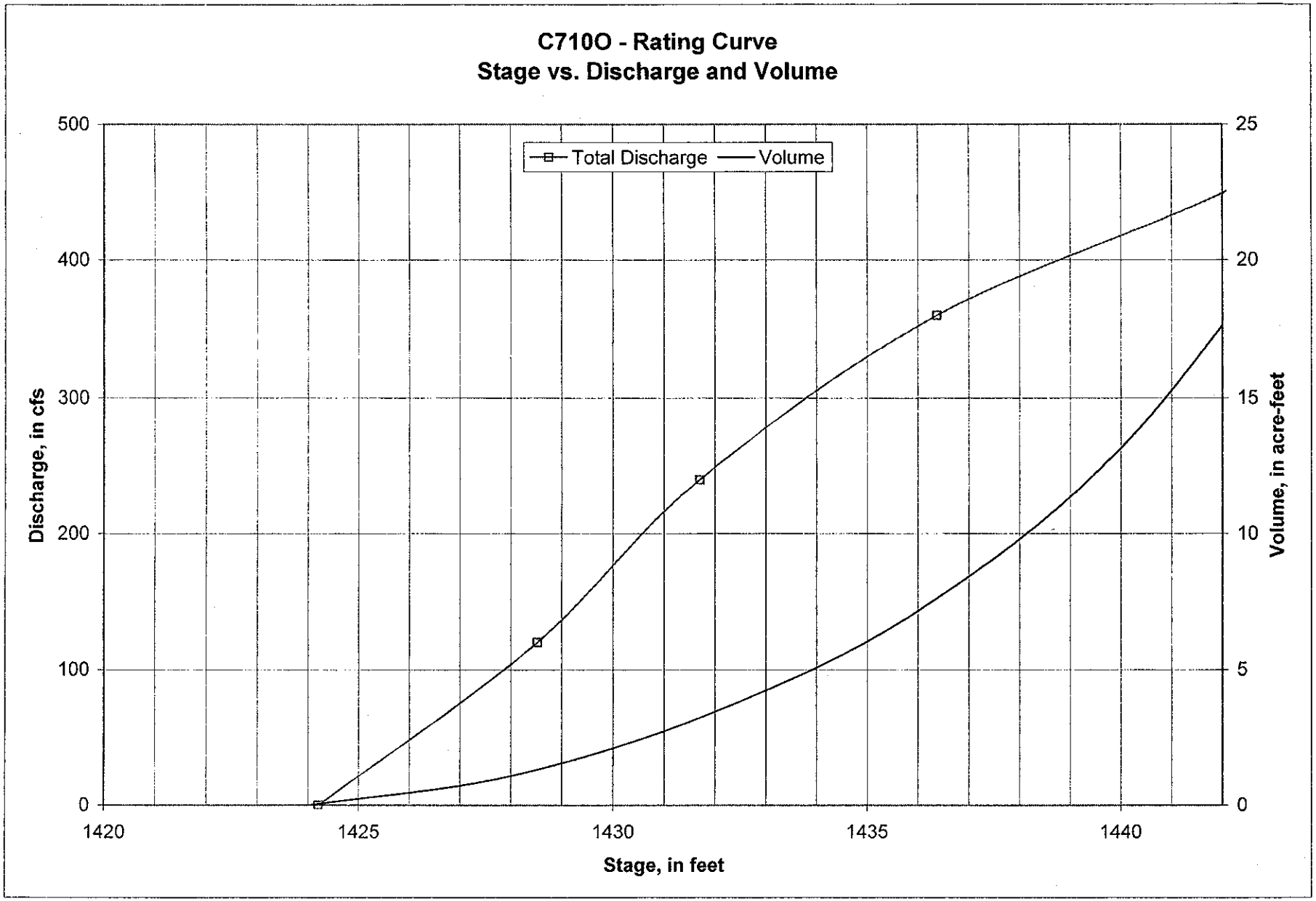
ROADWAY SURFACE	PAVED
EMBANKMENT TOP WIDTH	100.00 ft
CREST LENGTH	1000.00 ft
OVERTOPPING CREST ELEVATION	1540.00 ft

****

Table E-9
Total rating curve for C710O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1424.20	0.00	1424.00	0.00
1428.52	120.00	1428.00	1.08
1431.70	240.00	1432.00	3.46
1436.37	360.00	1436.00	7.13
1443.41	**480.00**	1440.00	13.17
1444.11	**600.00**	**1444.00**	**22.51**
1444.18	**720.00**		
1444.24	**840.00**		
1444.29	**960.00**		
1444.33	**1058.00**		
1444.38	**1200.00**		

Note: The crest elevation of the Beardsley Canal is 1442.2.
Data calculated from the Agua Fria FIS topo.


C710O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
500
400
300
200
100
0
25
20
15
10
5
0
1420
1425
1430
1435
1440

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:19:37 FILE NAME: C710O

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 6.1 **********

C U L V NO.	SITE DATA: INLET ELEV. (ft)	OUTLET ELEV. (ft)	CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	1424.20	1420.00	100.09	1 RCB	5.00	5.00	.015	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (cfs) FILE: C710O DATE: 08-11-2000

ELEV (ft)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
1424.20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1428.52	120.0	120.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1431.70	240.0	240.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1436.37	360.0	360.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1443.41	480.0	480.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1444.11	600.0	489.9	0.0	0.0	0.0	0.0	0.0	107.10	11
1444.18	720.0	490.8	0.0	0.0	0.0	0.0	0.0	225.73	6
1444.24	840.0	491.6	0.0	0.0	0.0	0.0	0.0	344.08	5
1444.29	960.0	492.3	0.0	0.0	0.0	0.0	0.0	460.00	4
1444.33	1058.0	492.9	0.0	0.0	0.0	0.0	0.0	559.65	4
1444.38	1200.0	493.6	0.0	0.0	0.0	0.0	0.0	700.72	4
1444.00	488.3	488.3	0.0	0.0	0.0	0.0	0.0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: C710O DATE: 08-11-2000

HEAD ELEV (ft)	HEAD ERROR (ft)	TOTAL FLOW (cfs)	FLOW ERROR (cfs)	% FLOW ERROR
1424.20	0.000	0.00	0.00	0.00
1428.52	0.000	120.00	0.00	0.00
1431.70	0.000	240.00	0.00	0.00
1436.37	0.000	360.00	0.00	0.00
1443.41	0.000	480.00	0.00	0.00
1444.11	-0.004	600.00	3.04	0.51
1444.18	-0.002	720.00	3.44	0.48
1444.24	-0.003	840.00	4.29	0.51
1444.29	-0.005	960.00	7.68	0.80
1444.33	-0.004	1058.00	5.48	0.52
1444.38	-0.004	1200.00	5.69	0.47

****

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:19:37 FILE NAME: C710O

PERFORMANCE CURVE FOR CULVERT 1 - 1(5.00 (ft) BY 5.00 (ft)) RCB

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	1424.20	0.00	0.00	0-NF	0.00	0.00	0.00	0.00	0.00	0.00
120.00	1428.52	4.32	4.32	1-S2n	1.30	2.62	1.42	0.51	16.89	7.53
240.00	1431.70	7.50	7.50	5-S2n	2.14	4.16	2.46	0.78	19.51	9.79
360.00	1436.37	12.17	7.19	6-S2n	2.90	5.00	3.40	0.99	21.18	11.39
480.00	1443.41	19.21	12.16	6-S2n	3.63	5.00	4.19	1.17	22.91	12.66
489.86	1444.10	19.90	12.63	6-S2n	3.69	5.00	4.24	1.34	23.11	13.73
490.83	1444.17	19.97	12.68	6-S2n	3.70	5.00	4.24	1.49	23.15	14.65
491.63	1444.23	20.03	12.72	6-S2n	3.70	5.00	4.25	1.63	23.14	15.48
492.33	1444.28	20.08	12.75	6-S2n	3.70	5.00	4.25	1.77	23.17	16.23
492.87	1444.32	20.12	12.78	6-S2n	3.71	5.00	4.25	1.87	23.19	16.79
493.59	1444.37	20.17	12.82	6-S2n	3.71	5.00	4.26	2.01	23.17	17.54

El. inlet face invert 1424.20 ft El. outlet invert 1420.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	100.00 ft
INLET ELEVATION	1424.20 ft
OUTLET STATION	200.00 ft
OUTLET ELEVATION	1420.00 ft
NUMBER OF BARRELS	1
SLOPE (V/H)	0.0420
CULVERT LENGTH ALONG SLOPE	100.09 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	BOX
BARREL SPAN	5.00 ft
BARREL RISE	5.00 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.015
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE (90-45 DEG.)
INLET DEPRESSION	NONE

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:19:37 FILE NAME: C710O

****
********** TAILWATER **********
****

******* REGULAR CHANNEL CROSS SECTION **********

BOTTOM WIDTH	30.00 ft
SIDE SLOPE H/V (X:1)	2.0
CHANNEL SLOPE V/H (ft/ft)	0.133
MANNING'S n (.01-0.1)	0.045
CHANNEL INVERT ELEVATION	1420.00 ft
CULVERT NO.1 OUTLET INVERT ELEVATION	1420.00 ft

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	1420.00	0.000	0.00	0.00	0.00
120.00	1420.51	1.851	0.51	7.53	4.27
240.00	1420.78	1.958	0.78	9.79	6.46
360.00	1420.99	2.019	0.99	11.39	8.22
480.00	1421.17	2.060	1.17	12.66	9.75
600.00	1421.34	2.091	1.34	13.73	11.13
720.00	1421.49	2.116	1.49	14.65	12.39
840.00	1421.63	2.136	1.63	15.48	13.57
960.00	1421.77	2.153	1.77	16.23	14.68
1058.00	1421.87	2.165	1.87	16.79	15.54
1200.00	1422.01	2.179	2.01	17.54	16.73

****
********** ROADWAY OVERTOPPING DATA **********
****

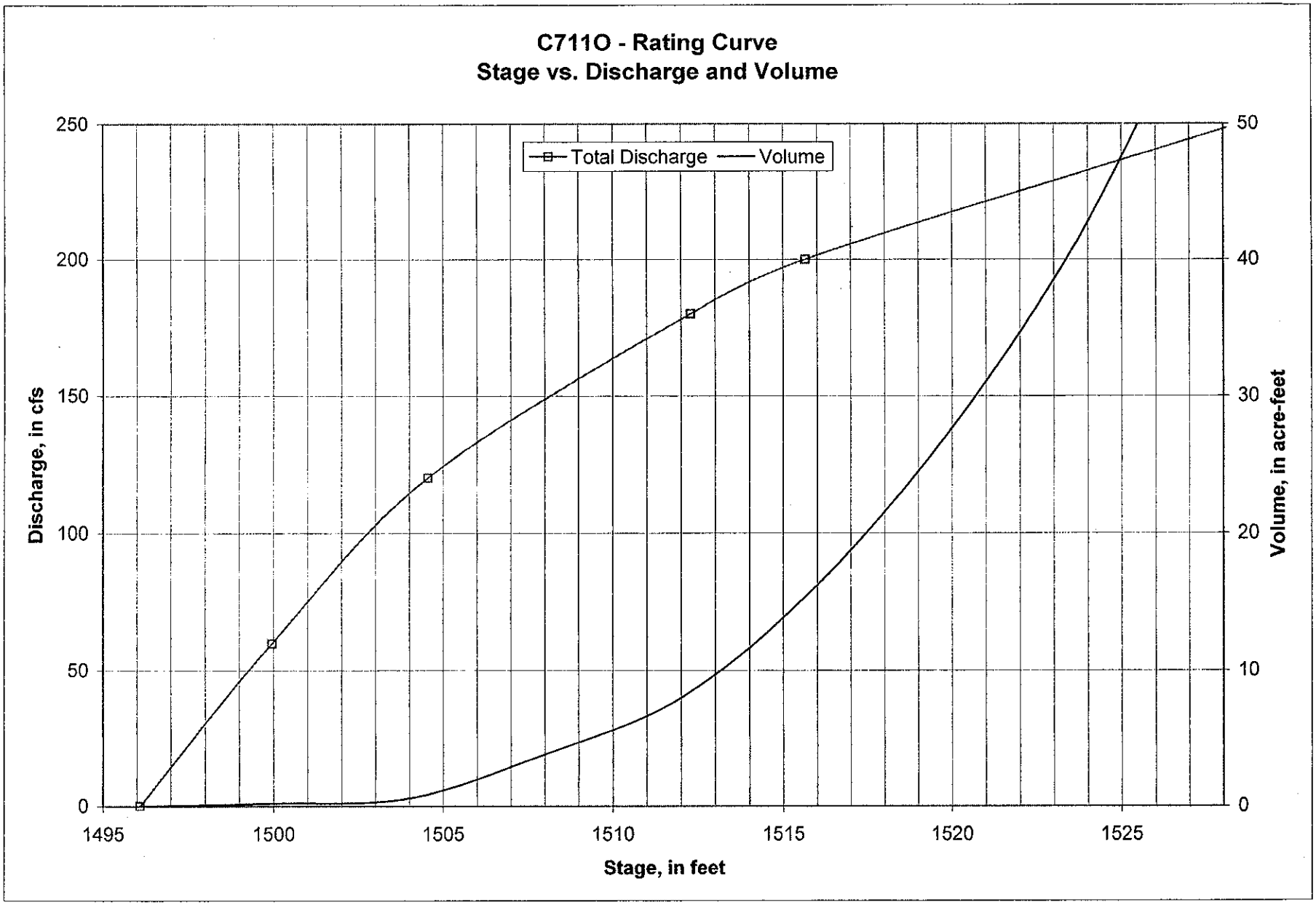
ROADWAY SURFACE	PAVED
EMBANKMENT TOP WIDTH	100.00 ft
CREST LENGTH	1000.00 ft
OVERTOPPING CREST ELEVATION	1444.00 ft

****

Table E-10
Total rating curve for C711O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1496.10	0.00	1496.10	0.00
1499.96	60.00	1500.00	0.20
1504.55	120.00	1504.00	0.59
1512.28	180.00	1508.00	3.79
1515.65	200.00	1512.00	7.98
1539.71	**300.00**	1516.00	16.27
1540.09	**360.00**	1520.00	27.64
1540.13	**420.00**	1524.00	42.75
1540.17	**480.00**	**1528.00**	**63.25**
1540.20	**540.00**		
1540.23	**600.00**		

Note: The crest elevation of the Waddell Canal is 1525.
Data calculated from the Agua Fria FIS topo.


C711O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
50
100
150
200
250
0
10
20
30
40
50
1495
1500
1505
1510
1515
1520
1525

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:42:20 FILE NAME: C711O

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 6.1 **********
****

C U L V NO.	SITE DATA: INLET ELEV. (ft)	OUTLET ELEV. (ft)	CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	1496.10	1488.00	245.13	1 RCP	3.50	3.50	.015	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (cfs) FILE: C711O DATE: 08-11-2000

ELEV (ft)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
1496.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1499.95	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1504.55	120.0	120.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1512.28	180.0	180.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1515.65	200.0	200.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1539.71	300.0	274.8	0.0	0.0	0.0	0.0	0.0	0.00	30
1540.09	360.0	275.5	0.0	0.0	0.0	0.0	0.0	81.95	15
1540.13	420.0	275.5	0.0	0.0	0.0	0.0	0.0	141.20	6
1540.17	480.0	275.6	0.0	0.0	0.0	0.0	0.0	200.26	5
1540.20	540.0	275.6	0.0	0.0	0.0	0.0	0.0	261.21	5
1540.23	600.0	275.7	0.0	0.0	0.0	0.0	0.0	318.62	4
1540.00	275.3	275.3	0.0	0.0	0.0	0.0	0.0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: C711O DATE: 08-11-2000

HEAD ELEV (ft)	HEAD ERROR (ft)	TOTAL FLOW (cfs)	FLOW ERROR (cfs)	% FLOW ERROR
1496.10	0.000	0.00	0.00	0.00
1499.95	0.000	60.00	0.00	0.00
1504.55	0.000	120.00	0.00	0.00
1512.28	0.000	180.00	0.00	0.00
1515.65	0.000	200.00	0.00	0.00
1539.71	-0.015	300.00	25.21	8.40
1540.09	-0.002	360.00	2.59	0.72
1540.13	-0.002	420.00	3.26	0.78
1540.17	-0.002	480.00	4.14	0.86
1540.20	-0.002	540.00	3.15	0.58
1540.23	-0.004	600.00	5.68	0.95

****

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:42:20 FILE NAME: C711O

PERFORMANCE CURVE FOR CULVERT 1 - 1(3.50 (ft) BY 3.50 (ft)) RCP

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	1496.10	0.00	0.00	0-NF	0.00	0.00	0.00	0.00	0.00	0.00
60.00	1499.96	3.86	3.86	5-S2n	1.49	2.42	1.42	0.42	16.32	3.61
120.00	1504.55	8.45	8.45	5-S2n	2.28	3.30	2.30	0.63	17.89	4.58
180.00	1512.28	16.18	13.94	6-S2n	3.50	3.50	3.40	0.79	18.99	5.23
200.00	1515.65	19.55	18.29	6-S2n	3.50	3.50	3.40	0.84	21.10	5.41
274.79	1539.71	43.61	38.61	6-S2n	3.50	3.50	3.40	1.05	28.99	6.16
275.46	1540.09	43.99	38.82	6-S2n	3.50	3.50	3.40	1.16	29.06	6.51
275.53	1540.13	44.03	38.84	6-S2n	3.50	3.50	3.40	1.26	29.07	6.83
275.59	1540.16	44.06	38.86	6-S2n	3.50	3.50	3.40	1.35	29.08	7.11
275.65	1540.19	44.09	38.88	6-S2n	3.50	3.50	3.40	1.44	29.08	7.37
275.70	1540.22	44.12	38.89	6-S2n	3.50	3.50	3.40	1.53	29.09	7.60

El. inlet face invert 1496.10 ft El. outlet invert 1488.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	100.00 ft
INLET ELEVATION	1496.10 ft
OUTLET STATION	345.00 ft
OUTLET ELEVATION	1488.00 ft
NUMBER OF BARRELS	1
SLOPE (V/H)	0.0331
CULVERT LENGTH ALONG SLOPE	245.13 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	CIRCULAR
BARREL DIAMETER	3.50 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.015
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE WITH HEADWALL
INLET DEPRESSION	NONE

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:42:20 FILE NAME: C711O

****
********** TAILWATER **********
****

******* REGULAR CHANNEL CROSS SECTION **********

BOTTOM WIDTH	35.00 ft
SIDE SLOPE H/V (X:1)	%11.0
CHANNEL SLOPE V/H (ft/ft)	0.044
MANNING'S n (.01-0.1)	0.045
CHANNEL INVERT ELEVATION	1488.00 ft
CULVERT NO.1 OUTLET INVERT ELEVATION	1488.00 ft

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	1488.00	0.000	0.00	0.00	0.00
60.00	1488.42	0.980	0.42	3.61	1.15
120.00	1488.63	1.019	0.63	4.58	1.72
180.00	1488.79	1.039	0.79	5.23	2.16
200.00	1488.84	1.043	0.84	5.41	2.30
300.00	1489.05	1.060	1.05	6.16	2.88
360.00	1489.16	1.067	1.16	6.51	3.18
420.00	1489.26	1.073	1.26	6.83	3.46
480.00	1489.35	1.077	1.35	7.11	3.71
540.00	1489.44	1.081	1.44	7.37	3.96
600.00	1489.53	1.085	1.53	7.60	4.19

****
********** ROADWAY OVERTOPPING DATA **********
****

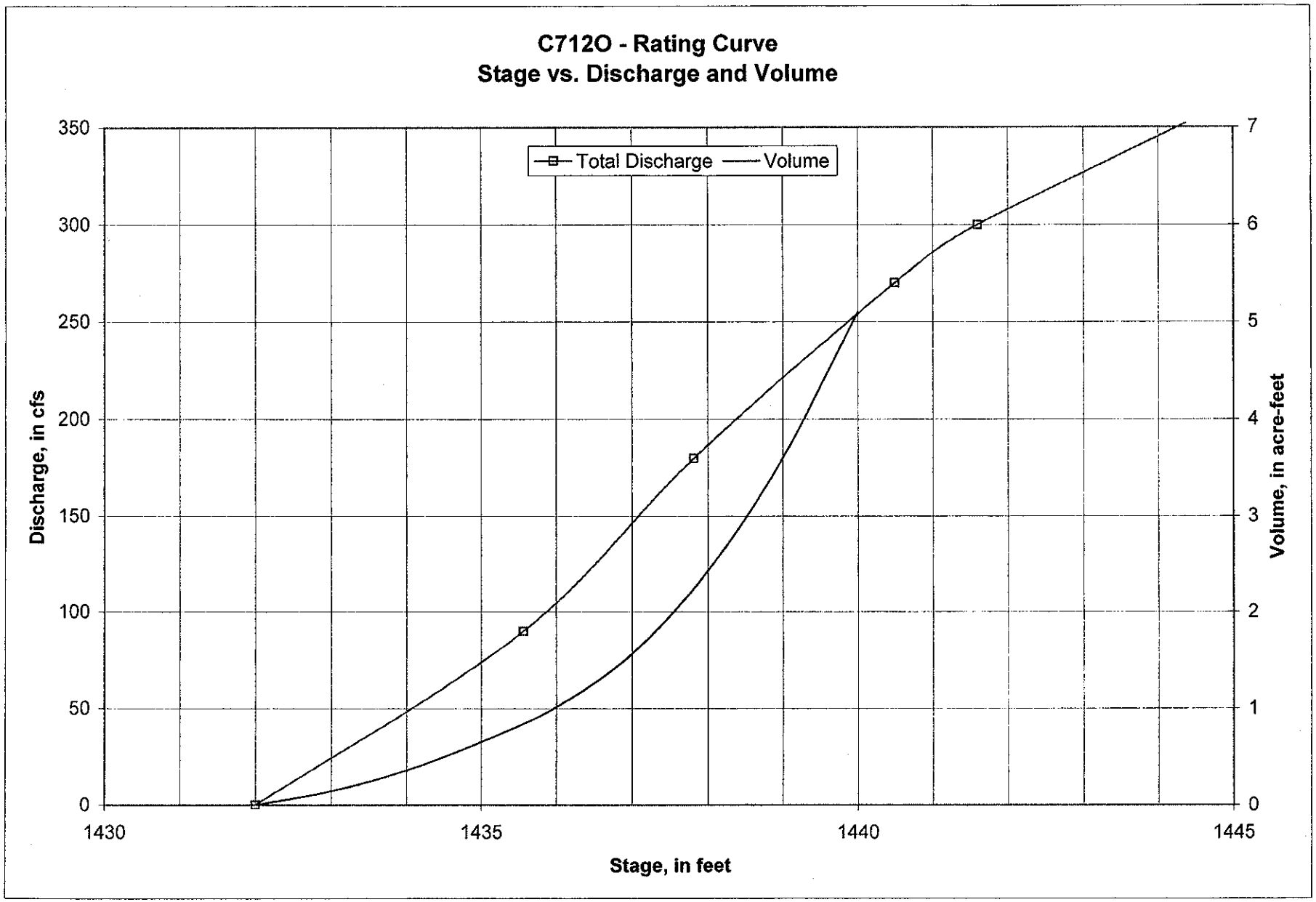
ROADWAY SURFACE	PAVED
EMBANKMENT TOP WIDTH	120.00 ft
CREST LENGTH	1000.00 ft
OVERTOPPING CREST ELEVATION	1540.00 ft

****

Table E-11
Total rating curve for C712O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1432.00	0.00	1432.00	0.00
1435.56	90.00	1433.00	0.14
1437.81	180.00	1434.00	0.36
1440.49	270.00	1435.00	0.65
1441.60	300.00	1436.00	1.02
1449.19	**450.00**	1437.00	1.56
1450.09	**540.00**	1438.00	2.43
1450.14	**630.00**	1439.00	3.61
1450.19	**720.00**	1440.00	5.10
1450.23	**810.00**		
1450.27	**900.00**		

Note: The crest elevation of the Beardsley Canal is 1442.
Data calculated from the Agua Fria FIS topo.


C712O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
350
300
250
200
150
100
50
0
7
6
5
4
3
2
1
0
1430
1435
1440
1445

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 16:11:38 FILE NAME: C712O

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 6.1 **********
****

CULV NO.	SITE DATA: INLET ELEV. (ft)	OUTLET ELEV. (ft)	CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	1432.00	1428.00	100.08	1 RCB	5.00	5.00	.015	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (cfs) FILE: C712O DATE: 08-11-2000

ELEV (ft)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
1432.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1435.56	90.0	90.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1437.81	180.0	180.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1440.49	270.0	270.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1441.60	300.0	300.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1449.19	450.0	450.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1450.09	540.0	463.4	0.0	0.0	0.0	0.0	0.0	73.88	8
1450.14	630.0	464.3	0.0	0.0	0.0	0.0	0.0	161.74	6
1450.19	720.0	465.0	0.0	0.0	0.0	0.0	0.0	250.06	5
1450.23	810.0	465.6	0.0	0.0	0.0	0.0	0.0	336.32	4
1450.27	900.0	466.2	0.0	0.0	0.0	0.0	0.0	426.79	4
1450.00	462.1	462.1	0.0	0.0	0.0	0.0	0.0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: C712O DATE: 08-11-2000

HEAD ELEV (ft)	HEAD ERROR (ft)	TOTAL FLOW (cfs)	FLOW ERROR (cfs)	% FLOW ERROR
1432.00	0.000	0.00	0.00	0.00
1435.56	0.000	90.00	0.00	0.00
1437.81	0.000	180.00	0.00	0.00
1440.49	0.000	270.00	0.00	0.00
1441.60	0.000	300.00	0.00	0.00
1449.19	0.000	450.00	0.00	0.00
1450.09	-0.008	540.00	2.71	0.50
1450.14	-0.002	630.00	3.99	0.63
1450.19	-0.003	720.00	4.96	0.69
1450.23	-0.005	810.00	8.09	1.00
1450.27	-0.005	900.00	7.03	0.78

****

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 16:11:38 FILE NAME: C712O

PERFORMANCE CURVE FOR CULVERT 1 - 1(5.00 (ft) BY 5.00 (ft)) RCB

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	1432.00	0.00	0.00	0-NF	0.00	0.00	0.00	0.00	0.00	0.00
90.00	1435.56	3.56	3.56	1-S2n	1.08	2.16	1.16	0.61	15.47	2.91
180.00	1437.81	5.81	5.81	5-S2n	1.77	3.43	2.00	0.91	17.96	3.70
270.00	1440.49	8.49	8.49	5-S2n	2.38	4.50	2.77	1.15	19.49	4.24
300.00	1441.60	9.60	9.60	5-S2n	2.58	4.83	3.02	1.22	19.88	4.39
450.00	1449.19	17.19	10.99	6-S2n	3.52	5.00	4.07	1.53	22.11	4.99
463.40	1450.08	18.08	11.59	6-S2n	3.60	5.00	4.15	1.69	22.33	5.29
464.27	1450.14	18.14	11.63	6-S2n	3.61	5.00	4.15	1.84	22.37	5.55
464.98	1450.19	18.19	11.66	6-S2n	3.61	5.00	4.16	1.98	22.35	5.78
465.59	1450.23	18.23	11.69	6-S2n	3.61	5.00	4.16	2.11	22.38	5.99
466.17	1450.27	18.27	11.72	6-S2n	3.62	5.00	4.16	2.24	22.41	6.18

El. inlet face invert 1432.00 ft El. outlet invert 1428.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	100.00 ft
INLET ELEVATION	1432.00 ft
OUTLET STATION	200.00 ft
OUTLET ELEVATION	1428.00 ft
NUMBER OF BARRELS	1
SLOPE (V/H)	0.0400
CULVERT LENGTH ALONG SLOPE	100.08 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	BOX
BARREL SPAN	5.00 ft
BARREL RISE	5.00 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.015
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE (90-45 DEG.)
INLET DEPRESSION	NONE

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 16:11:38 FILE NAME: C712O

****
********** TAILWATER **********
****

******* REGULAR CHANNEL CROSS SECTION **********

BOTTOM WIDTH	45.00 ft
SIDE SLOPE H/V (X:1)	9.0
CHANNEL SLOPE V/H (ft/ft)	0.017
MANNING'S n (.01-0.1)	0.045
CHANNEL INVERT ELEVATION	1428.00 ft
CULVERT NO.1 OUTLET INVERT ELEVATION	1428.00 ft

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	1428.00	0.000	0.00	0.00	0.00
90.00	1428.61	0.655	0.61	2.91	0.66
180.00	1428.91	0.682	0.91	3.70	0.98
270.00	1429.15	0.696	1.15	4.24	1.24
300.00	1429.22	0.699	1.22	4.39	1.31
450.00	1429.53	0.711	1.53	4.99	1.64
540.00	1429.69	0.716	1.69	5.29	1.82
630.00	1429.84	0.720	1.84	5.55	1.98
720.00	1429.98	0.723	1.98	5.78	2.13
810.00	1430.11	0.726	2.11	5.99	2.27
900.00	1430.24	0.728	2.24	6.18	2.40

****
********** ROADWAY OVERTOPPING DATA **********
****

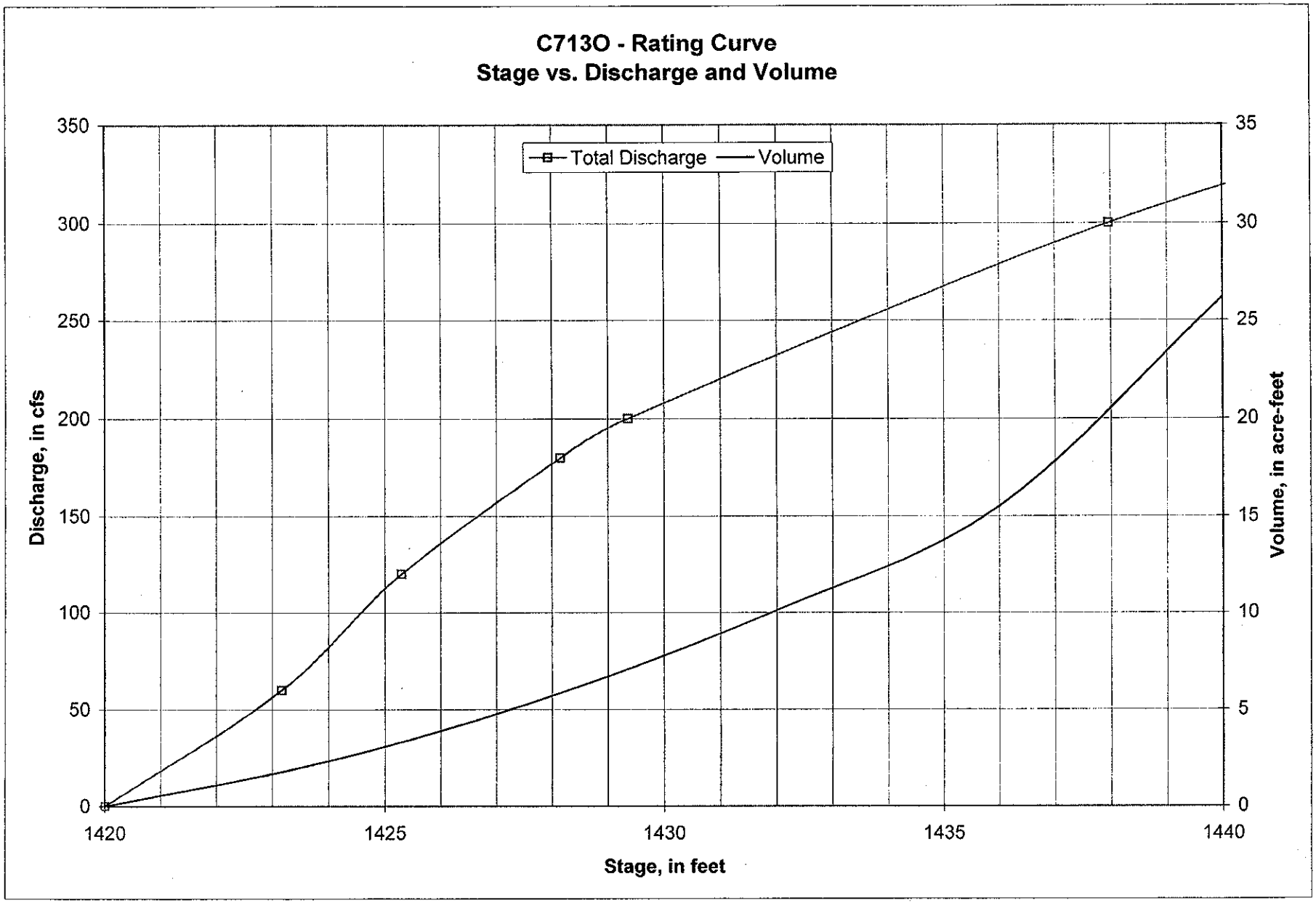
ROADWAY SURFACE	PAVED
EMBANKMENT TOP WIDTH	120.00 ft
CREST LENGTH	1000.00 ft
OVERTOPPING CREST ELEVATION	1450.00 ft

****

Table E-12
Total rating curve for C713O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1420.00	0.00	1420.00	0.00
1423.17	60.00	1424.00	2.35
1425.30	120.00	1428.00	5.72
1428.15	180.00	1432.00	10.11
1429.36	200.00	1436.00	15.52
1437.97	300.00	**1440.00**	**26.19**
1444.99	**360.00**		
1450.04	**420.00**		
1450.09	**480.00**		
1450.13	**540.00**		
1450.17	**600.00**		

Note: The crest elevation of the Beardsley Canal is 1438.
Data calculated from the Agua Fria FIS topo.


C713O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
350
300
250
200
150
100
50
0
35
30
25
20
15
10
5
0
1420
1425
1430
1435
1440

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:21:06 FILE NAME: C713O

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 6.1 **********

C U L V NO.	SITE DATA: INLET ELEV. (ft)	OUTLET ELEV. (ft)	CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	1420.00	1416.00	120.07	1 RCB	4.00	4.00	.015	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (cfs) FILE: C713O DATE: 08-11-2000

ELEV (ft)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
1420.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1423.17	60.0	60.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1425.30	120.0	120.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1428.15	180.0	180.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1429.36	200.0	200.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1437.97	300.0	300.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1444.99	360.0	360.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1450.04	420.0	397.5	0.0	0.0	0.0	0.0	0.0	18.60	15
1450.09	480.0	397.9	0.0	0.0	0.0	0.0	0.0	77.72	7
1450.13	540.0	398.2	0.0	0.0	0.0	0.0	0.0	138.43	6
1450.17	600.0	398.4	0.0	0.0	0.0	0.0	0.0	197.15	5
1450.00	397.3	397.3	0.0	0.0	0.0	0.0	0.0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: C713O DATE: 08-11-2000

HEAD ELEV (ft)	HEAD ERROR (ft)	TOTAL FLOW (cfs)	FLOW ERROR (cfs)	% FLOW ERROR
1420.00	0.000	0.00	0.00	0.00
1423.17	0.000	60.00	0.00	0.00
1425.30	0.000	120.00	0.00	0.00
1428.15	0.000	180.00	0.00	0.00
1429.36	0.000	200.00	0.00	0.00
1437.97	0.000	300.00	0.00	0.00
1444.99	0.000	360.00	0.00	0.00
1450.04	-0.002	420.00	3.90	0.93
1450.09	-0.002	480.00	4.39	0.91
1450.13	-0.002	540.00	3.38	0.63
1450.17	-0.002	600.00	4.42	0.74

****

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:21:06 FILE NAME: C713O

PERFORMANCE CURVE FOR CULVERT 1 - 1(4.00 (ft) BY 4.00 (ft)) RCB

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	1420.00	0.00	0.00	0-NF	0.00	0.00	0.00	0.00	0.00	0.00
60.00	1423.17	3.17	3.17	1-S2n	1.05	1.92	1.09	0.46	13.81	4.97
120.00	1425.30	5.30	5.30	5-S2n	1.74	3.04	1.84	0.69	16.29	6.43
180.00	1428.15	8.15	8.15	5-S2n	2.36	3.99	2.56	0.88	17.61	7.45
200.00	1429.36	9.36	5.54	6-S2n	2.55	4.00	2.78	0.93	17.99	7.73
300.00	1437.97	17.97	12.47	6-S2n	3.52	4.00	3.74	1.18	20.05	8.91
360.00	1444.99	24.99	17.95	6-S2n	4.00	4.00	3.90	1.31	23.08	9.49
397.50	1450.03	30.03	21.88	6-S2n	4.00	4.00	3.90	1.43	25.48	10.00
397.89	1450.08	30.09	21.93	6-S2n	4.00	4.00	3.90	1.55	25.51	10.46
398.18	1450.13	30.13	21.96	6-S2n	4.00	4.00	3.90	1.66	25.52	10.88
398.43	1450.16	30.16	21.99	6-S2n	4.00	4.00	3.90	1.76	25.54	11.27

El. inlet face invert 1420.00 ft El. outlet invert 1416.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	100.00 ft
INLET ELEVATION	1420.00 ft
OUTLET STATION	220.00 ft
OUTLET ELEVATION	1416.00 ft
NUMBER OF BARRELS	1
SLOPE (V/H)	0.0333
CULVERT LENGTH ALONG SLOPE	120.07 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	BOX
BARREL SPAN	4.00 ft
BARREL RISE	4.00 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.015
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE (90-45 DEG.)
INLET DEPRESSION	NONE

CURRENT DATE: 08-11-2000 FILE DATE: 08-11-2000
CURRENT TIME: 15:21:06 FILE NAME: C713O

****
********** TAILWATER **********
****

******* REGULAR CHANNEL CROSS SECTION **********

BOTTOM WIDTH	25.00 ft
SIDE SLOPE H/V (X:1)	3.0
CHANNEL SLOPE V/H (ft/ft)	0.042
MANNING'S n (.01-0.1)	0.035
CHANNEL INVERT ELEVATION	1416.00 ft
CULVERT NO.1 OUTLET INVERT ELEVATION	1416.00 ft

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	1416.00	0.000	0.00	0.00	0.00
60.00	1416.46	1.296	0.46	4.97	1.20
120.00	1416.69	1.365	0.69	6.43	1.81
180.00	1416.88	1.402	0.88	7.45	2.29
200.00	1416.93	1.412	0.93	7.73	2.44
300.00	1417.18	1.446	1.18	8.91	3.09
360.00	1417.31	1.460	1.31	9.49	3.44
420.00	1417.43	1.472	1.43	10.00	3.76
480.00	1417.55	1.481	1.55	10.46	4.06
540.00	1417.66	1.491	1.66	10.88	4.34
600.00	1417.76	1.498	1.76	11.27	4.61

****
********** ROADWAY OVERTOPPING DATA **********
****

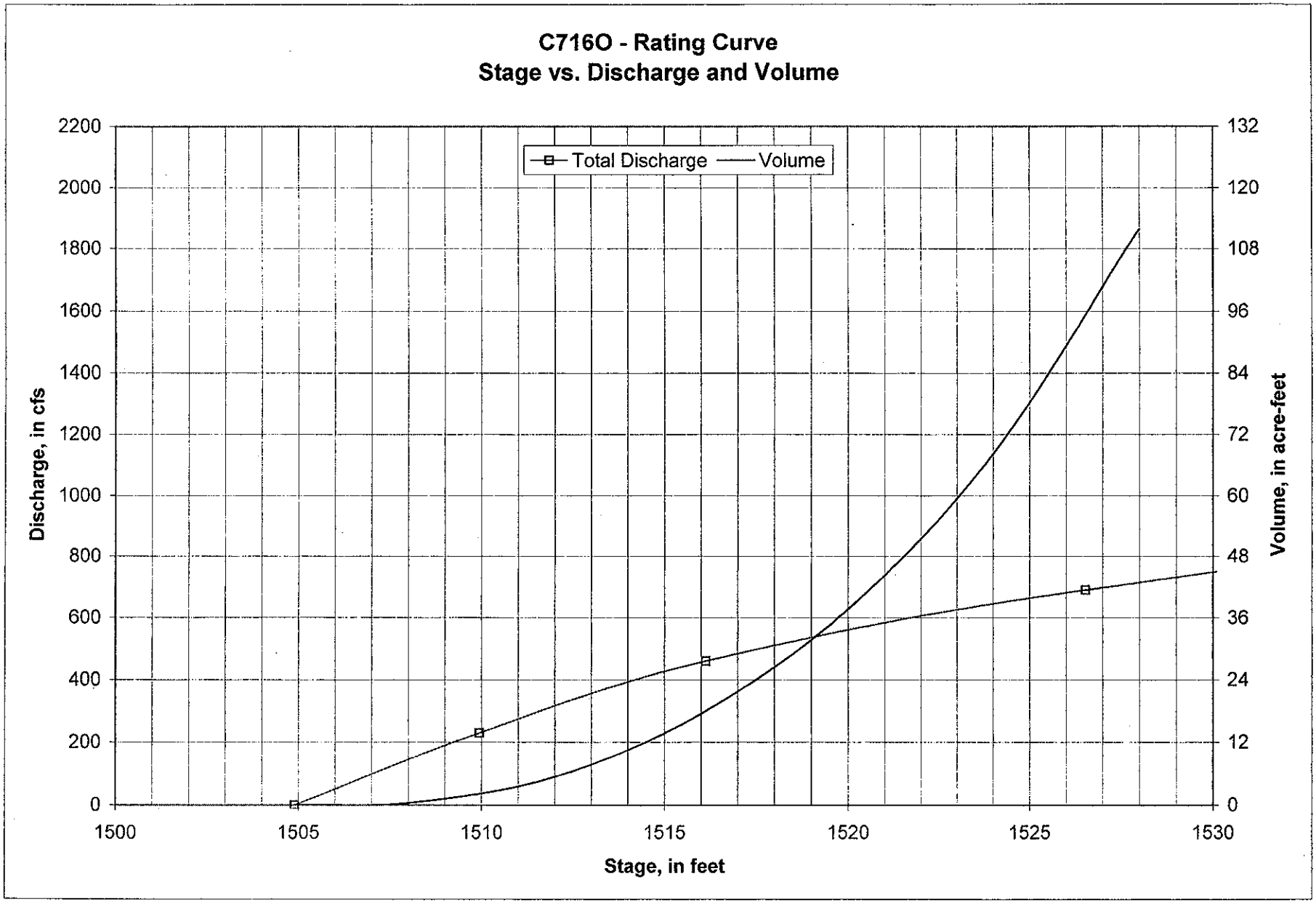
ROADWAY SURFACE	PAVED
EMBANKMENT TOP WIDTH	120.00 ft
CREST LENGTH	1000.00 ft
OVERTOPPING CREST ELEVATION	1450.00 ft

****

Table E-13
Total rating curve for C716O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1504.90	0.00	1504.90	0.00
1509.94	230.00	1508.00	0.40
1516.13	460.00	1512.00	5.42
1526.53	690.00	1516.00	17.50
1544.42	**920.00**	1520.00	37.71
1592.19	**1150.00**	1524.00	68.23
1729.99	**1380.00**	1528.00	111.87
2074.29	**1610.00**		
2108.01	**1625.00**		
4241.67	**2070.00**		
6746.91	**2300.00**		

Note: The crest elevation of the Waddell Canal is 1528.


C716O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
0
12
24
36
48
60
72
84
96
108
120
132
1500
1505
1510
1515
1520
1525
1530

CURRENT DATE: 11-30-2000 FILE DATE: 11-30-2000
CURRENT TIME: 13:57:41 FILE NAME: C716O

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 6.1 **********
****

CULV NO.	SITE DATA: INLET ELEV. (ft)	SITE DATA: OUTLET ELEV. (ft)	SITE DATA: CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	1504.90	1496.00	252.16	2 RCP	4.50	4.50	.015	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (cfs) FILE: C716O DATE: 11-30-2000

ELEV (ft)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
1504.90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1509.94	230.0	230.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1516.13	460.0	460.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1526.53	690.0	690.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1544.42	920.0	920.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1592.19	1150.0	1150.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1729.99	1380.0	1380.0	0.0	0.0	0.0	0.0	0.0	0.00	1
2074.29	1610.0	1610.0	0.0	0.0	0.0	0.0	0.0	0.00	1
2108.01	1625.0	1625.0	0.0	0.0	0.0	0.0	0.0	0.00	1
4241.67	2070.0	2070.0	0.0	0.0	0.0	0.0	0.0	0.00	1
6746.91	2300.0	2300.0	0.0	0.0	0.0	0.0	0.0	0.00	1
6750.00	2300.2	2300.2	0.0	0.0	0.0	0.0	0.0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: C716O DATE: 11-30-2000

HEAD ELEV (ft)	HEAD ERROR (ft)	TOTAL FLOW (cfs)	FLOW ERROR (cfs)	% FLOW ERROR
1504.90	0.000	0.00	0.00	0.00
1509.94	0.000	230.00	0.00	0.00
1516.13	0.000	460.00	0.00	0.00
1526.53	0.000	690.00	0.00	0.00
1544.42	0.000	920.00	0.00	0.00
1592.19	0.000	1150.00	0.00	0.00
1729.99	0.000	1380.00	0.00	0.00
2074.29	0.000	1610.00	0.00	0.00
2108.01	0.000	1625.00	0.00	0.00
4241.67	0.000	2070.00	0.00	0.00
6746.91	0.000	2300.00	0.00	0.00

****

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 11-30-2000 FILE DATE: 11-30-2000
CURRENT TIME: 13:57:41 FILE NAME: C716O

PERFORMANCE CURVE FOR CULVERT 1 - 2(4.50 (ft) BY 4.50 (ft)) RCP

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	1504.90	0.00	0.00	0-NF	0.00	0.00	0.00	-4.00	0.00	0.00
230.00	1509.94	5.04	5.04	5-S2n	1.86	3.16	1.90	-2.93	18.06	4.91
460.00	1516.13	11.23	11.23	5-S2n	2.82	4.29	2.92	-2.46	21.06	5.99
690.00	1526.53	21.63	16.83	6-S2n	4.50	4.50	4.40	-2.12	21.95	6.70
920.00	1544.42	39.52	33.35	6-S2n	4.50	4.50	4.40	-1.82	29.26	7.26
1150.00	1592.19	87.29	54.59	6-S2n	4.50	4.50	4.40	-1.58	36.58	7.70
1380.00	1729.99	225.09	80.54	6-S2n	4.50	4.50	4.40	-1.36	43.89	8.09
1610.00	2074.29	569.39	111.21	6-S2n	4.50	4.50	4.40	-1.16	51.21	8.42
1625.00	2108.01	603.11	113.38	6-S2n	4.50	4.50	4.40	-1.14	51.68	8.45
2070.00	4241.67	0.00	186.71	6-S2n	4.50	4.50	4.40	-0.80	65.84	9.00
2300.00	6746.91	0.00	231.54	6-S2n	4.50	4.50	4.40	-0.64	73.15	9.25

El. inlet face invert 1504.90 ft El. outlet invert 1496.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	100.00 ft
INLET ELEVATION	1504.90 ft
OUTLET STATION	352.00 ft
OUTLET ELEVATION	1496.00 ft
NUMBER OF BARRELS	2
SLOPE (V/H)	0.0353
CULVERT LENGTH ALONG SLOPE	252.16 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	CIRCULAR
BARREL DIAMETER	4.50 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.015
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE WITH HEADWALL
INLET DEPRESSION	NONE

CURRENT DATE: 11-30-2000 FILE DATE: 11-30-2000
CURRENT TIME: 13:57:41 FILE NAME: C716O

****
********** TAILWATER **********
****

***** USER DEFINED CHANNEL CROSS-SECTION FILE NAME: C716OTW
MAIN CHANNEL AND LT & RT OVER BANKS FILE DATE: 11-30-00
LEFT CHANNEL BOUNDARY 3
RIGHT CHANNEL BOUNDARY 6
MANNING n LEFT OVER BANK 0.050
MANNING n MAIN CHANNEL 0.035
MANNING n RIGHT OVER BANK 0.050
SLOPE OF CHANNEL 0.0177 ft/ft

CROSS-SECTION COORD. NO.	X (ft)	Y (ft)
1	100.00	1504.00
2	115.00	1500.00
3	150.00	1496.00
4	165.00	1492.00
5	195.00	1492.00
6	285.00	1496.00
7	370.00	1500.00
8	425.00	1504.00

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	1492.00	0.000	-4.00	0.00	0.00
230.00	1493.07	0.960	-2.93	4.91	0.89
460.00	1493.54	1.008	-2.46	5.99	1.21
690.00	1493.88	1.037	-2.12	6.70	1.43
920.00	1494.18	1.058	-1.82	7.26	1.61
1150.00	1494.42	1.073	-1.58	7.70	1.76
1380.00	1494.64	1.087	-1.36	8.09	1.89
1610.00	1494.84	1.098	-1.16	8.42	2.01
1625.00	1494.86	1.098	-1.14	8.45	2.02
2070.00	1495.20	1.116	-0.80	9.00	2.22
2300.00	1495.36	1.124	-0.64	9.25	2.32

Note: Shear stress was calculated using R.

****
********** ROADWAY OVERTOPPING DATA **********
****

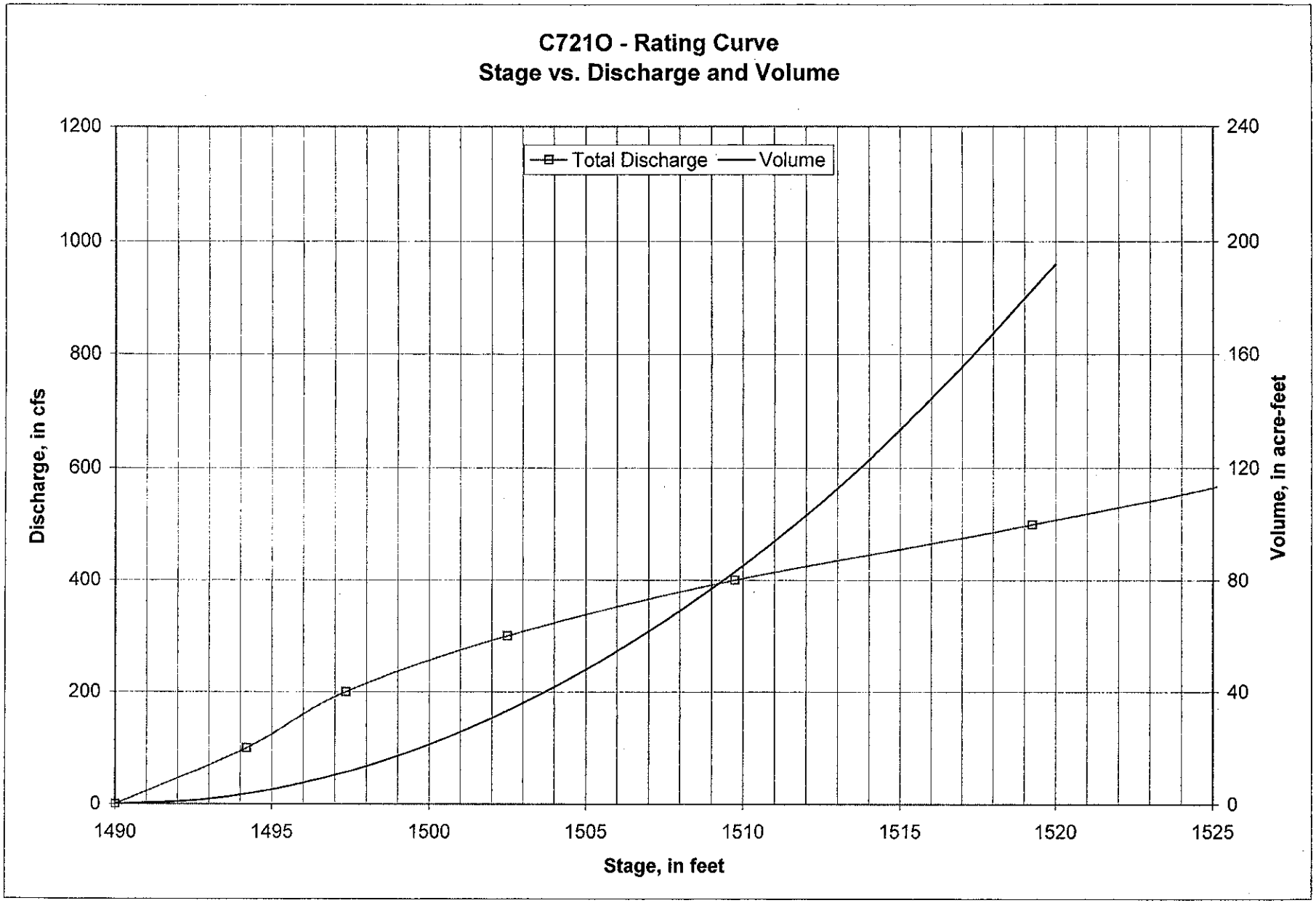
WEIR COEFFICIENT 2.70
EMBANKMENT TOP WIDTH 170.00 ft
CREST LENGTH 1360.00 ft
OVERTOPPING CREST ELEVATION 6750.00 ft

****

Table E-14
Total rating curve for C721O

Stage feet (1)	Discharge cfs (2)	Stage feet (3)	Volume ac-ft (4)
1490.00	0.00	1490.00	0.00
1494.20	100.00	1493.00	1.83
1497.36	200.00	1496.00	7.58
1502.51	300.00	1499.00	17.18
1509.74	400.00	1502.00	30.63
1519.26	500.00	1505.00	47.92
1527.05	**600.00**	1508.00	69.05
1527.13	**700.00**	1511.00	94.03
1527.18	**800.00**	1514.00	122.85
1527.22	**866.00**	1517.00	155.51
1527.28	**1000.00**	1520.00	192.02

Note: The crest elevation of the Waddell Canal is 1527.


C721O - Rating Curve
Stage vs. Discharge and Volume
Total Discharge
Volume
Discharge, in cfs
Volume, in acre-feet
Stage, in feet
0
200
400
600
800
1000
1200
0
40
80
120
160
200
240
1490
1495
1500
1505
1510
1515
1520
1525

CURRENT DATE: 12-07-2000 FILE DATE: 12-07-2000
CURRENT TIME: 08:46:15 FILE NAME: C721O-C

****
********** FHWA CULVERT ANALYSIS **********
********** HY-8, VERSION 6.1 **********
****

C U L V NO.	SITE DATA: INLET ELEV. (ft)	OUTLET ELEV. (ft)	CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	1490.00	1480.00	260.19	1 RCP	5.00	5.00	.015	CONVENTIONAL
2								
3								
4								
5								
6								

****

SUMMARY OF CULVERT FLOWS (cfs) FILE: C721O-C DATE: 12-07-2000

ELEV (ft)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
1490.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1494.74	120.0	120.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1499.14	240.0	240.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1506.62	360.0	360.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1517.09	480.0	480.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1534.17	600.0	600.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1572.06	720.0	720.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1662.33	840.0	840.0	0.0	0.0	0.0	0.0	0.0	0.00	1
1693.69	866.0	866.0	0.0	0.0	0.0	0.0	0.0	0.00	1
2254.60	1080.0	1080.0	0.0	0.0	0.0	0.0	0.0	0.00	1
2968.52	1200.0	1200.0	0.0	0.0	0.0	0.0	0.0	0.00	1
3000.00	1204.0	1204.0	0.0	0.0	0.0	0.0	0.0	OVERTOPPING	

****

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: C721O-C DATE: 12-07-2000

HEAD ELEV (ft)	HEAD ERROR (ft)	TOTAL FLOW (cfs)	FLOW ERROR (cfs)	% FLOW ERROR
1490.00	0.000	0.00	0.00	0.00
1494.74	0.000	120.00	0.00	0.00
1499.14	0.000	240.00	0.00	0.00
1506.62	0.000	360.00	0.00	0.00
1517.09	0.000	480.00	0.00	0.00
1534.17	0.000	600.00	0.00	0.00
1572.06	0.000	720.00	0.00	0.00
1662.33	0.000	840.00	0.00	0.00
1693.69	0.000	866.00	0.00	0.00
2254.60	0.000	1080.00	0.00	0.00
2968.52	0.000	1200.00	0.00	0.00

****

<1> TOLERANCE (ft) = 0.010 <2> TOLERANCE (%) = 1.000

****

CURRENT DATE: 12-07-2000 FILE DATE: 12-07-2000
CURRENT TIME: 08:46:15 FILE NAME: C721O-C

PERFORMANCE CURVE FOR CULVERT 1 - 1(5.00 (ft) BY 5.00 (ft)) RCP

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	1490.00	0.00	0.00	0-NF	0.00	0.00	0.00	0.00	0.00	0.00
120.00	1494.74	4.74	4.74	1-S2n	1.76	3.12	1.72	0.74	19.96	4.24
240.00	1499.14	9.14	9.14	5-S2n	2.62	4.33	2.72	1.10	22.02	5.40
360.00	1506.62	16.62	9.41	6-S2n	3.42	5.00	3.58	1.39	23.96	6.20
480.00	1517.09	27.09	20.62	6-S2n	5.00	5.00	4.90	1.64	24.70	6.82
600.00	1534.17	44.17	35.03	6-S2n	5.00	5.00	4.90	1.85	30.88	7.32
720.00	1572.06	82.06	52.65	6-S2n	5.00	5.00	4.90	2.05	37.05	7.76
840.00	1662.33	172.33	73.46	6-S2n	5.00	5.00	4.90	2.24	43.23	8.15
866.00	1693.69	203.69	78.39	6-S2n	5.00	5.00	4.90	2.28	44.57	8.23
1080.00	2254.60	764.60	124.70	6-S2n	5.00	5.00	4.90	2.57	55.58	8.81
1200.00	2968.52	0.00	155.13	6-S2n	5.00	5.00	4.90	2.72	61.76	9.09

El. inlet face invert 1490.00 ft El. outlet invert 1480.00 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	100.00 ft
INLET ELEVATION	1490.00 ft
OUTLET STATION	360.00 ft
OUTLET ELEVATION	1480.00 ft
NUMBER OF BARRELS	1
SLOPE (V/H)	0.0385
CULVERT LENGTH ALONG SLOPE	260.19 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	CIRCULAR
BARREL DIAMETER	5.00 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.015
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE WITH HEADWALL
INLET DEPRESSION	NONE

CURRENT DATE: 12-07-2000 FILE DATE: 12-07-2000
CURRENT TIME: 08:46:15 FILE NAME: C721O-C

****
********** TAILWATER **********
****

***** USER DEFINED CHANNEL CROSS-SECTION FILE NAME: 721722
MAIN CHANNEL AND LT & RT OVER BANKS FILE DATE: 12-7-00
LEFT CHANNEL BOUNDARY 3
RIGHT CHANNEL BOUNDARY 6
MANNING n LEFT OVER BANK 0.050
MANNING n MAIN CHANNEL 0.035
MANNING n RIGHT OVER BANK 0.050
SLOPE OF CHANNEL 0.0170 ft/ft

CROSS-SECTION COORD. NO.	X (ft)	Y (ft)
1	100.00	1492.00
2	125.00	1488.00
3	175.00	1484.00
4	200.00	1480.00
5	235.00	1480.00
6	250.00	1484.00
7	270.00	1492.00
8	595.00	1496.00

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	1480.00	0.000	0.00	0.00	0.00
120.00	1480.74	0.911	0.74	4.24	0.71
240.00	1481.10	0.967	1.10	5.40	1.02
360.00	1481.39	1.001	1.39	6.20	1.26
480.00	1481.64	1.024	1.64	6.82	1.45
600.00	1481.85	1.042	1.85	7.32	1.61
720.00	1482.05	1.057	2.05	7.76	1.76
840.00	1482.24	1.070	2.24	8.15	1.89
866.00	1482.28	1.073	2.28	8.23	1.92
1080.00	1482.57	1.091	2.57	8.81	2.13
1200.00	1482.72	1.099	2.72	9.09	2.23

Note: Shear stress was calculated using R.

****
********** ROADWAY OVERTOPPING DATA **********
****

WEIR COEFFICIENT 2.70
EMBANKMENT TOP WIDTH 270.00 ft
CREST LENGTH 1000.00 ft
OVERTOPPING CREST ELEVATION 3000.00 ft

****

Table E-15
Summary of storage routing locations

Storage Routing ID (1)	Location (2)	Structure # (3)
C400O *	Downstream end of S509, northside of the C.A.P.; sta. 561+40.	78
C502O *	Downstream end of S502 and S503 confluence, C502, northside of the C.A.P.; sta. 492+30.	81
C503O *	Downstream end of S505, northside of the C.A.P.; sta. 538+25.	94
C504O *	Downstream end of S506, northside of the C.A.P.; sta. 549+00.	93
C506O *	Downstream end of S509, northside of the C.A.P.; sta. 459+30.	84
C507O *	Downstream end of S511, northside of the C.A.P.; sta. 480+90.	82
C705O #	Downstream end of S705, northwest side of the Beardsley Canal.	63
C709O +	Downstream end of S709 and north of SR74, eastside of the Waddell Canal; sta. 189+80.	95
C710O +	Downstream end of S710 at C710, eastside of the Beardsley Canal.	58
C711O +	Downstream end of S711, eastside of the Waddell Canal; sta. 149+20.	71
C712O +	Downstream end of S712 at C712, eastside of the Beardsley Canal.	60
C713O +	Downstream end of S713 at C713, eastside of the Beardsley Canal.	59
C716O #	Downstream end of S716, eastside of the Waddell Canal.	74
C721O #	Downstream end of S721, eastside of the Waddell Canal.	75

* Data directly from the C.A.P. Overchute Study.

\+ Data directly from the Waddell Study and the Agua Fria FIS.

\# Data from the Waddell Study, Agua Fria FIS, and Cooper topography (4 ft. contour intervals).

APPENDIX F: INDIRECT VERIFICATION OF RESULTS

FIGURE 10-3

100-YEAR PEAK DISCHARGE BY LP3 ANALYSIS (LP3 Q100) AND MAXIMUM RECORDED DISCHARGE (Q_M RECORD) vs. DRAINAGE AREA FOR 0.1 TO 2.0 SQUARE MILES

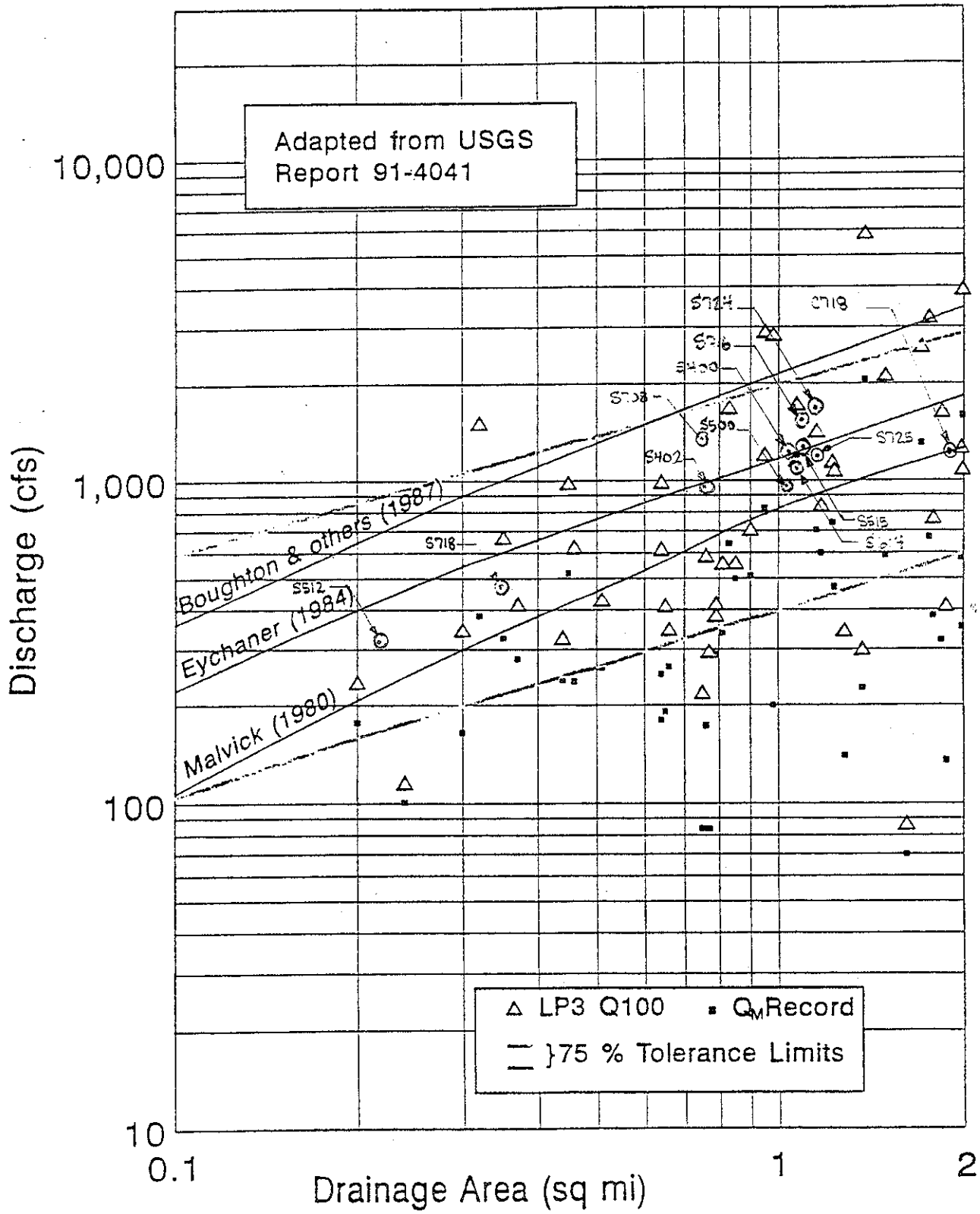


FIGURE 10-4

100-YEAR PEAK DISCHARGE BY LP3 ANALYSIS (LP3 Q100) AND MAXIMUM RECORDED DISCHARGE (Q_M RECORD) vs. DRAINAGE AREA FOR 1 TO 20 SQUARE MILES

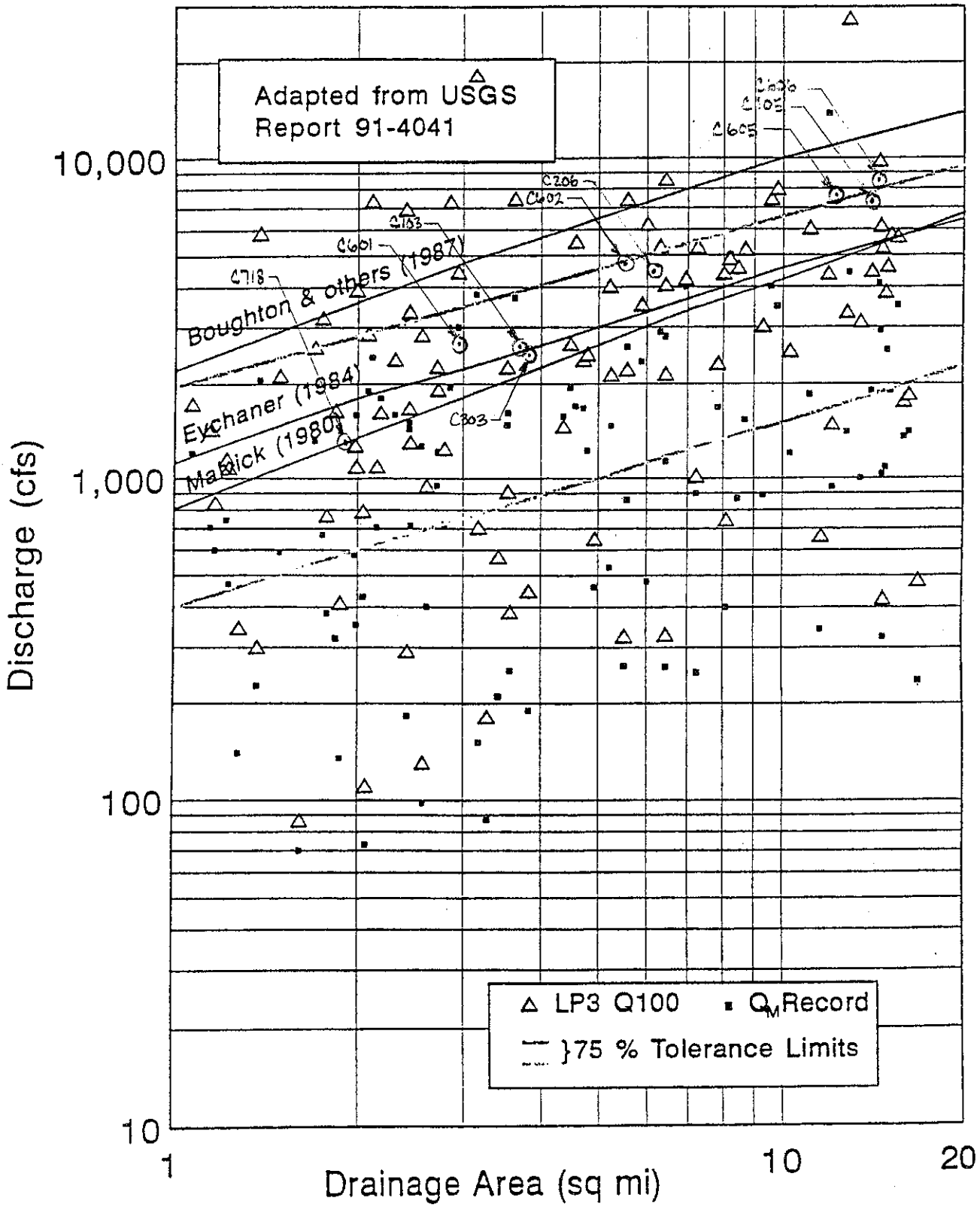


FIGURE 10-5

100-YEAR PEAK DISCHARGE BY LP3 ANALYSIS (LP3 Q100) AND MAXIMUM RECORDED DISCHARGE (Q_M RECORD) vs. DRAINAGE AREA FOR 10 TO 200 SQUARE MILES

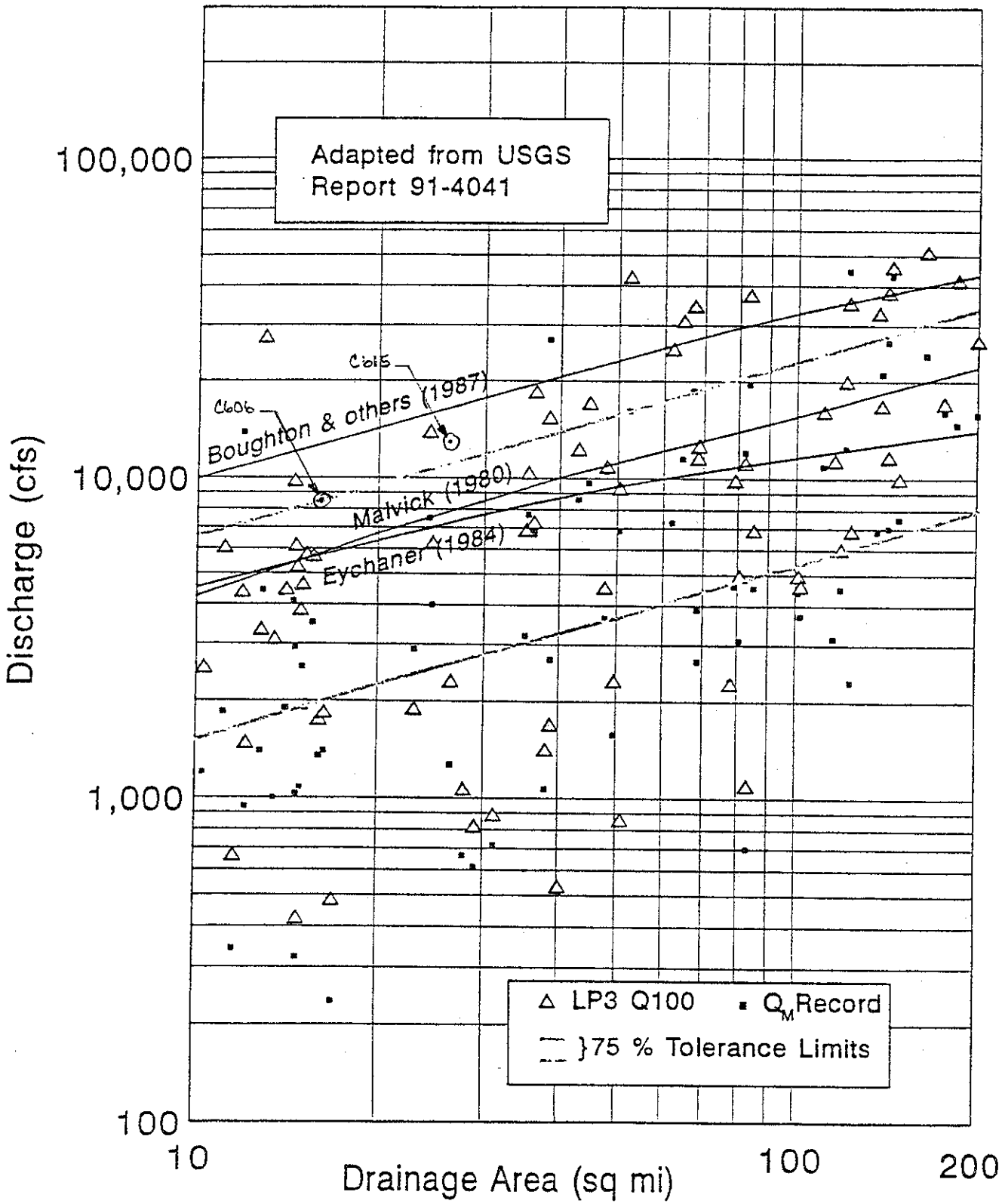


TABLE 10-6

FLOOD MAGNITUDE-FREQUENCY RELATIONS FOR THE CENTRAL ARIZONA REGION (R12)

Equation: Q, peak discharge, in cubic feet per second; AREA, drainage area, in square miles; and ELEV, mean basin elevation, in feet divided by 1,000.

Recurrence interval, in years	Equation	Average standard error of model, in percent
2	$Q = 41.1\ AREA^{0.629}$	102
5	$Q = 238\ AREA^{0.687}\ ELEV^{-0.358}$	64
10	$Q = 479\ AREA^{0.661}\ ELEV^{-0.398}$	47
25	$Q = 942\ AREA^{0.630}\ ELEV^{-0.383}$	34
50	$LOG\ Q = 7.36 - 4.17\ AREA^{-0.08} - 0.440\ LOG\ ELEV$	30
100	$LOG\ Q = 6.55 - 3.17\ AREA^{-0.11} - 0.454\ LOG\ ELEV$	31

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Table F-1
Summary of selected HEC-1 model results for comparison with indirect verification methods

HEC-1 ID	Drainage Area sq. mi.	Mean Basin Elevation feet	Existing Condition HEC-1 Model Results											
			100-Year		50-Year		25-Year		10-Year		5-Year		2-Year	
			Peak cfs	Unit Peak cfs/sq. mi.	Peak cfs	Unit Peak cfs/sq. mi.	Peak cfs	Unit Peak cfs/sq. mi.	Peak cfs	Unit Peak cfs/sq. mi.	Peak cfs	Unit Peak cfs/sq. mi.	Peak cfs	Unit Peak cfs/sq. mi.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
C103	3.54	1,739	2,671	755	2,127	601	1,501	424	957	270	576	163	207	58
C105	12.75	1,759	7,297	572	5,290	415	3,687	289	2,232	175	1,408	110	703	55
C206	6.09	1,856	4,421	726	3,561	585	2,709	445	1,730	284	1,156	190	572	94
C303	3.60	1,670	2,567	713	2,054	571	1,344	373	901	250	540	150	234	65
C601	2.92	2,774	2,687	920	2,150	736	1,618	554	990	339	588	201	330	113
C602	5.47	2,578	4,746	868	3,603	659	2,904	531	1,766	323	1,111	203	610	112
C605	11.76	2,479	7,954	676	6,121	520	4,783	407	3,007	256	1,983	169	1,067	91
C606	13.17	2,403	8,535	648	6,588	500	5,172	393	3,251	247	2,174	165	1,159	88
C615	22.90	2,081	11,824	516	9,101	397	7,224	315	4,568	199	3,178	139	1,587	69
C718	1.86	1,526	1,158	623	998	537	837	450	624	335	489	263	268	144
S400	1.05	1,637	1,212	1,154	962	916	719	685	438	417	278	265	145	138
S402	0.74	1,483	951	1,285	739	999	524	708	295	399	174	235	74	100
S500	1.05	1,838	914	870	721	687	540	514	350	333	263	250	160	152
S512	0.21	1,490	306	1,430	247	1,154	190	888	119	556	74	346	29	136
S515	1.10	1,374	1,268	1,153	1,027	934	785	714	500	455	350	318	183	166
S614	1.08	1,951	1,033	956	821	760	618	572	398	369	279	258	168	156
S708	0.71	1,616	1,336	1,882	1,123	1,582	913	1,286	656	924	476	670	219	308
S716	1.13	1,584	1,625	1,438	1,373	1,215	1,110	982	786	696	561	496	255	226
S718	0.44	1,408	476	1,082	397	902	318	723	222	505	157	357	91	207
S724	1.16	1,413	1,788	1,541	1,516	1,307	1,244	1,072	907	782	665	573	330	284
S725	1.16	1,400	1,153	994	638	550	725	625	469	404	316	272	171	147

Table F-2
USGS gage data for representative watersheds

Station No.	Station Name	Drainage Area	Mean Basin Elevation	Log Pearson Type III Peak Discharge Estimates											
				100-Year		50-Year		25-Year		10-Year		5-Year		2-Year	
				Peak	Unit Peak	Peak	Unit Peak	Peak	Unit Peak	Peak	Unit Peak	Peak	Unit Peak	Peak	Unit Peak
		sq. mi.	feet	cfs	cfs/sq. mi.	cfs	cfs/sq. mi.	cfs	cfs/sq. mi.	cfs	cfs/sq. mi.	cfs	cfs/sq. mi.	cfs	cfs/sq. mi.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
9478500	Queen C At Whitlow Damsite N Superior Ariz.	144.0	3,180	46,100	320	33,800	235	24,000	167	14,300	99	8,850	61	3,630	25
9479200	Queen C Trib A Apache Junc Ariz	0.5	1,760	431	845	346	678	269	527	179	351	120	235	53	103
9480000	Santa Cruz River Near Lochiel, Ariz.	82.2	5,150	11,200	136	8,700	106	6,590	80	4,330	53	2,950	36	1,460	18
9488600	Silver Reef Wash Near Casa Grande, Ariz.	12.8	1,620	3,340	261	2,480	194	1,780	139	1,070	84	663	52	268	21
9498870	Rye Creek Nr Gisela, Ariz.	122.0	4,390	35,400	290	24,600	202	16,800	138	9,700	80	6,100	50	2,850	23
9512200	Salt River Trib. In S. Mnt. Park, Phoenix, Ariz.	1.8	1,730	3,220	1,840	2,000	1,143	1,140	651	448	256	171	98	22	13
9512700	Agua Fria River Trib #2 Nr Rock Springs, Ariz	1.1	2,140	1,730	1,617	1,400	1,308	1,110	1,037	781	730	565	528	309	289
9513780	New River Nr Rock Springs, Ariz.	67.3	3,970	34,600	514	25,600	380	18,200	270	10,600	158	6,260	93	2,170	32
9513800	New River At New River, Ariz.	83.3	3,600	37,500	450	28,300	340	20,600	247	12,600	151	7,880	95	3,150	38
9513820	Deadman Wash Near New River, Ariz.	11.1	1,980	6,070	547	4,300	387	2,900	261	1,550	140	846	76	250	23
9513860	Skunk Creek Near Phoenix, Ariz.	64.6	2,180	31,000	480	21,200	328	13,700	212	6,910	107	3,570	55	967	15
9515800	Hartman Wash Near Wickenburg, Ariz.	5.6	2,690	7,450	1,338	4,960	890	3,150	566	1,550	278	796	143	218	39
9516600	Ox Wash Near Morristown, Ariz.	6.3	2,290	5,330	845	3,660	580	2,400	380	1,240	197	662	105	194	31
9517200	Centennial Wash Tributary Near Wenden, Ariz.	2.8	2,480	1,240	444	977	350	743	266	479	172	312	112	132	47
9517280	Tiger Wash Near Aguila, Ariz.	85.2	2,590	6,910	81	5,630	66	4,450	52	3,060	36	2,120	25	1,010	12
9517400	Winters Wash Near Tonopah, Ariz.	47.8	1,630	4,560	95	3,720	78	2,980	62	2,120	44	1,540	32	857	18
9519600	Rainbow Wash Trib Near Buckeye, Ariz.	2.4	950	1,670	687	1,440	593	1,220	502	945	389	748	308	484	199

Figure F-1
100-year, existing condition HEC-1 model results comparison with USGS gage Data

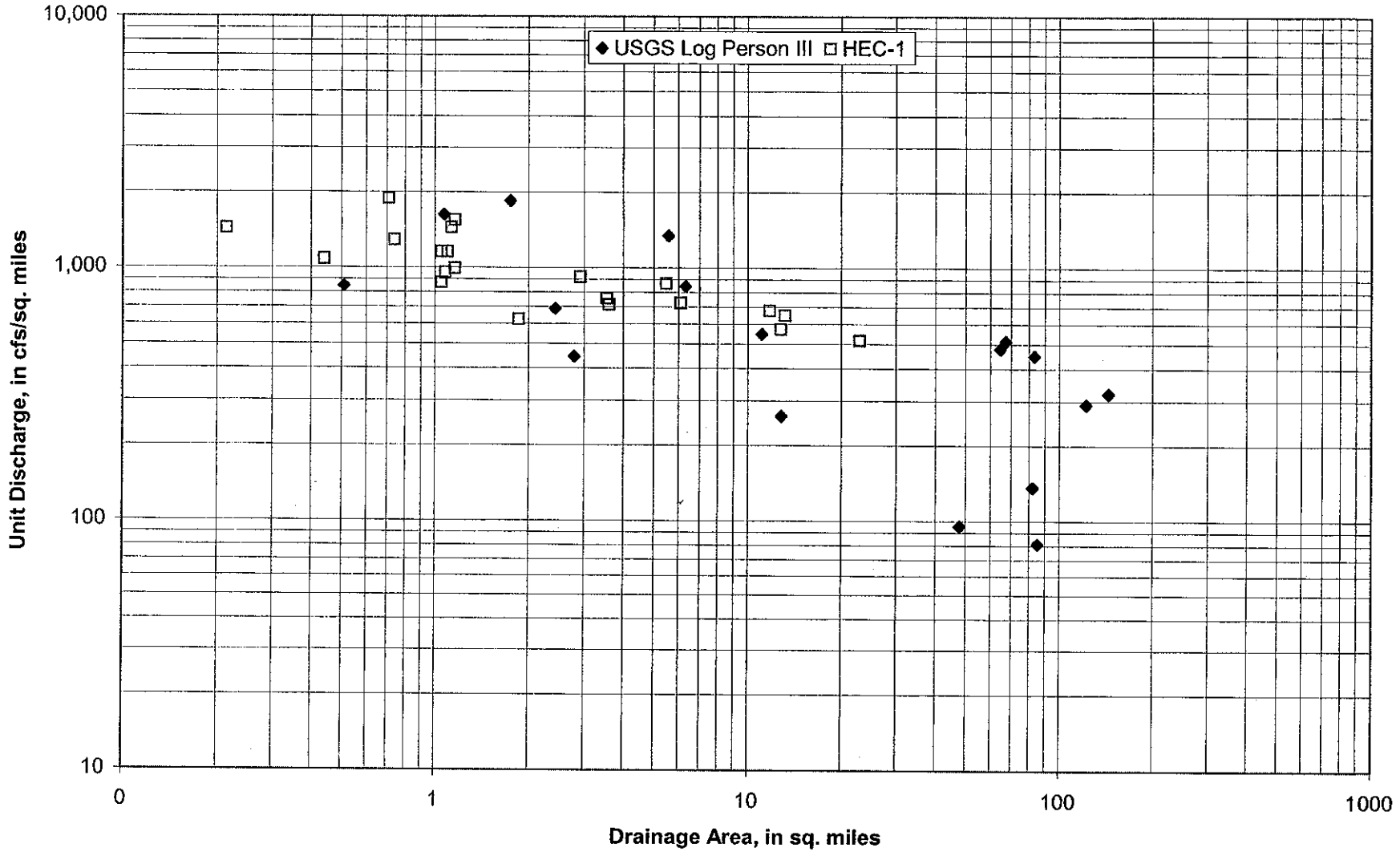


Figure F-2
50-year, existing condition HEC-1 model results comparison with USGS gage Data

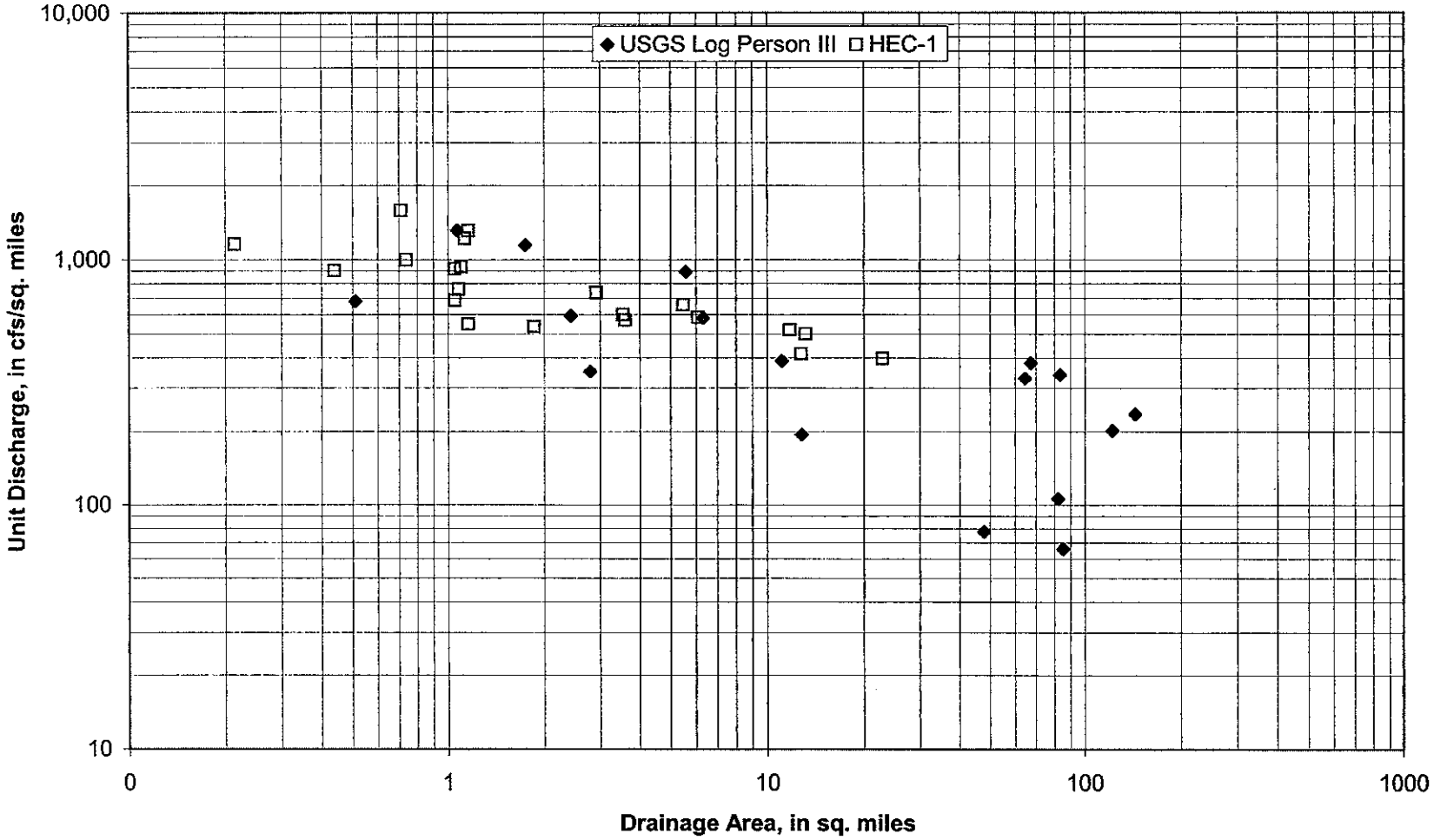


Figure F-3
25-year, existing condition HEC-1 model results comparison with USGS gage Data

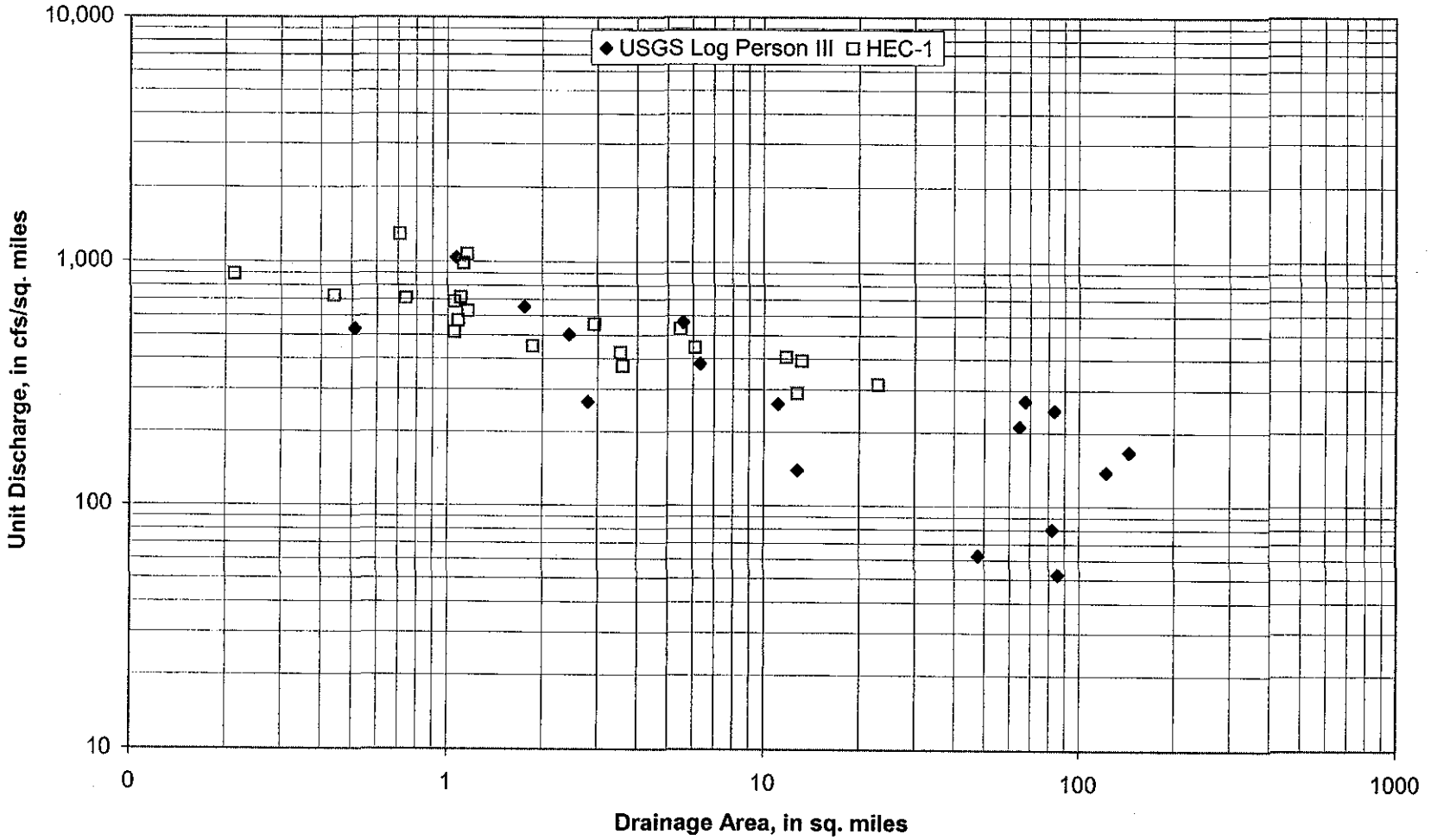


Figure F-4
10-year, existing condition HEC-1 model results comparison with USGS gage Data

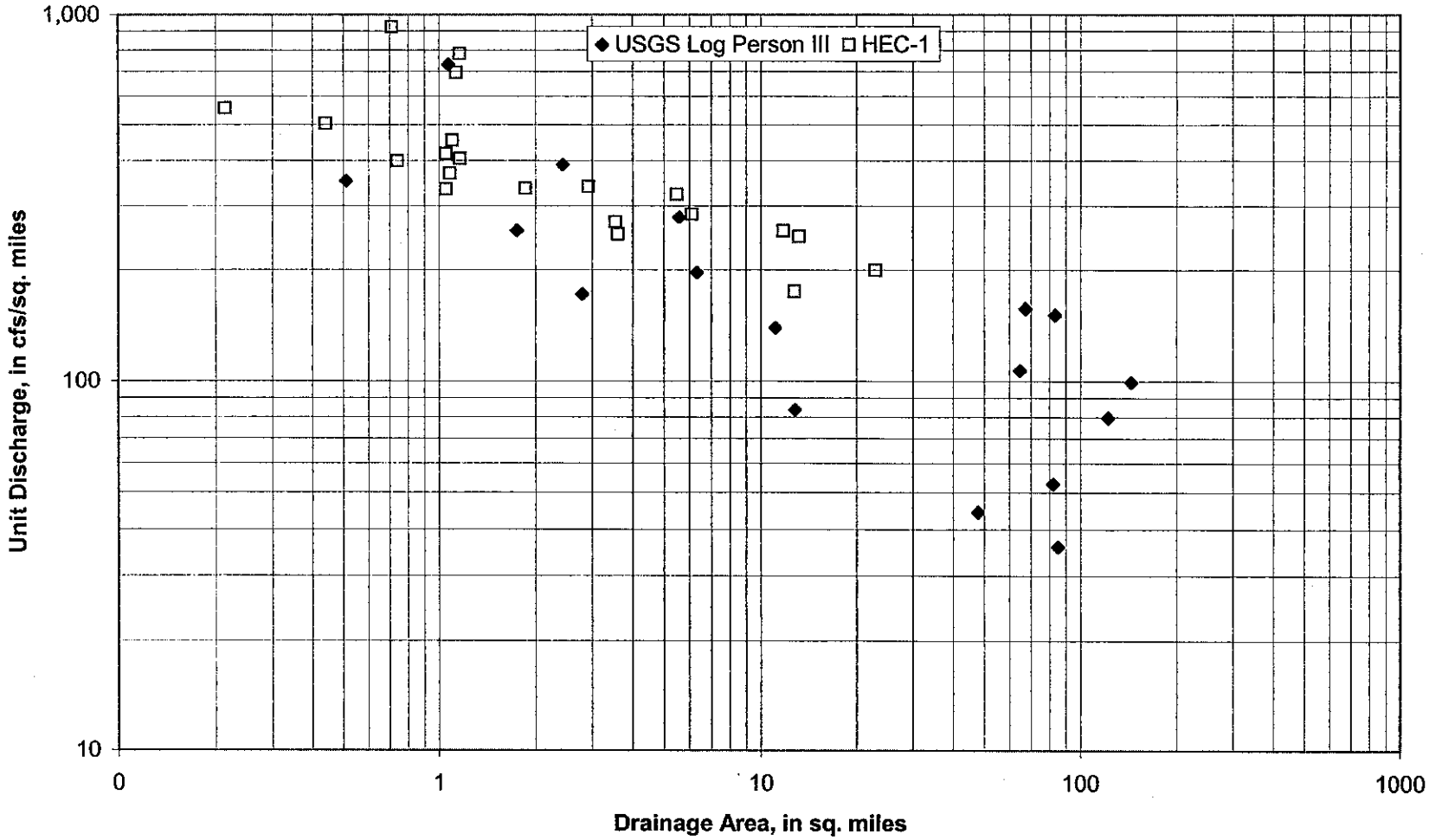


Figure F-5
5-year, existing condition HEC-1 model results comparison with USGS gage Data

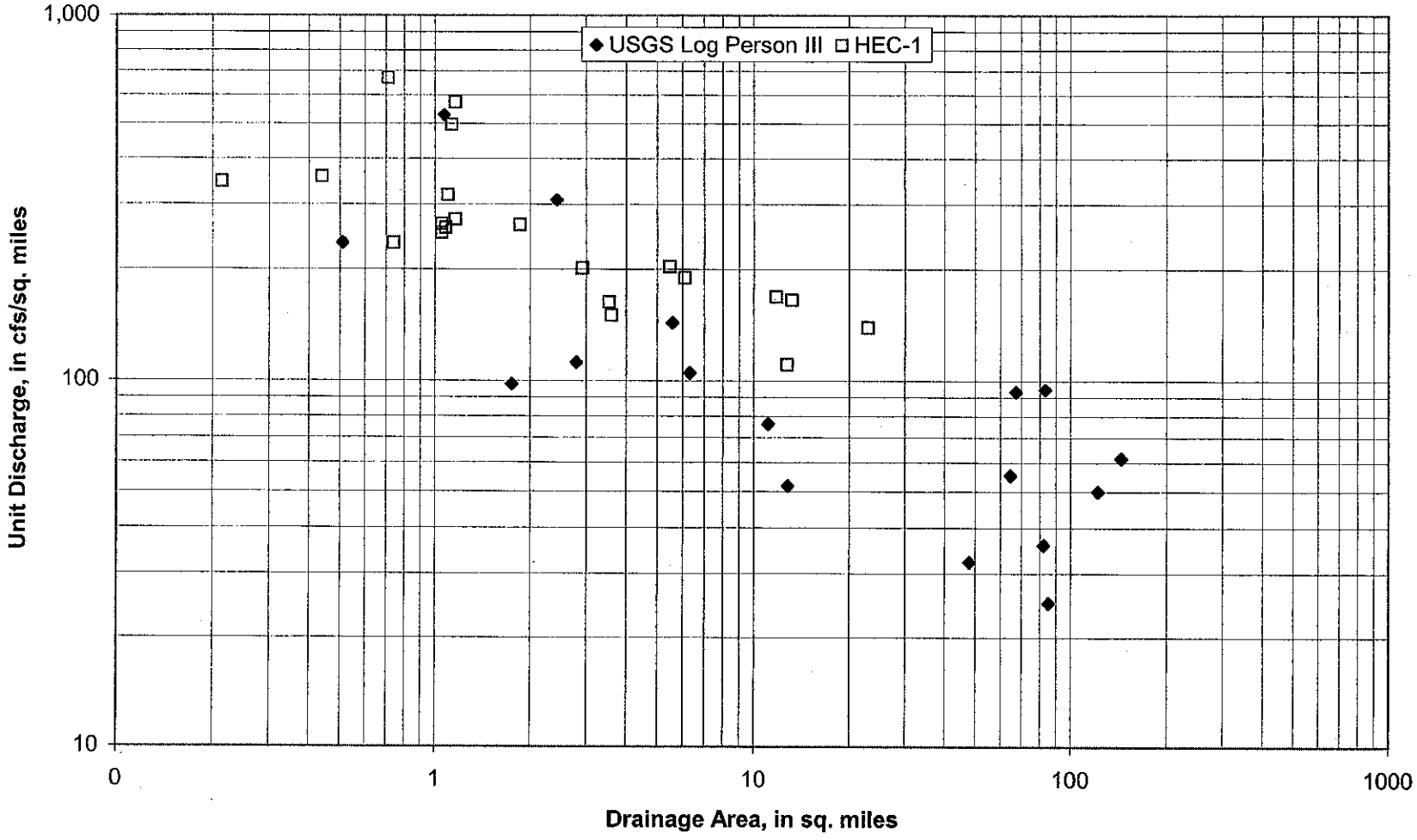


Figure F-6
2-year, existing condition HEC-1 model results comparison with USGS gage Data

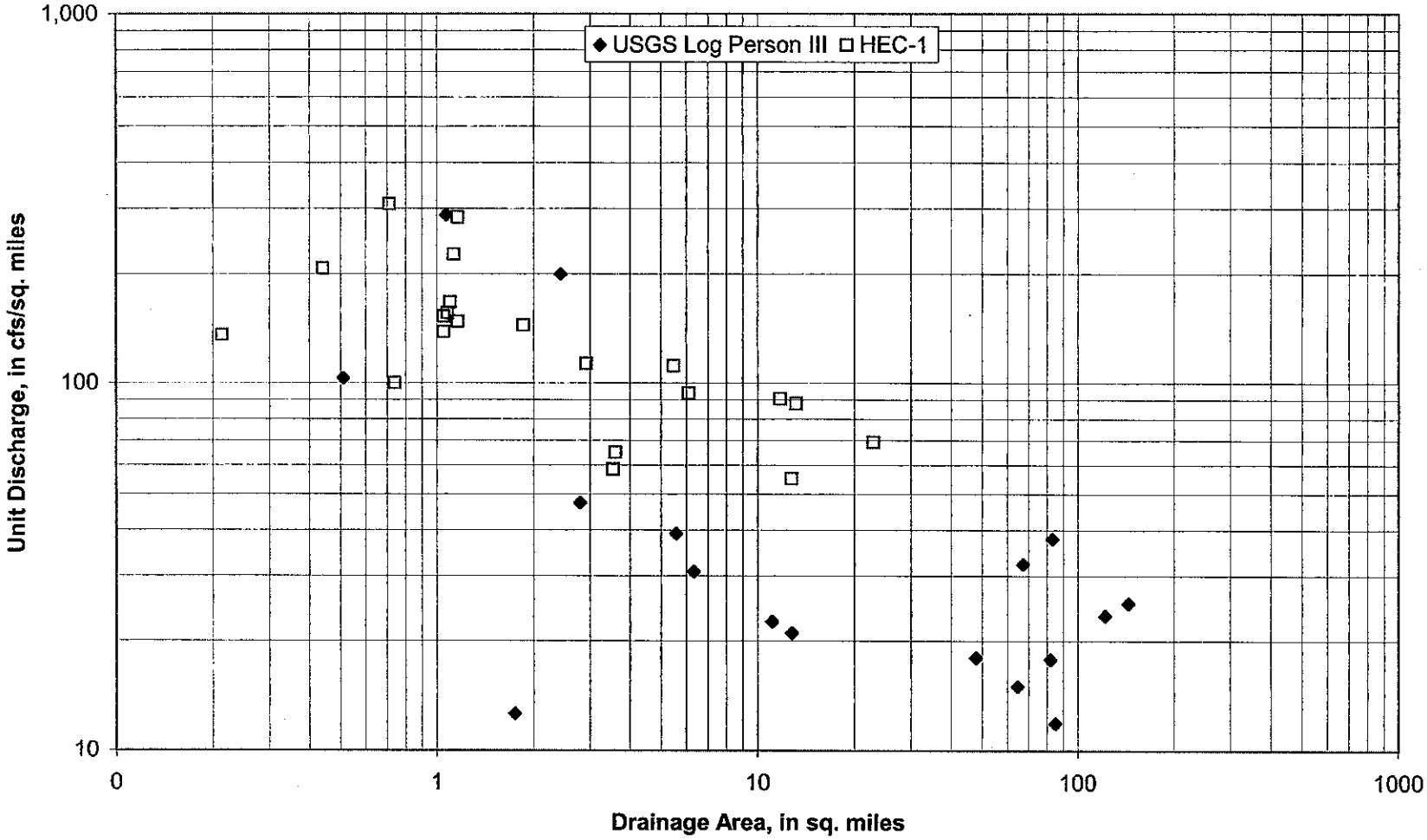
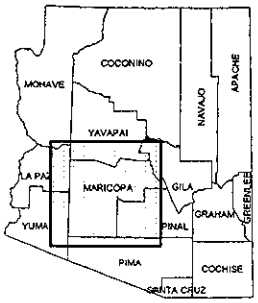


Table F-3
Summary of indirect method results for Method 3

HEC-1 ID	Drainage Area sq. miles	Basin Mean Elevation feet	HEC-1 Model Peak Discharge, in cfs						USGS Regression Results, in cfs					
			100-Year	50-Year	25-Year	10-Year	5-Year	2-Year	100-Year	50-Year	25-Year	10-Year	5-Year	2-Year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
C103	3.54	1,739	2,671	2,127	1,501	957	576	207	4,813	3,057	1,690	886	465	91
C105	12.75	1,759	7,297	5,290	3,687	2,232	1,408	703	11,037	7,086	3,772	2,058	1,118	204
C206	6.09	1,856	4,421	3,561	2,709	1,730	1,156	572	6,751	4,295	2,320	1,236	660	128
C303	3.60	1,670	2,567	2,054	1,344	901	540	234	4,960	3,149	1,735	911	478	92
C601	2.92	2,774	2,687	2,150	1,618	990	588	330	3,399	2,176	1,252	648	345	81
C602	5.47	2,578	4,746	3,603	2,904	1,766	1,111	610	5,417	3,460	1,912	1,010	545	120
C605	11.76	2,479	7,954	6,121	4,783	3,007	1,983	1,067	8,991	5,791	3,143	1,702	935	194
C606	13.17	2,403	8,535	6,588	5,172	3,251	2,174	1,159	9,769	6,304	3,416	1,857	1,022	208
C615	22.90	2,081	11,824	9,101	7,224	4,568	3,178	1,587	14,426	9,418	5,115	2,835	1,573	295
C718	1.86	1,526	1,158	998	837	624	489	268	3,205	2,047	1,185	610	313	61
S400	1.05	1,637	1,212	962	719	438	278	145	1,994	1,294	804	407	206	42
S402	0.74	1,483	951	739	524	295	174	74	1,569	1,030	670	336	168	34
S500	1.05	1,838	914	721	540	350	263	160	1,892	1,230	769	388	198	42
S512	0.21	1,490	306	247	190	119	74	29	519	368	306	148	72	16
S515	1.10	1,374	1,268	1,027	785	500	350	183	2,241	1,449	886	450	227	44
S614	1.08	1,951	1,033	821	618	398	279	168	1,883	1,224	765	386	198	43
S708	0.71	1,616	1,336	1,123	913	656	476	219	1,458	960	632	316	158	33
S716	1.13	1,584	1,625	1,373	1,110	786	561	255	2,146	1,389	853	432	220	44
S718	0.44	1,408	476	397	318	222	157	91	1,030	694	493	243	120	25
S724	1.16	1,413	1,788	1,516	1,244	907	665	330	2,308	1,490	906	460	233	45
S725	1.16	1,400	1,153	638	725	469	316	171	2,317	1,496	909	462	234	45

YAVAPAI COUNTY
MARICOPA COUNTY
LA PAZ COUNTY
YUMA COUNTY
MARICOPA COUNTY
PINAL COUNTY
MARICOPA COUNTY
PIMA COUNTY
PEORIA
PHOENIX
9512700
9513780
9513800
9513820
9513860
9515800
9516600
9517200
9517280
9517400
9519600
9512200
9479200
9488600
Centennial Wash
Hassayampa River
Agua Fria River
New River
Skunk Creek
Cave Creek
Verde River
Sycamore Creek
Salt River
Waterman Wash
Gila River
17
10
8



LOCATION MAP

N
W E
S

10 0 10 20 Miles

Legend

- USGS Gages
- Interstate Highways
- Streams
- Watershed
- County Line
- City of Peoria
- Cities

FIGURE F-7

Stantec

R12

YAVAPAI COUNTY

LA PAZ COUNTY

MARICOPA COUNTY

YUMA COUNTY

PEORIA

PHOENIX

Hassayampa River

Agua Fria River

New River

Skunk Creek

Cave Creek

Verde River

Sycamore Creek

Tonto Creek

Salt River

Centennial Wash

Waterman Wash

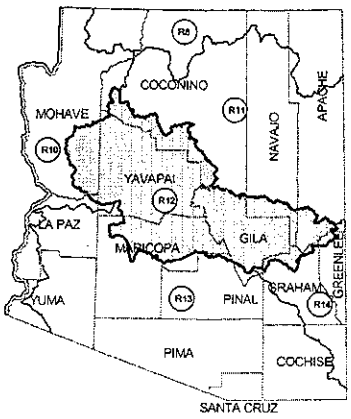
Gila River

PINAL COUNTY

MARICOPA COUNTY

PINAL COUNTY

PIMA COUNTY



LOCATION MAP

N
W E
S

10 0 10 20 Miles

Legend

- Flood Region Boundary
- Interstate Highways
- Streams
- Watershed
- County Line
- City of Peoria
- Cities

FIGURE F-8

Stantec

FIGURE 10-20

SCATTER DIAGRAM OF INDEPENDENT VARIABLES FOR R12 REGRESSION EQUATION

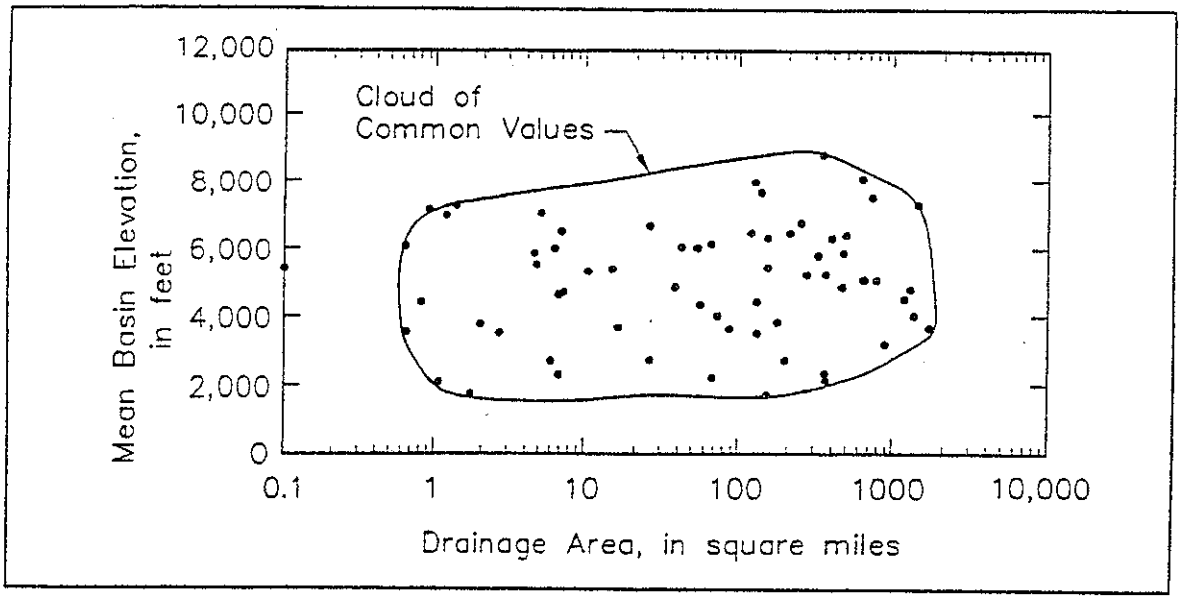
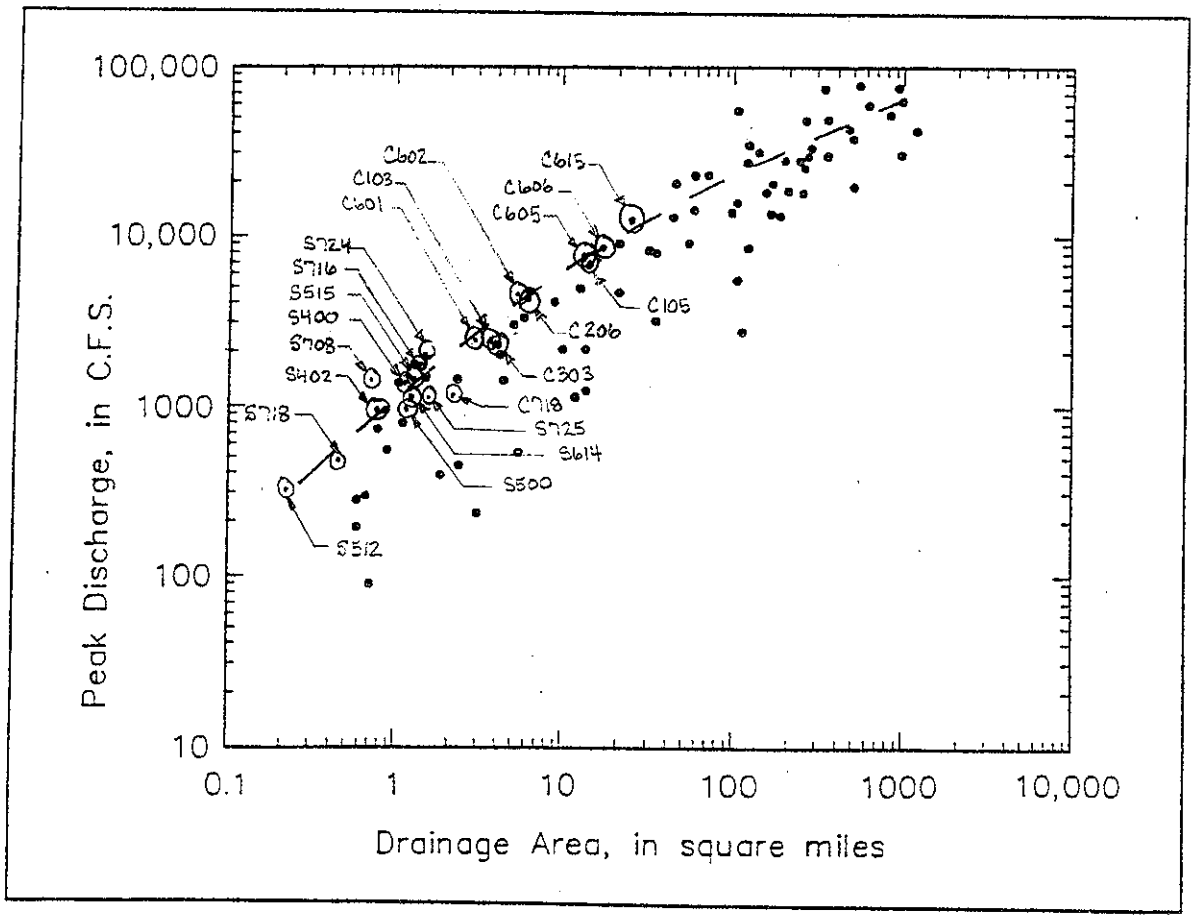


FIGURE 10-21

Q_{100} DATA POINTS AND 100-YEAR PEAK DISCHARGE RELATION FOR R12



APPENDIX G: RATIONAL METHOD PARAMETERS AND CALCULATIONS

Table G-1
Runoff coefficient and Kb estimation worksheet

C (10-yr, Table 3.2), Enter Default Values		C (100-yr, Table 3.2), Enter Default Values	
ARP	0.85	ARP	0.95
COMM	0.70	COMM	0.88
DESERT	0.40	DESERT	0.50
IND	0.70	IND	0.88
LDR	0.55	LDR	0.69
OPEN	0.40	OPEN	0.50
PF	0.70	PF	0.88

SUB-BASIN ID	R100						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2650			0.50			0.50
HIGH ELEVATION (FT)	1520						1520.00
LOW ELEVATION (FT)	1392						1392.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	51						
SOIL TYPE AREA (SQ. FT), (ACRES)	2674492.0						61.40
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	2674492	0	0	0	0	0	2674492.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.06

SUB-BASIN ID	R101						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2850			0.54			0.54
HIGH ELEVATION (FT)	1580						1580.00
LOW ELEVATION (FT)	1385.8						1385.80
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	51						
SOIL TYPE AREA (SQ. FT), (ACRES)	2346662.0						53.87
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	2346662	0	0	0	0	0	2346662.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.056

Table G-1
Runoff coefficient and Kb estimation worksheet

SUB-BASIN ID	R102						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	3050			0.58			0.58
HIGH ELEVATION (FT)	1583.5						1583.50
LOW ELEVATION (FT)	1350						1350.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	18	45	51				
SOIL TYPE AREA (SQ. FT), (ACRES)	4388.2	2126.8	2783347.0				64.05
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	2789862	0	0	0	0	0	2789862.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	C	Kb Table 3.1 (FCDMC V.I Hydrology)					0.105

SUB-BASIN ID	R103						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	4750			0.90			0.90
HIGH ELEVATION (FT)	1510.2						1510.20
LOW ELEVATION (FT)	1363.3						1363.30
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	45	48	49	51	110		
SOIL TYPE AREA (SQ. FT), (ACRES)	215056.6	1934413.0	951377.5	29543.8	1847869.0		114.29
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	4978260	0	0	0	0	0	4978260.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.052

SUB-BASIN ID	R104						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	4500			0.85			0.85
HIGH ELEVATION (FT)	1507.9						1507.90
LOW ELEVATION (FT)	1351.1						1351.10
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	48	110	118		
SOIL TYPE AREA (SQ. FT), (ACRES)	518256.4	460561.3	199613	2751847.0	17232		86.14
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	3752349	0	0	0	0	0	3752349.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.053

Table G-1
Runoff coefficient and Kb estimation worksheet

SUB-BASIN ID	R105						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2250			0.43			0.43
HIGH ELEVATION (FT)	1526						1526.00
LOW ELEVATION (FT)	1340						1340.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	70	110			
SOIL TYPE AREA (SQ. FT), (ACRES)	67182.5	262747.8	162312.2	640891.8			26.01
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	1133134	0	0	0	0	0	1133134.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.061

SUB-BASIN ID	R106						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	3860			0.73			0.73
HIGH ELEVATION (FT)	1482.5						1482.50
LOW ELEVATION (FT)	1340.9						1340.90
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	12	13	18	45	110		
SOIL TYPE AREA (SQ. FT), (ACRES)	1593762.0	376294.8	60587.8	778654.6	847849.1		83.96
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	3657148	0	0	0	0	0	3657148.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.054

SUB-BASIN ID	R107						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	4025			0.76			0.76
HIGH ELEVATION (FT)	1382.2						1382.20
LOW ELEVATION (FT)	1342.7						1342.70
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	98	110	TSC		
SOIL TYPE AREA (SQ. FT), (ACRES)	1862099.0	485486.4	68323.3	5113455.0	822895.6		191.74
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	8352260	0	0	0	0	0	8352260.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.049

Table G-1
Runoff coefficient and Kb estimation worksheet

SUB-BASIN ID	R108						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	3800			0.72			0.72
HIGH ELEVATION (FT)	1342.7						1342.70
LOW ELEVATION (FT)	1260						1260.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	98	110	CF	TSC	
SOIL TYPE AREA (SQ. FT), (ACRES)	6810.2	855686.2	274465.3	165134.9	14991.2	7245120.0	196.56
LAND USE QUALIFIER	LDR	DESERT	0	0	0	0	
LAND USE (D/N)	N	N	0	0	0	0	
LAND USE AREA	437080.4	8125128	0	0	0	0	8562208.40
C (Defaults to 0.4 if Land Use = N)	0.4	0.4	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.048

SUB-BASIN ID	R109						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	4650			0.88			0.88
HIGH ELEVATION (FT)	1331.2						1331.20
LOW ELEVATION (FT)	1237.9						1237.90
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	CF	LcA	MTB	PWB	PYD		
SOIL TYPE AREA (SQ. FT), (ACRES)	372935.0	376168.3	1508758.0	835519.1	584347.3		84.43
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	3677728	0	0	0	0	0	3677728.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.054

SUB-BASIN ID	R110						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	1770			0.34			0.34
HIGH ELEVATION (FT)	1275						1275.00
LOW ELEVATION (FT)	1235						1235.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	MTB						
SOIL TYPE AREA (SQ. FT), (ACRES)	2749943.0						63.13
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	2749943.0	0	0	0	0	0	2749943.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.060

Table G-1
Runoff coefficient and Kb estimation worksheet

SUB-BASIN ID	R111						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	8310			1.57			1.57
HIGH ELEVATION (FT)	1325						1325.00
LOW ELEVATION (FT)	1220						1220.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	LcA	MTB	PWB	PYD			
SOIL TYPE AREA (SQ. FT), (ACRES)	910460.0	2087598.0	2724265.0	864974.0			151.22
LAND USE QUALIFIER	PF	DESERT	0	0	0	0	
LAND USE (D/N)	D	N	0	0	0	0	
LAND USE AREA	809671	5780330	0	0	0	0	6590001.00
C (Defaults to 0.4 if Land Use = N)	0.7	0.4	0	0	0	0	0.44
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.050

SUB-BASIN ID	R112						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	7530			1.43			1.43
HIGH ELEVATION (FT)	1300						1300.00
LOW ELEVATION (FT)	1210						1210.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	MTB	PWB	PYD				
SOIL TYPE AREA (SQ. FT), (ACRES)	2832476.0	2473337.0	1905373.4				165.55
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	7211358	0	0	0	0	0	7211358.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.049

SUB-BASIN ID	R113						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2530			0.48			0.48
HIGH ELEVATION (FT)	1240						1240.00
LOW ELEVATION (FT)	1210						1210.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	MTB	PYD					
SOIL TYPE AREA (SQ. FT), (ACRES)	1573085.0	508939.8					47.80
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	2082168	0	0	0	0	0	2082168.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.060

Table G-1
Runoff coefficient and Kb estimation worksheet

SUB-BASIN ID	R114						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	7710			1.46			1.46
HIGH ELEVATION (FT)	1300						1300.00
LOW ELEVATION (FT)	1215						1215.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	MTB	PWB	PYD				
SOIL TYPE AREA (SQ. FT), (ACRES)	2232600.0	2515440.0	1596589.8				145.65
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	6344514	0	0	0	0	0	6344514.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.060

SUB-BASIN ID	R115						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	7180			1.36			1.36
HIGH ELEVATION (FT)	1290						1290.00
LOW ELEVATION (FT)	1205						1205.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	BE	MTB	PWB	PYD			
SOIL TYPE AREA (SQ. FT), (ACRES)	1536586.4	2512304.2	2075224.1	1791769.0			181.72
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	7915723	0	0	0	0	0	7915723.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.060

SUB-BASIN ID	R116						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2000			0.38			0.38
HIGH ELEVATION (FT)	1560						1560.00
LOW ELEVATION (FT)	1430						1430.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	12	45	47	52	98		
SOIL TYPE AREA (SQ. FT), (ACRES)	252191.3	79748.6	58715.5	468429.0	230294.0		37.14
LAND USE QUALIFIER	OPEN	DESERT	0	0	0	0	
LAND USE (D/N)	N	N	0	0	0	0	
LAND USE AREA	562133.2	1055687	0	0	0	0	1617820.20
C (Defaults to 0.4 if Land Use = N)	0.4	0.4	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	C	Kb Table 3.1 (FCDMC V.I Hydrology)					0.111

Table G-1
Runoff coefficient and Kb estimation worksheet

SUB-BASIN ID	R117						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	620			0.12			0.12
HIGH ELEVATION (FT)	1550						1550.00
LOW ELEVATION (FT)	1520						1520.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	47	52			
SOIL TYPE AREA (SQ. FT), (ACRES)	381288.6	86958.0	239540.5	29154.0			16.92
LAND USE QUALIFIER	OPEN	DESERT	0	0	0	0	
LAND USE (D/N)	N	N	0	0	0	0	
LAND USE AREA	150669.2	586271.9	0	0	0	0	736941.10
C (Defaults to 0.4 if Land Use = N)	0.4	0.4	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.063

SUB-BASIN ID	R118						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	1650			0.31			0.31
HIGH ELEVATION (FT)	1555.3						1555.30
LOW ELEVATION (FT)	1430						1430.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	45	52	98				
SOIL TYPE AREA (SQ. FT), (ACRES)	1005229.0	70988.9	74126.1				26.41
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	1150344	0	0	0	0	0	1150344.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	C	Kb Table 3.1 (FCDMC V.I Hydrology)					0.114

SUB-BASIN ID	R119						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	1225			0.23			0.23
HIGH ELEVATION (FT)	1550						1550.00
LOW ELEVATION (FT)	1440						1440.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	45	98					
SOIL TYPE AREA (SQ. FT), (ACRES)	1258063.0	90658.9					30.96
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	1348722	0	0	0	0	0	1348722.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	C	Kb Table 3.1 (FCDMC V.I Hydrology)					0.113

Table G-1
Runoff coefficient and Kb estimation worksheet

SUB-BASIN ID	R120						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2875			0.54			0.54
HIGH ELEVATION (FT)	1572.6						1572.60
LOW ELEVATION (FT)	1494						1494.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45					
SOIL TYPE AREA (SQ. FT), (ACRES)	2076412.0	476894.2					58.62
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	2553306	0	0	0	0	0	2553306.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.056

SUB-BASIN ID	R121						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2100			0.40			0.40
HIGH ELEVATION (FT)	1494						1494.00
LOW ELEVATION (FT)	1444.3						1444.30
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	12	13	45				
SOIL TYPE AREA (SQ. FT), (ACRES)	13016.1	1048447.0	2765875.0				87.86
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	3827338	0	0	0	0	0	3827338.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.053

SUB-BASIN ID	R122						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	3300			0.63			0.63
HIGH ELEVATION (FT)	1410						1410.00
LOW ELEVATION (FT)	1360						1360.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	10	12	45	98			
SOIL TYPE AREA (SQ. FT), (ACRES)	9530.3	1668158.0	802812.6	616414.2			71.10
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	3096915	0	0	0	0	0	3096915.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.055

Table G-1
Runoff coefficient and Kb estimation worksheet

SUB-BASIN ID	R123						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	1400			0.27			0.27
HIGH ELEVATION (FT)	1365						1365.00
LOW ELEVATION (FT)	1320						1320.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	68				
SOIL TYPE AREA (SQ. FT), (ACRES)	671005.7	587988.0	91516.2				31.00
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	1350510	0	0	0	0	0	1350510.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.059

SUB-BASIN ID	R124						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2600			0.49			0.49
HIGH ELEVATION (FT)	1384						1384.00
LOW ELEVATION (FT)	1315						1315.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	68				
SOIL TYPE AREA (SQ. FT), (ACRES)	1436241.0	145317.5	44854.0				37.34
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	1626413	0	0	0	0	0	1626413.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.058

SUB-BASIN ID	R125						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2800			0.53			0.53
HIGH ELEVATION (FT)	1402.8						1402.80
LOW ELEVATION (FT)	1280						1280.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	10	12	13	45	98	110	
SOIL TYPE AREA (SQ. FT), (ACRES)	19872.5	365805.4	163766.4	913245.1	383353.4	223463.0	47.51
LAND USE QUALIFIER	DESERT	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	2069506	0	0	0	0	0	2069506.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.057

Table G-2

Summary of existing watershed condition Rational Method calculations

R100			
DRAINAGE LENGTH (FT)	2650.00		
HIGH ELEVATION (FT)	1520.00		
LOW ELEVATION (FT)	1392.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	61.40		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.7	13.2	67.3
5	3.9	11.5	96.7
10	4.7	10.8	114.3
25	5.8	10.0	157.9
50	6.6	10.0	194.2
100	7.3	10.0	225.1

R101			
DRAINAGE LENGTH (FT)	2850.00		
HIGH ELEVATION (FT)	1580.00		
LOW ELEVATION (FT)	1385.80		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	53.87		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.8	12.2	61.4
5	4.0	10.7	87.2
10	4.8	10.0	103.1
25	5.8	10.0	138.6
50	6.6	10.0	170.4
100	7.3	10.0	197.5

R102			
DRAINAGE LENGTH (FT)	3050.00		
HIGH ELEVATION (FT)	1583.50		
LOW ELEVATION (FT)	1350.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	64.05		
Weighted C	0.40		
Weighted Kb	0.10		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.4	18.1	60.3
5	3.4	15.8	86.3
10	4.0	14.8	102.9
25	5.2	13.4	146.4
50	6.1	12.6	186.4
100	6.9	12.0	219.9

Table G-2

Summary of existing watershed condition Rational Method calculations

R103			
DRAINAGE LENGTH (FT)	4750.00		
HIGH ELEVATION (FT)	1510.20		
LOW ELEVATION (FT)	1363.30		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	114.29		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.1	21.5	97.7
5	3.1	18.8	139.4
10	3.7	17.4	170.5
25	4.8	15.8	239.9
50	5.6	14.9	307.2
100	6.4	14.2	362.9

R104			
DRAINAGE LENGTH (FT)	4500.00		
HIGH ELEVATION (FT)	1507.90		
LOW ELEVATION (FT)	1351.10		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	86.14		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.2	20.2	76.5
5	3.2	17.6	109.5
10	3.8	16.4	132.2
25	4.9	15.0	185.3
50	5.8	14.0	239.1
100	6.5	13.4	281.6

R105			
DRAINAGE LENGTH (FT)	2250.00		
HIGH ELEVATION (FT)	1526.00		
LOW ELEVATION (FT)	1340.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	26.01		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	3.1	10.3	31.7
5	4.1	10.0	43.1
10	4.8	10.0	49.8
25	5.8	10.0	66.9
50	6.6	10.0	82.3
100	7.3	10.0	95.4

Table G-2

Summary of existing watershed condition Rational Method calculations

R106			
DRAINAGE LENGTH (FT)	3860.00		
HIGH ELEVATION (FT)	1482.50		
LOW ELEVATION (FT)	1340.90		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	83.96		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.4	18.0	79.2
5	3.4	15.7	113.5
10	4.0	14.7	135.4
25	5.2	13.3	192.6
50	6.1	12.6	244.4
100	6.9	12.0	288.2

R107			
DRAINAGE LENGTH (FT)	4025.00		
HIGH ELEVATION (FT)	1382.20		
LOW ELEVATION (FT)	1342.70		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	191.74		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	1.7	29.7	131.4
5	2.5	25.7	193.3
10	3.1	23.7	237.8
25	4.0	21.6	304.9
50	4.9	19.9	376.0
100	5.6	19.0	427.1

R108			
DRAINAGE LENGTH (FT)	3800.00		
HIGH ELEVATION (FT)	1342.70		
LOW ELEVATION (FT)	1260.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	196.56		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.2	20.5	173.0
5	3.1	17.9	247.3
10	3.8	16.6	300.0
25	4.9	15.1	421.5
50	5.7	14.2	541.7
100	6.5	13.6	638.0

Table G-2

Summary of existing watershed condition Rational Method calculations

R109			
DRAINAGE LENGTH (FT)	4650.00		
HIGH ELEVATION (FT)	1331.20		
LOW ELEVATION (FT)	1237.90		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	84.43		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	1.9	26.0	63.2
5	2.7	22.5	92.4
10	3.4	20.8	114.1
25	4.3	19.0	159.5
50	5.2	17.6	211.6
100	5.9	16.8	248.9

R110			
DRAINAGE LENGTH (FT)	1770.00		
HIGH ELEVATION (FT)	1275.00		
LOW ELEVATION (FT)	1235.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	63.13		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.6	14.5	65.8
5	3.8	12.6	95.6
10	4.5	11.8	113.5
25	5.7	10.8	158.1
50	6.5	10.2	198.4
100	7.3	10.0	231.5

R111			
DRAINAGE LENGTH (FT)	8310.00		
HIGH ELEVATION (FT)	1325.00		
LOW ELEVATION (FT)	1220.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	151.22		
Weighted C	0.44		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	1.4	43.5	91.1
5	2.1	36.9	140.8
10	2.5	34.7	165.7
25	3.2	31.5	234.7
50	3.8	29.6	301.9
100	4.6	27.6	377.5

Table G-2

Summary of existing watershed condition Rational Method calculations

R112			
DRAINAGE LENGTH (FT)	7530.00		
HIGH ELEVATION (FT)	1300.00		
LOW ELEVATION (FT)	1210.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	165.55		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	1.4	41.3	94.9
5	2.1	35.5	140.9
10	2.5	33.4	165.4
25	3.2	30.6	230.3
50	3.7	28.7	296.2
100	4.3	27.3	351.8

R113			
DRAINAGE LENGTH (FT)	2530.00		
HIGH ELEVATION (FT)	1240.00		
LOW ELEVATION (FT)	1210.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	47.80		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.0	23.3	38.7
5	2.9	20.3	55.5
10	3.6	18.7	68.7
25	4.6	17.0	96.6
50	5.4	16.0	124.9
100	6.4	15.0	152.5

R114			
DRAINAGE LENGTH (FT)	7710.00		
HIGH ELEVATION (FT)	1300.00		
LOW ELEVATION (FT)	1215.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	145.65		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	1.2	50.5	70.5
5	2.0	41.9	115.3
10	2.4	39.1	137.9
25	3.1	35.5	195.5
50	3.6	33.3	253.1
100	4.2	31.6	303.9

Table G-2

Summary of existing watershed condition Rational Method calculations

R115			
DRAINAGE LENGTH (FT)	7180.00		
HIGH ELEVATION (FT)	1290.00		
LOW ELEVATION (FT)	1205.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	181.72		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	1.3	46.2	95.4
5	2.1	38.9	150.5
10	2.4	36.5	178.1
25	3.1	33.1	251.7
50	3.7	31.1	324.7
100	4.3	29.4	390.7

R116			
DRAINAGE LENGTH (FT)	2000.00		
HIGH ELEVATION (FT)	1560.00		
LOW ELEVATION (FT)	1430.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	37.14		
Weighted C	0.40		
Weighted Kb	0.11		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.5	15.4	37.5
5	3.7	13.4	54.6
10	4.4	12.5	65.1
25	5.6	11.4	91.1
50	6.4	10.8	114.6
100	7.3	10.3	134.9

R117			
DRAINAGE LENGTH (FT)	620.00		
HIGH ELEVATION (FT)	1550.00		
LOW ELEVATION (FT)	1520.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	16.92		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	3.1	10.0	20.9
5	4.1	10.0	28.0
10	4.8	10.0	32.4
25	5.8	10.0	43.5
50	6.6	10.0	53.5
100	7.3	10.0	62.0

Table G-2

Summary of existing watershed condition Rational Method calculations

R118			
DRAINAGE LENGTH (FT)	1650.00		
HIGH ELEVATION (FT)	1555.30		
LOW ELEVATION (FT)	1430.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	26.41		
Weighted C	0.40		
Weighted Kb	0.11		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.8	13.1	29.1
5	3.9	11.5	41.6
10	4.7	10.8	49.2
25	5.8	10.0	67.9
50	6.6	10.0	83.5
100	7.3	10.0	96.8

R119			
DRAINAGE LENGTH (FT)	1225.00		
HIGH ELEVATION (FT)	1550.00		
LOW ELEVATION (FT)	1440.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	30.96		
Weighted C	0.40		
Weighted Kb	0.11		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	3.1	10.3	37.8
5	4.1	10.0	51.3
10	4.8	10.0	59.2
25	5.8	10.0	79.6
50	6.6	10.0	97.9
100	7.3	10.0	113.5

R120			
DRAINAGE LENGTH (FT)	2875.00		
HIGH ELEVATION (FT)	1572.60		
LOW ELEVATION (FT)	1494.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	58.62		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.4	17.2	56.5
5	3.5	15.0	81.0
10	4.1	14.0	97.2
25	5.3	12.7	137.4
50	6.2	12.0	174.0
100	7.0	11.5	204.6

Table G-2

Summary of existing watershed condition Rational Method calculations

R121			
DRAINAGE LENGTH (FT)	2100.00		
HIGH ELEVATION (FT)	1494.00		
LOW ELEVATION (FT)	1444.30		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	87.86		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.6	14.7	90.8
5	3.8	12.7	132.6
10	4.5	11.9	157.4
25	5.7	10.9	219.3
50	6.5	10.3	275.3
100	7.3	10.0	322.2

R122			
DRAINAGE LENGTH (FT)	3300.00		
HIGH ELEVATION (FT)	1410.00		
LOW ELEVATION (FT)	1360.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	71.10		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.0	23.5	57.1
5	2.9	20.5	82.1
10	3.6	18.9	101.6
25	4.6	17.2	142.7
50	5.4	16.1	185.2
100	6.1	15.4	217.0

R123			
DRAINAGE LENGTH (FT)	1400.00		
HIGH ELEVATION (FT)	1365.00		
LOW ELEVATION (FT)	1320.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	31.00		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	3.0	10.9	37.0
5	4.1	10.0	51.4
10	4.8	10.0	59.3
25	5.8	10.0	79.7
50	6.6	10.0	98.1
100	7.3	10.0	113.7

Table G-2

Summary of existing watershed condition Rational Method calculations

R124			
DRAINAGE LENGTH (FT)	2600.00		
HIGH ELEVATION (FT)	1384.00		
LOW ELEVATION (FT)	1315.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	37.34		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**i (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.4	16.9	36.3
5	3.5	14.7	52.2
10	4.2	13.7	62.6
25	5.4	12.5	88.2
50	6.2	11.8	111.6
100	7.0	11.3	131.2

R125			
DRAINAGE LENGTH (FT)	2800.00		
HIGH ELEVATION (FT)	1402.80		
LOW ELEVATION (FT)	1280.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	47.51		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**i (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.6	14.4	49.7
5	3.8	12.5	72.2
10	4.5	11.7	85.7
25	5.7	10.7	119.4
50	6.6	10.1	149.8
100	7.3	10.0	174.2

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

C (10-yr, Table 3.2), Enter Default Values		C (100-yr, Table 3.2), Enter Default Values	
ARP	0.85	ARP	0.95
COMM	0.70	COMM	0.88
DESERT	0.40	DESERT	0.50
H20	1.00	H20	1.00
IND	0.70	IND	0.88
LDR	0.49	LDR	0.60
MDR	0.55	MDR	0.69
MFR1	0.60	MFR1	0.75
MFR2	0.65	MFR2	0.80
MFR3	0.66	MFR3	0.81
MFR4	0.66	MFR4	0.81
OPEN	0.40	OPEN	0.50
P	0.85	P	0.95
PF	0.70	PF	0.55
VLDR	0.45	VLDR	0.56

SUB-BASIN ID	R100						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2650			0.50			0.50
HIGH ELEVATION (FT)	1520						1520.00
LOW ELEVATION (FT)	1392						1392.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	51						
SOIL TYPE AREA (SQ. FT), (ACRES)	2674492.0						61.40
LAND USE QUALIFIER	OPEN	0	0	0	0	0	
LAND USE (D/N)	N	0	0	0	0	0	
LAND USE AREA	2674461	0	0	0	0	0	2674461.00
C (Defaults to 0.4 if Land Use = N)	0.4	0	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.06

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R101						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2850			0.54			0.54
HIGH ELEVATION (FT)	1580						1580.00
LOW ELEVATION (FT)	1385.8						1385.80
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	51						
SOIL TYPE AREA (SQ. FT), (ACRES)	2346662.0						53.87
LAND USE QUALIFIER	OPEN	VLDR	0	0	0	0	
LAND USE (D/N)	N	D	0	0	0	0	
LAND USE AREA	2282149	64497.12	0	0	0	0	2346646.12
C (Defaults to 0.4 if Land Use = N)	0.4	0.45	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.056

SUB-BASIN ID	R102						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	3050			0.58			0.58
HIGH ELEVATION (FT)	1583.5						1583.50
LOW ELEVATION (FT)	1350						1350.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	18	45	51				
SOIL TYPE AREA (SQ. FT), (ACRES)	4388.2	2126.8	2783347.0				64.05
LAND USE QUALIFIER	OPEN	VLDR	0	0	0	0	
LAND USE (D/N)	N	D	0	0	0	0	
LAND USE AREA	1088104	1701748	0	0	0	0	2789852.00
C (Defaults to 0.4 if Land Use = N)	0.4	0.45	0	0	0	0	0.43
Kb Type (A = Min, B = Low, C = Hi or D = Max)	C	Kb Table 3.1 (FCDMC V.I Hydrology)					0.105

SUB-BASIN ID	R103						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	4750			0.90			0.90
HIGH ELEVATION (FT)	1510.2						1510.20
LOW ELEVATION (FT)	1363.3						1363.30
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	45	48	49	51	110		
SOIL TYPE AREA (SQ. FT), (ACRES)	215056.6	1934413.0	951377.5	29543.8	1847869.0		114.29
LAND USE QUALIFIER	H20	MFR2	VLDR	0	0	0	
LAND USE (D/N)	N	D	D	0	0	0	
LAND USE AREA	270855.2	3184014	1523375	0	0	0	4978244.20
C (Defaults to 0.4 if Land Use = N)	0.4	0.65	0.45	0	0	0	0.58
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.027

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R104						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	4500			0.85			0.85
HIGH ELEVATION (FT)	1507.9						1507.90
LOW ELEVATION (FT)	1351.1						1351.10
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	48	110	118		
SOIL TYPE AREA (SQ. FT), (ACRES)	518256.4	460561.3	19961.3	2751847.0	1723.2		86.14
LAND USE QUALIFIER	MDR	MFR2	MFR3	0	0	0	
LAND USE (D/N)	D	D	D	0	0	0	
LAND USE AREA	899887.9	2197201	655240.2	0	0	0	3752329.10
C (Defaults to 0.4 if Land Use = N)	0.55	0.65	0.66	0	0	0	0.63
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.028

SUB-BASIN ID	R105						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2250			0.43			0.43
HIGH ELEVATION (FT)	1526						1526.00
LOW ELEVATION (FT)	1340						1340.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	70	110			
SOIL TYPE AREA (SQ. FT), (ACRES)	67182.5	262747.8	162312.2	640891.8			26.01
LAND USE QUALIFIER	COMM	IND	0	0	0	0	
LAND USE (D/N)	D	D	0	0	0	0	
LAND USE AREA	6103.83	1126975	0	0	0	0	1133078.83
C (Defaults to 0.4 if Land Use = N)	0.7	0.7	0	0	0	0	0.70
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.031

SUB-BASIN ID	R106						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	3860			0.73			0.73
HIGH ELEVATION (FT)	1482.5						1482.50
LOW ELEVATION (FT)	1340.9						1340.90
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	12	13	18	45	110		
SOIL TYPE AREA (SQ. FT), (ACRES)	1593762.0	376294.8	60587.8	778654.6	847849.1		83.96
LAND USE QUALIFIER	IND	LDR	OPEN	VLDR	0	0	
LAND USE (D/N)	D	D	N	D	0	0	
LAND USE AREA	739751	37401.26	922474	1957493	0	0	3657119.26
C (Defaults to 0.4 if Land Use = N)	0.7	0.49	0.4	0.45	0	0	0.49
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.054

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R107						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	4025			0.76			0.76
HIGH ELEVATION (FT)	1382.2						1382.20
LOW ELEVATION (FT)	1342.7						1342.70
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	98	110	TSC		
SOIL TYPE AREA (SQ. FT), (ACRES)	1862099.0	485486.4	68323.3	5113455.0	822895.6		191.74
LAND USE QUALIFIER	H20	LDR	MDR	0	0	0	
LAND USE (D/N)	N	D	D	0	0	0	
LAND USE AREA	152675.5	7894564	305020.6	0	0	0	8352260.10
C (Defaults to 0.4 if Land Use = N)	0.4	0.49	0.55	0	0	0	0.49
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.026

SUB-BASIN ID	R108						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	3800			0.72			0.72
HIGH ELEVATION (FT)	1342.7						1342.70
LOW ELEVATION (FT)	1260						1260.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	98	110	CF	TSC	
SOIL TYPE AREA (SQ. FT), (ACRES)	68102	855686.2	274465.3	165134.9	14991.2	7245120.0	196.56
LAND USE QUALIFIER	H20	LDR	MER2	OPEN	VLDR	0	
LAND USE (D/N)	N	D	D	N	D	0	
LAND USE AREA	901957.3	49382.77	959750.9	3956850	2693315	0	8561255.97
C (Defaults to 0.4 if Land Use = N)	0.4	0.49	0.65	0.4	0.45	0	0.44
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.048

SUB-BASIN ID	R109						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	4650			0.88			0.88
HIGH ELEVATION (FT)	1331.2						1331.20
LOW ELEVATION (FT)	1237.9						1237.90
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	CF	LcA	MTB	PWB	PYD		
SOIL TYPE AREA (SQ. FT), (ACRES)	372935.0	376168.3	1508758.0	835519.1	584347.3		84.43
LAND USE QUALIFIER	COMM	OPEN	0	0	0	0	
LAND USE (D/N)	D	N	0	0	0	0	
LAND USE AREA	2519265	1158463	0	0	0	0	3677728.00
C (Defaults to 0.4 if Land Use = N)	0.7	0.4	0	0	0	0	0.61
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.028

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R110						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	1769			0.34			0.34
HIGH ELEVATION (FT)	1275						1275.00
LOW ELEVATION (FT)	1235						1235.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	MTB						
SOIL TYPE AREA (SQ. FT), (ACRES)	2749943.0						63.13
LAND USE QUALIFIER	COMM	OPEN	0	0	0	0	
LAND USE (D/N)	D	N	0	0	0	0	
LAND USE AREA	53099.7	2696843.3	0	0	0	0	2749943.00
C (Defaults to 0.4 if Land Use = N)	0.7	0.4	0	0	0	0	0.40579
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.055

SUB-BASIN ID	R111						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	8311			1.57			1.57
HIGH ELEVATION (FT)	1325						1325.00
LOW ELEVATION (FT)	1220						1220.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	LcA	MTB	PWB	PYD			
SOIL TYPE AREA (SQ. FT), (ACRES)	574939.4	1752078.0	2388745.0	1871380.8			151.22
LAND USE QUALIFIER	COMM	IND	MDR	OPEN	0	0	
LAND USE (D/N)	D	D	D	N	0	0	
LAND USE AREA	2895869	386494.7	1913251	1391528.5	0	0	6587143.20
C (Defaults to 0.4 if Land Use = N)	0.7	0.7	0.55	0.4	0	0	0.59
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.026

SUB-BASIN ID	R112						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	7535			1.43			1.43
HIGH ELEVATION (FT)	1300						1300.00
LOW ELEVATION (FT)	1210						1210.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	MTB	PWB	PYD				
SOIL TYPE AREA (SQ. FT), (ACRES)	1283482.0	924343.0	5003533.0				165.55
LAND USE QUALIFIER	COMM	IND	MDR	0	0	0	
LAND USE (D/N)	D	D	D	0	0	0	
LAND USE AREA	51427.54	53383.32	7106547.14	0	0	0	7211358.00
C (Defaults to 0.4 if Land Use = N)	0.7	0.7	0.55	0	0	0	0.55
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.026

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R113						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2534.4			0.48			0.48
HIGH ELEVATION (FT)	1240						1240.00
LOW ELEVATION (FT)	1210						1210.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	MTB	PYD					
SOIL TYPE AREA (SQ. FT), (ACRES)	1064958.0	1017210.0					47.80
LAND USE QUALIFIER	MDR	0	0	0	0	0	
LAND USE (D/N)	D	0	0	0	0	0	
LAND USE AREA	2082168	0	0	0	0	0	2082168.00
C (Defaults to 0.4 if Land Use = N)	0.55	0	0	0	0	0	0.55
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.030

SUB-BASIN ID	R114						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	7714.08			1.46			1.46
HIGH ELEVATION (FT)	1300						1300.00
LOW ELEVATION (FT)	1215						1215.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	MTB	PWB	PYD				
SOIL TYPE AREA (SQ. FT), (ACRES)	1018292.0	4943940.2	382281.8				145.65
LAND USE QUALIFIER	MDR	0	0	0	0	0	
LAND USE (D/N)	D	0	0	0	0	0	
LAND USE AREA	6344514	0	0	0	0	0	6344514.00
C (Defaults to 0.4 if Land Use = N)	0.55	0	0	0	0	0	0.55
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.026

SUB-BASIN ID	R115						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	7180.8			1.36			1.36
HIGH ELEVATION (FT)	1290						1290.00
LOW ELEVATION (FT)	1205						1205.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	BE	MTB	PWB	PYD			
SOIL TYPE AREA (SQ. FT), (ACRES)	30717.2	7029751.3	569354.9	285899.8			181.72
LAND USE QUALIFIER	MDR	0	0	0	0	0	
LAND USE (D/N)	D	0	0	0	0	0	
LAND USE AREA	7915723.2	0	0	0	0	0	7915723.20
C (Defaults to 0.4 if Land Use = N)	0.55	0	0	0	0	0	0.55
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.026

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R116						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2000			0.38			0.38
HIGH ELEVATION (FT)	1560						1560.00
LOW ELEVATION (FT)	1430						1430.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	12	45	47	52	98		
SOIL TYPE AREA (SQ. FT), (ACRES)	252191.3	79748.6	587157.5	468429.0	230294.0		37.14
LAND USE QUALIFIER	H20	OPEN	0	0	0	0	
LAND USE (D/N)	N	N	0	0	0	0	
LAND USE AREA	280619.7	1331205	0	0	0	0	1611824.70
C (Defaults to 0.4 if Land Use = N)	0.4	0.4	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	C	Kb Table 3.1 (FCDMC V.I Hydrology)					0.111

SUB-BASIN ID	R117						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	620			0.12			0.12
HIGH ELEVATION (FT)	1550						1550.00
LOW ELEVATION (FT)	1520						1520.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	47	52			
SOIL TYPE AREA (SQ. FT), (ACRES)	381288.6	86958.0	239540.5	29154.0			16.92
LAND USE QUALIFIER	H20	OPEN	VLDR	0	0	0	
LAND USE (D/N)	N	N	D	0	0	0	
LAND USE AREA	162503	536677.3	37760.78	0	0	0	736941.08
C (Defaults to 0.4 if Land Use = N)	0.4	0.4	0.45	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.063

SUB-BASIN ID	R118						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	1650			0.31			0.31
HIGH ELEVATION (FT)	1555.3						1555.30
LOW ELEVATION (FT)	1430						1430.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	45	52	98				
SOIL TYPE AREA (SQ. FT), (ACRES)	1005229.0	70988.9	74126.1				26.41
LAND USE QUALIFIER	H20	OPEN	0	0	0	0	
LAND USE (D/N)	N	N	0	0	0	0	
LAND USE AREA	57900.51	1092443	0	0	0	0	1150343.51
C (Defaults to 0.4 if Land Use = N)	0.4	0.4	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	C	Kb Table 3.1 (FCDMC V.I Hydrology)					0.114

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R119						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	1225			0.23			0.23
HIGH ELEVATION (FT)	1550						1550.00
LOW ELEVATION (FT)	1440						1440.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	45	98					
SOIL TYPE AREA (SQ. FT), (ACRES)	1258063.0	90658.9					30.96
LAND USE QUALIFIER	H20	LDR	OPEN	0	0	0	
LAND USE (D/N)	N	D	N	0	0	0	
LAND USE AREA	149040.1	513178.8	682672	0	0	0	1344890.90
C (Defaults to 0.4 if Land Use = N)	0.4	0.49	0.4	0	0	0	0.43
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.031

SUB-BASIN ID	R120						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2875			0.54			0.54
HIGH ELEVATION (FT)	1572.6						1572.60
LOW ELEVATION (FT)	1494						1494.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45					
SOIL TYPE AREA (SQ. FT), (ACRES)	2076412.0	476894.2					58.62
LAND USE QUALIFIER	H20	LDR	MDR	0	0	0	
LAND USE (D/N)	N	D	D	0	0	0	
LAND USE AREA	106443.8	2085658	361203.8	0	0	0	2553305.60
C (Defaults to 0.4 if Land Use = N)	0.4	0.49	0.55	0	0	0	0.49
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.029

SUB-BASIN ID	R121						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2100			0.40			0.40
HIGH ELEVATION (FT)	1494						1494.00
LOW ELEVATION (FT)	1444.3						1444.30
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	12	13	45				
SOIL TYPE AREA (SQ. FT), (ACRES)	13016.1	1048447.0	2765875.0				87.86
LAND USE QUALIFIER	H20	LDR	0	0	0	0	
LAND USE (D/N)	N	D	0	0	0	0	
LAND USE AREA	201112	3626226	0	0	0	0	3827338.00
C (Defaults to 0.4 if Land Use = N)	0.4	0.49	0	0	0	0	0.49
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.028

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R122						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	3300			0.63			0.63
HIGH ELEVATION (FT)	1410						1410.00
LOW ELEVATION (FT)	1360						1360.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	10	12	45	98			
SOIL TYPE AREA (SQ. FT), (ACRES)	9530.3	1668158.0	802812.6	616414.2			71.10
LAND USE QUALIFIER	LDR	OPEN	0	0	0	0	
LAND USE (D/N)	D	N	0	0	0	0	
LAND USE AREA	12998.56	3083885	0	0	0	0	3096883.56
C (Defaults to 0.4 if Land Use = N)	0.49	0.4	0	0	0	0	0.40
Kb Type (A = Min, B = Low, C = Hi or D = Max)	B	Kb Table 3.1 (FCDMC V.I Hydrology)					0.055

SUB-BASIN ID	R123						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	1400			0.27			0.27
HIGH ELEVATION (FT)	1365						1365.00
LOW ELEVATION (FT)	1320						1320.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	68				
SOIL TYPE AREA (SQ. FT), (ACRES)	671005.7	587988.0	91516.2				31.00
LAND USE QUALIFIER	IND	OPEN	0	0	0	0	
LAND USE (D/N)	D	N	0	0	0	0	
LAND USE AREA	853433.1	497072.3	0	0	0	0	1350505.40
C (Defaults to 0.4 if Land Use = N)	0.7	0.4	0	0	0	0	0.59
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.031

SUB-BASIN ID	R124						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2600			0.49			0.49
HIGH ELEVATION (FT)	1384						1384.00
LOW ELEVATION (FT)	1315						1315.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	13	45	68				
SOIL TYPE AREA (SQ. FT), (ACRES)	1436241.0	145317.5	44854.0				37.34
LAND USE QUALIFIER	IND	MFR2	OPEN	0	0	0	
LAND USE (D/N)	D	D	N	0	0	0	
LAND USE AREA	1430625	73741.03	122033.6	0	0	0	1626399.63
C (Defaults to 0.4 if Land Use = N)	0.7	0.65	0.4	0	0	0	0.68
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.030

Table G-3
Runoff coefficient and Kb estimation worksheet for future watershed conditions

SUB-BASIN ID	R125						INPUT DATA FOR COUNTY RATIONAL
DRAINAGE LENGTH (FT), (MILE)	2800			0.53			0.53
HIGH ELEVATION (FT)	1402.8						1402.80
LOW ELEVATION (FT)	1280						1280.00
10-YR, 6-HR PRECIP (IN)	2.2						2.20
SOIL TYPE	10	12	13	45	98	110	
SOIL TYPE AREA (SQ. FT), (ACRES)	19872.5	365805.4	163766.4	913245.1	383353.4	223463.0	47.51
LAND USE QUALIFIER	LDR	OPEN	0	0	0	0	
LAND USE (D/N)	D	N	0	0	0	0	
LAND USE AREA	1807602	261878.2	0	0	0	0	2069480.20
C (Defaults to 0.4 if Land Use = N)	0.49	0.4	0	0	0	0	0.48
Kb Type (A = Min, B = Low, C = Hi or D = Max)	A	Kb Table 3.1 (FCDMC V.I Hydrology)					0.030

Table G-4
Summary of future watershed condition Rational Method Calculations

R100			
DRAINAGE LENGTH (FT)	2650.00		
HIGH ELEVATION (FT)	1520.00		
LOW ELEVATION (FT)	1392.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	61.40		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.7	13.2	67.3
5	3.9	11.5	96.7
10	4.7	10.8	114.3
25	5.9	10.0	158.8
50	6.6	10.0	194.2
100	7.3	10.0	225.1

R101			
DRAINAGE LENGTH (FT)	2850.00		
HIGH ELEVATION (FT)	1580.00		
LOW ELEVATION (FT)	1385.80		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	53.87		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.8	12.2	61.6
5	4.0	10.7	87.5
10	4.8	10.0	103.4
25	6.1	10.0	145.9
50	6.6	10.0	171.0
100	7.3	10.0	198.2

R102			
DRAINAGE LENGTH (FT)	3050.00		
HIGH ELEVATION (FT)	1583.50		
LOW ELEVATION (FT)	1350.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	64.05		
Weighted C	0.43		
Weighted Kb	0.10		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.4	18.1	64.9
5	3.4	15.8	92.9
10	4.0	14.8	110.8
25	5.2	13.4	157.6
50	6.1	12.6	200.6
100	6.9	12.0	236.6

Table G-4
Summary of future watershed condition Rational Method Calculations

R103			
DRAINAGE LENGTH (FT)	4750.00		
HIGH ELEVATION (FT)	1510.20		
LOW ELEVATION (FT)	1363.30		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	114.29		
Weighted C	0.58		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.6	14.2	173.3
5	3.8	12.3	251.6
10	4.5	11.5	298.7
25	5.7	10.5	415.8
50	6.6	10.0	519.8
100	7.3	10.0	602.6

R104			
DRAINAGE LENGTH (FT)	4500.00		
HIGH ELEVATION (FT)	1507.90		
LOW ELEVATION (FT)	1351.10		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	86.14		
Weighted C	0.63		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.7	13.3	147.7
5	3.9	11.6	212.2
10	4.6	10.9	250.9
25	5.8	10.0	347.7
50	6.6	10.0	427.6
100	7.3	10.0	495.7

R105			
DRAINAGE LENGTH (FT)	2250.00		
HIGH ELEVATION (FT)	1526.00		
LOW ELEVATION (FT)	1340.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	26.01		
Weighted C	0.70		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	3.1	10.0	56.1
5	4.1	10.0	75.5
10	4.8	10.0	87.1
25	5.8	10.0	117.1
50	6.6	10.0	144.0
100	7.3	10.0	166.9

Table G-4
Summary of future watershed condition Rational Method Calculations

R106			
DRAINAGE LENGTH (FT)	3860.00		
HIGH ELEVATION (FT)	1482.50		
LOW ELEVATION (FT)	1340.90		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	83.96		
Weighted C	0.49		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.4	18.0	96.7
5	3.4	15.7	138.6
10	4.0	14.7	165.4
25	5.2	13.3	235.2
50	6.1	12.6	298.4
100	6.9	12.0	351.9

R107			
DRAINAGE LENGTH (FT)	4025.00		
HIGH ELEVATION (FT)	1382.20		
LOW ELEVATION (FT)	1342.70		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	191.74		
Weighted C	0.49		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.3	19.1	215.3
5	3.3	16.7	307.9
10	3.9	15.6	368.9
25	5.1	14.1	476.0
50	5.9	13.3	555.2
100	6.7	12.7	630.4

R108			
DRAINAGE LENGTH (FT)	3800.00		
HIGH ELEVATION (FT)	1342.70		
LOW ELEVATION (FT)	1260.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	196.56		
Weighted C	0.44		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.2	20.5	192.1
5	3.1	17.9	274.7
10	3.8	16.6	333.2
25	4.9	15.1	468.1
50	5.7	14.2	601.6
100	6.5	13.6	708.5

Table G-4
Summary of future watershed condition Rational Method Calculations

R109			
DRAINAGE LENGTH (FT)	4650.00		
HIGH ELEVATION (FT)	1331.20		
LOW ELEVATION (FT)	1237.90		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	84.43		
Weighted C	0.61		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**i (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.4	16.8	124.5
5	3.5	14.6	179.4
10	4.2	13.7	214.3
25	5.4	12.4	302.9
50	6.2	11.8	381.9
100	7.1	11.2	450.7

R110			
DRAINAGE LENGTH (FT)	1768.80		
HIGH ELEVATION (FT)	1275.00		
LOW ELEVATION (FT)	1235.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	63.13		
Weighted C	0.41		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**i (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.7	13.7	68.9
5	3.9	11.9	99.5
10	4.6	11.2	117.6
25	5.8	10.2	163.6
50	6.6	10.0	202.6
100	7.3	10.0	234.8

R111			
DRAINAGE LENGTH (FT)	8310.72		
HIGH ELEVATION (FT)	1325.00		
LOW ELEVATION (FT)	1220.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	151.22		
Weighted C	0.59		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**i (in/hr)**	**Tc (min)**	**Q (cfs)**
2	1.8	28.4	158.6
5	2.6	24.6	231.4
10	3.2	22.7	286.6
25	4.1	20.7	401.6
50	5.0	19.1	539.5
100	5.7	18.2	637.7

Table G-4
Summary of future watershed condition Rational Method Calculations

R112			
DRAINAGE LENGTH (FT)	7534.56		
HIGH ELEVATION (FT)	1300.00		
LOW ELEVATION (FT)	1210.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	165.55		
Weighted C	0.55		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**i (in/hr)**	**Tc (min)**	**Q (cfs)**
2	1.8	27.0	167.1
5	2.7	23.4	244.1
10	3.3	21.6	301.8
25	4.2	19.7	421.3
50	5.1	18.2	563.6
100	5.8	17.4	663.6

R113			
DRAINAGE LENGTH (FT)	2534.40		
HIGH ELEVATION (FT)	1240.00		
LOW ELEVATION (FT)	1210.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	47.80		
Weighted C	0.55		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**i (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.6	14.7	67.9
5	3.8	12.7	99.2
10	4.5	11.9	117.8
25	5.7	10.9	164.1
50	6.5	10.3	206.0
100	7.3	10.0	241.0

R114			
DRAINAGE LENGTH (FT)	7714.08		
HIGH ELEVATION (FT)	1300.00		
LOW ELEVATION (FT)	1215.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	145.65		
Weighted C	0.55		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**i (in/hr)**	**Tc (min)**	**Q (cfs)**
2	1.8	28.6	141.0
5	2.6	24.8	205.5
10	3.2	22.9	254.5
25	4.1	20.8	357.8
50	5.0	19.3	479.3
100	5.7	18.4	566.6

Table G-4
Summary of future watershed condition Rational Method Calculations

R115			
DRAINAGE LENGTH (FT)	7180.80		
HIGH ELEVATION (FT)	1290.00		
LOW ELEVATION (FT)	1205.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	181.72		
Weighted C	0.55		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	1.9	26.1	186.5
5	2.7	22.6	272.8
10	3.4	20.9	336.6
25	4.3	19.1	470.4
50	5.2	17.7	624.5
100	5.9	16.9	734.8

R116			
DRAINAGE LENGTH (FT)	2000.00		
HIGH ELEVATION (FT)	1560.00		
LOW ELEVATION (FT)	1430.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	37.14		
Weighted C	0.40		
Weighted Kb	0.11		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.5	15.4	37.6
5	3.7	13.4	54.9
10	4.4	12.5	64.9
25	5.6	11.4	90.8
50	6.4	10.8	114.5
100	7.3	10.3	134.7

R117			
DRAINAGE LENGTH (FT)	620.00		
HIGH ELEVATION (FT)	1550.00		
LOW ELEVATION (FT)	1520.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	16.92		
Weighted C	0.40		
Weighted Kb	0.06		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	3.1	10.0	21.0
5	4.1	10.0	28.2
10	4.8	10.0	32.6
25	5.8	10.0	43.8
50	6.6	10.0	53.9
100	7.3	10.0	62.4

Table G-4
Summary of future watershed condition Rational Method Calculations

R118			
DRAINAGE LENGTH (FT)	1650.00		
HIGH ELEVATION (FT)	1555.30		
LOW ELEVATION (FT)	1430.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	26.41		
Weighted C	0.40		
Weighted Kb	0.11		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.8	13.1	29.1
5	3.9	11.5	41.6
10	4.7	10.8	49.2
25	5.8	10.0	67.9
50	6.6	10.0	83.5
100	7.3	10.0	96.8

R119			
DRAINAGE LENGTH (FT)	1225.00		
HIGH ELEVATION (FT)	1550.00		
LOW ELEVATION (FT)	1440.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	30.96		
Weighted C	0.43		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	3.1	10.0	41.3
5	4.1	10.0	55.6
10	4.8	10.0	64.1
25	5.8	10.0	86.2
50	6.6	10.0	106.0
100	7.3	10.0	122.9

R120			
DRAINAGE LENGTH (FT)	2875.00		
HIGH ELEVATION (FT)	1572.60		
LOW ELEVATION (FT)	1494.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	58.62		
Weighted C	0.49		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	2.9	11.4	85.1
5	4.1	10.0	120.2
10	4.8	10.0	138.7
25	5.8	10.0	186.5
50	6.6	10.0	229.3
100	7.3	10.0	265.8

Table G-4
Summary of future watershed condition Rational Method Calculations

R121			
DRAINAGE LENGTH (FT)	2100.00		
HIGH ELEVATION (FT)	1494.00		
LOW ELEVATION (FT)	1444.30		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	87.86		
Weighted C	0.49		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	3.1	10.0	131.4
5	4.1	10.0	176.7
10	4.8	10.0	203.9
25	5.8	10.0	274.2
50	6.6	10.0	337.1
100	7.3	10.0	390.8

R122			
DRAINAGE LENGTH (FT)	3300.00		
HIGH ELEVATION (FT)	1410.00		
LOW ELEVATION (FT)	1360.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	71.10		
Weighted C	0.40		
Weighted Kb	0.05		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	2.0	23.5	57.2
5	2.9	20.5	82.1
10	3.6	18.9	101.6
25	4.6	17.2	142.8
50	5.4	16.1	185.4
100	6.1	15.4	217.2

R123			
DRAINAGE LENGTH (FT)	1400.00		
HIGH ELEVATION (FT)	1365.00		
LOW ELEVATION (FT)	1320.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	31.00		
Weighted C	0.59		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	**I (in/hr)**	**Tc (min)**	**Q (cfs)**
2	3.1	10.0	56.3
5	4.1	10.0	75.8
10	4.8	10.0	87.4
25	5.8	10.0	117.5
50	6.6	10.0	144.5
100	7.3	10.0	167.6

Table G-4
Summary of future watershed condition Rational Method Calculations

R124			
DRAINAGE LENGTH (FT)	2600.00		
HIGH ELEVATION (FT)	1384.00		
LOW ELEVATION (FT)	1315.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	37.34		
Weighted C	0.68		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	3.0	11.1	74.8
5	4.1	10.0	104.5
10	4.8	10.0	120.6
25	5.8	10.0	162.1
50	6.6	10.0	199.3
100	7.3	10.0	231.1

R125			
DRAINAGE LENGTH (FT)	2800.00		
HIGH ELEVATION (FT)	1402.80		
LOW ELEVATION (FT)	1280.00		
10-YR, 6-HR PRECIP (IN)	2.20		
AREA (ACRES)	47.51		
Weighted C	0.48		
Weighted Kb	0.03		
RETURN PERIOD (YEARS)	i (in/hr)	Tc (min)	Q (cfs)
2	3.1	10.0	70.1
5	4.1	10.0	94.2
10	4.8	10.0	108.7
25	5.8	10.0	146.2
50	6.6	10.0	179.8
100	7.3	10.0	208.4

APPENDIX H: 100-YEAR, 2-HOUR RETENTION VOLUME CALCULATIONS

Table H-1

Retention volume calculations for each HEC-1 subbasin

S100

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	5.2	310.2	51.7
C-value	...	0.88	0.50	0.56
Area with <= 10% Slope (%)	...	93%	53%	71%

A_T	=	367.2	acres
A_D	=	57.0	acres
C_w	=	0.59	
Retention Volume (acre-feetf)	=	7.83	acre-ft
80% of Retention Volume	=	6.27	acre-ft

S101

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	403.9
C-value	...	0.50
Area with <= 10% Slope (%)	...	56%

A_T	=	403.9	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S102

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	150.0	137.6
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	39%	64%

A_T	=	287.7	acres
A_D	=	137.6	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	17.99	acre-ft
80% of Retention Volume	=	14.39	acre-ft

S103

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	252.6
C-value	...	0.50
Area with <= 10% Slope (%)	...	64%

A_T	=	252.6	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S104

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	75.2	426.0	74.9
C-value	...	0.88	0.50	0.56
Area with <= 10% Slope (%)	...	58%	44%	55%

A_T	=	576.1	acres
A_D	=	150.1	acres
C_w	=	0.72	
Retention Volume (acre-feetf)	=	**25.23**	**acre-ft**
80% of Retention Volume	=	**20.19**	**acre-ft**

S105

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	43.2	182.8	154.0
C-value	...	0.88	0.50	0.56
Area with <= 10% Slope (%)	...	38%	51%	56%

A_T	=	380.0	acres
A_D	=	154.0	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	**20.13**	**acre-ft**
80% of Retention Volume	=	**16.10**	**acre-ft**

S106

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	100.9	262.1
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	25%	44%

A_T	=	363.0	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

S107

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	198.4	400.5
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	27%	45%

A_T	=	599.0	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S200

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	613.7
C-value	...	0.50
Area with <= 10% Slope (%)	...	34%

A_T	=	613.7	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S201

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	224.1
C-value	...	0.50
Area with <= 10% Slope (%)	...	34%

A_T	=	224.1	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S202

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	81.2
C-value	...	0.50
Area with <= 10% Slope (%)	...	52%

A_T	=	81.2	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S203

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	94.0	145.0
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	40%	55%

A_T	=	239.0	acres
A_D	=	145.0	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	18.95	acre-ft
80% of Retention Volume	=	15.16	acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S204

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	594.3	14.1
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	48%	88%

A_T	=	608.4	acres
A_D	=	14.1	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	1.84	acre-ft
80% of Retention Volume	=	1.47	acre-ft

S205

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	50.1	157.6	56.7
C-value	...	0.88	0.50	0.56
Area with <= 10% Slope (%)	...	72%	57%	62%

A_T	=	264.5	acres
A_D	=	106.8	acres
C_w	=	0.71	
Retention Volume (acre-feetf)	=	17.70	acre-ft
80% of Retention Volume	=	14.16	acre-ft

S206

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	0.9	140.9	404.0
C-value	...	0.88	0.50	0.56
Area with <= 10% Slope (%)	...	0%	41%	55%

A_T	=	545.8	acres
A_D	=	404.0	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	52.79	acre-ft
80% of Retention Volume	=	42.23	acre-ft

S207

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	421.4	191.0
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	24%	52%

A_T	=	612.4	acres
A_D	=	191.0	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	24.95	acre-ft
80% of Retention Volume	=	19.96	acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S208

Land Use Class	...	MFR3	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	85.2	406.9	213.5
C-value	...	0.81	0.50	0.56
Area with <= 10% Slope (%)	...	56%	23%	29%

A_T	=	705.6	acres
A_D	=	85.2	acres
C_w	=	0.81	
Retention Volume (acre-feetf)	=	**16.10**	**acre-ft**
80% of Retention Volume	=	**12.88**	**acre-ft**

S209

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	350.0	66.3
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	15%	23%

A_T	=	416.3	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

S210

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	169.0	138.8
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	21%	25%

A_T	=	307.7	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

S211

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	126.4	185.7
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	15%	18%

A_T	=	312.1	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S300

Land Use Class	...	LDR	MFR3	OPEN	VLDR
Natural or Developed	...	D	D	N	D
Sub-Area (acres)	...	119.2	24.9	101.2	148.4
C-value	...	0.60	0.81	0.50	0.56
Area with <= 10% Slope (%)	...	52%	88%	26%	56%

A_T =	393.6	acres
A_D =	292.5	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	40.78	acre-ft
80% of Retention Volume =	32.62	acre-ft

S301

Land Use Class	...	LDR	MFR3	OPEN	VLDR
Natural or Developed	...	D	D	N	D
Sub-Area (acres)	...	317.8	15.0	83.4	220.3
C-value	...	0.60	0.81	0.50	0.56
Area with <= 10% Slope (%)	...	61%	68%	20%	48%

A_T =	636.5	acres
A_D =	332.8	acres
C_w =	0.61	
Retention Volume (acre-feetf) =	47.32	acre-ft
80% of Retention Volume =	37.86	acre-ft

S302

Land Use Class	...	COMM	LDR	MFR3	OPEN	VLDR
Natural or Developed	...	D	D	D	N	D
Sub-Area (acres)	...	4.0	48.9	7.5	164.2	72.7
C-value	...	0.88	0.60	0.81	0.50	0.56
Area with <= 10% Slope (%)	...	89%	43%	39%	33%	75%

A_T =	297.3	acres
A_D =	76.7	acres
C_w =	0.58	
Retention Volume (acre-feetf) =	10.32	acre-ft
80% of Retention Volume =	8.26	acre-ft

S303

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	330.0	123.0
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	15%	18%

A_T =	453.0	acres
A_D =	0.0	acres
C_w =	0.00	
Retention Volume (acre-feetf) =	0.00	acre-ft
80% of Retention Volume =	0.00	acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S304

Land Use Class	...	H20	OPEN	VLDR
Natural or Developed	...	N	N	D
Sub-Area (acres)	...	2.1	206.9	317.5
C-value	...	1.00	0.50	0.56
Area with <= 10% Slope (%)	...	32%	21%	52%

A_T = 526.4 acres
A_D = 317.5 acres
C_w = 0.56
Retention Volume (acre-feetf) = 41.48 acre-ft
80% of Retention Volume = 33.19 acre-ft

S400

Land Use Class	...	COMM	H20	LDR	MDR	MFR3	OPEN	VLDR
Natural or Developed	...	D	N	D	D	D	N	D
Sub-Area (acres)	...	81.0	4.1	1.5	9.3	184.8	268.4	121.5
C-value	...	0.88	1.00	0.60	0.69	0.81	0.50	0.56
Area with <= 10% Slope (%)	...	95%	93%	58%	100%	95%	18%	67%

A_T = 670.7 acres
A_D = 398.2 acres
C_w = 0.74
Retention Volume (acre-feetf) = 69.16 acre-ft
80% of Retention Volume = 55.33 acre-ft

S401

Land Use Class	...	H20	LDR	OPEN	VLDR
Natural or Developed	...	N	D	N	D
Sub-Area (acres)	...	7.4	20.4	60.9	324.9
C-value	...	1.00	0.60	0.50	0.56
Area with <= 10% Slope (%)	...	39%	97%	30%	66%

A_T = 413.5 acres
A_D = 345.3 acres
C_w = 0.56
Retention Volume (acre-feetf) = 45.30 acre-ft
80% of Retention Volume = 36.24 acre-ft

S402

Land Use Class	...	COMM	IND	LDR	MDR	MFR1	MFR2	MFR3	OPEN	VLDR
Natural or Developed	...	D	D	D	D	D	D	D	N	D
Sub-Area (acres)	...	23.4	81.1	36.1	21.1	44.3	14.9	91.3	107.3	54.1
C-value	...	0.88	0.88	0.60	0.69	0.75	0.80	0.81	0.50	0.56
Area with <= 10% Slope (%)	...	98%	87%	100%	93%	96%	100%	87%	33%	69%

A_T = 473.5 acres
A_D = 366.3 acres
C_w = 0.76
Retention Volume (acre-feetf) = 64.77 acre-ft
80% of Retention Volume = 51.81 acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S403

Land Use Class	...	H20	IND	LDR	MDR	MFR3	OPEN	VLDR
Natural or Developed	...	N	D	D	D	D	N	D
Sub-Area (acres)	...	0.0	145.8	109.7	18.6	69.7	12.0	2.0
C-value	...	1.00	0.88	0.60	0.69	0.81	0.50	0.56
Area with <= 10% Slope (%)	...	100%	97%	90%	100%	100%	46%	100%

A_T =	357.8	acres
A_D =	345.8	acres
C_w =	0.77	
Retention Volume (acre-feetf) =	**61.72**	**acre-ft**
80% of Retention Volume =	**49.38**	**acre-ft**

S404

Land Use Class	...	H20	LDR	OPEN	VLDR
Natural or Developed	...	N	D	N	D
Sub-Area (acres)	...	12.0	7.2	129.0	20.3
C-value	...	1.00	0.60	0.50	0.56
Area with <= 10% Slope (%)	...	98%	87%	97%	100%

A_T =	168.5	acres
A_D =	27.5	acres
C_w =	0.57	
Retention Volume (acre-feetf) =	**3.65**	**acre-ft**
80% of Retention Volume =	**2.92**	**acre-ft**

S500

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	*20.4*	*240.7*	*413.7*
C-value	...	0.88	0.50	0.56
Area with <= 10% Slope (%)	...	61%	31%	52%

A_T =	674.8	acres
A_D =	*434.1*	*acres*
C_w =	0.58	
Retention Volume (acre-feetf) =	**58.24**	**acre-ft**
80% of Retention Volume =	**46.60**	**acre-ft**

S501

Land Use Class	...	LDR	MDR	OPEN	VLDR
Natural or Developed	...	D	D	N	D
Sub-Area (acres)	...	15.4	28.8	143.8	205.1
C-value	...	0.60	0.69	0.50	0.56
Area with <= 10% Slope (%)	...	16%	91%	30%	65%

A_T =	393.1	acres
A_D =	233.8	acres
C_w =	0.58	
Retention Volume (acre-feetf) =	**31.42**	**acre-ft**
80% of Retention Volume =	**25.14**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S502

Land Use Class ...	COMM	H20	LDR	OPEN	VLDR
Natural or Developed ...	D	N	D	N	D
Sub-Area (acres) ...	12.5	2.3	44.5	119.3	79.1
C-value ...	0.88	1.00	0.60	0.50	0.56
Area with <= 10% Slope (%) ...	5%	87%	91%	7%	50%

A_T = 257.7 acres
A_D = 123.6 acres
C_w = 0.57
Retention Volume (acre-feetf) = 16.57 acre-ft
80% of Retention Volume = 13.25 acre-ft

S503

Land Use Class ...	H20	LDR	MDR	OPEN	PF	VLDR
Natural or Developed ...	N	D	D	N	D	D
Sub-Area (acres) ...	0.2	205.2	19.5	180.0	37.1	194.1
C-value ...	1.00	0.60	0.69	0.50	0.88	0.56
Area with <= 10% Slope (%) ...	0%	88%	87%	38%	43%	34%

A_T = 636.2 acres
A_D = 224.7 acres
C_w = 0.61
Retention Volume (acre-feetf) = 31.87 acre-ft
80% of Retention Volume = 25.50 acre-ft

S504

Land Use Class ...	COMM	H20	IND	LDR	MDR	MFR1	MFR2	VLDR
Natural or Developed ...	D	N	D	D	D	D	D	D
Sub-Area (acres) ...	39.5	4.1	0.0	56.4	10.7	24.3	18.7	54.8
C-value ...	0.88	1.00	0.88	0.60	0.69	0.75	0.80	0.56
Area with <= 10% Slope (%) ...	98%	97%	0%	100%	100%	100%	98%	100%

A_T = 208.6 acres
A_D = 204.4 acres
C_w = 0.68
Retention Volume (acre-feetf) = 32.64 acre-ft
80% of Retention Volume = 26.12 acre-ft

S505

Land Use Class ...	H20	OPEN	PF	VLDR
Natural or Developed ...	N	N	D	D
Sub-Area (acres) ...	3.6	73.0	4.0	10.9
C-value ...	1.00	0.50	0.88	0.56
Area with <= 10% Slope (%) ...	56%	9%	84%	71%

A_T = 91.5 acres
A_D = 14.9 acres
C_w = 0.65
Retention Volume (acre-feetf) = 2.25 acre-ft
80% of Retention Volume = 1.80 acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S506

Land Use Class	...	H20	MFR3	OPEN	PF	VLDR
Natural or Developed	...	N	D	N	D	D
Sub-Area (acres)	...	0.8	24.3	51.3	14.3	5.7
C-value	...	1.00	0.81	0.50	0.88	0.56
Area with <= 10% Slope (%)	...	*100%*	*95%*	*8%*	*90%*	*35%*

A_T = 96.5 acres
A_D = 38.7 acres
C_w = 0.84
Retention Volume (acre-feetf) = 7.54 acre-ft
80% of Retention Volume = 6.03 acre-ft

S507

Land Use Class	...	H20	LDR	MDR	OPEN	PF	VLDR
Natural or Developed	...	N	D	D	N	D	D
Sub-Area (acres)	...	7.5	61.6	8.9	2.1	21.9	324.2
C-value	...	1.00	0.60	0.69	0.50	0.88	0.56
Area with <= 10% Slope (%)	...	68%	98%	98%	95%	100%	98%

A_T = 426.2 acres
A_D = 416.5 acres
C_w = 0.59
Retention Volume (acre-feetf) = 56.90 acre-ft
80% of Retention Volume = 45.52 acre-ft

S508

Land Use Class	...	LDR	MDR	MFR1	MFR2	OPEN	PF	VLDR
Natural or Developed	...	D	D	D	D	N	D	D
Sub-Area (acres)	...	69.8	24.4	21.6	21.6	20.6	5.1	25.6
C-value	...	0.60	0.69	0.75	0.80	0.50	0.88	0.56
Area with <= 10% Slope (%)	...	*98%*	*99%*	*98%*	*98%*	*97%*	*87%*	*100%*

A_T = 188.8 acres
A_D = 168.1 acres
C_w = 0.66
Retention Volume (acre-feetf) = 25.91 acre-ft
80% of Retention Volume = 20.73 acre-ft

S509

Land Use Class	...	H20	LDR	MDR	OPEN	VLDR
Natural or Developed	...	N	D	D	N	D
Sub-Area (acres)	...	1.0	13.8	28.3	15.3	50.0
C-value	...	1.00	0.60	0.69	0.50	0.56
Area with <= 10% Slope (%)	...	87%	100%	98%	0%	50%

A_T = 108.5 acres
A_D = 42.2 acres
C_w = 0.66
Retention Volume (acre-feetf) = 6.50 acre-ft
80% of Retention Volume = 5.20 acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S510

Land Use Class	...	H20	IND	LDR	MDR	MFR2
Natural or Developed	...	N	D	D	D	D
Sub-Area (acres)	...	2.8	10.5	16.9	10.1	40.9
C-value	...	1.00	0.88	0.60	0.69	0.80
Area with <= 10% Slope (%)	...	100%	94%	100%	99%	99%

A_T =	81.1	acres
A_D =	78.3	acres
C_w =	0.75	
Retention Volume (acre-feetf) =	**13.76**	**acre-ft**
80% of Retention Volume =	**11.01**	**acre-ft**

S511

Land Use Class	...	H20	LDR	MDR	OPEN	VLDR
Natural or Developed	...	N	D	D	N	D
Sub-Area (acres)	...	2.3	131.3	22.7	47.2	42.9
C-value	...	1.00	0.60	0.69	0.50	0.56
Area with <= 10% Slope (%)	...	100%	97%	98%	2%	32%

A_T =	246.4	acres
A_D =	154.0	acres
C_w =	0.61	
Retention Volume (acre-feetf) =	**22.03**	**acre-ft**
80% of Retention Volume =	**17.63**	**acre-ft**

S512

Land Use Class	...	COMM	H20	IND	LDR	MDR	MFR2
Natural or Developed	...	D	N	D	D	D	D
Sub-Area (acres)	...	10.8	4.4	58.0	9.7	38.4	15.5
C-value	...	0.88	1.00	0.88	0.60	0.69	0.80
Area with <= 10% Slope (%)	...	99%	96%	99%	100%	100%	96%

A_T =	136.7	acres
A_D =	132.3	acres
C_w =	0.80	
Retention Volume (acre-feetf) =	**24.54**	**acre-ft**
80% of Retention Volume =	**19.63**	**acre-ft**

S513

Land Use Class	...	COMM	LDR	MDR	VLDR
Natural or Developed	...	D	D	D	D
Sub-Area (acres)	...	32.9	349.1	22.0	93.7
C-value	...	0.88	0.60	0.69	0.56
Area with <= 10% Slope (%)	...	100%	99%	99%	99%

A_T =	497.6	acres
A_D =	497.6	acres
C_w =	0.61	
Retention Volume (acre-feetf) =	**71.41**	**acre-ft**
80% of Retention Volume =	**57.13**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S514

Land Use Class	...	COMM	LDR	MDR	MFR1	MFR2	MFR3	OPEN	PF	VLDR
Natural or Developed	...	D	D	D	D	D	D	N	D	D
Sub-Area (acres)	...	13.9	135.4	40.0	17.9	54.0	61.2	31.9	49.0	12.3
C-value	...	0.88	0.60	0.69	0.75	0.80	0.81	0.50	0.88	0.56
Area with <= 10% Slope (%)	...	100%	100%	98%	98%	100%	100%	100%	100%	100%

A_T = 415.7 acres
A_D = 383.8 acres
C_w = 0.72
Retention Volume (acre-feetf) = 64.72 acre-ft
80% of Retention Volume = 51.77 acre-ft

S515

Land Use Class	...	COMM	H20	IND	LDR	MDR	MFR2	MFR3	OPEN	PF
Natural or Developed	...	D	N	D	D	D	D	D	N	D
Sub-Area (acres)	...	39.3	0.1	4.6	240.1	228.9	30.1	80.0	54.2	27.5
C-value	...	0.88	1.00	0.88	0.60	0.69	0.80	0.81	0.50	0.88
Area with <= 10% Slope (%)	...	100%	100%	81%	99%	100%	98%	100%	100%	100%

A_T = 704.9 acres
A_D = 650.6 acres
C_w = 0.70
Retention Volume (acre-feetf) = 105.89 acre-ft
80% of Retention Volume = 84.71 acre-ft

S516

Land Use Class	...	COMM	H20	LDR	MDR	MFR2	MFR3	OPEN
Natural or Developed	...	D	N	D	D	D	D	N
Sub-Area (acres)	...	91.7	16.9	2.4	0.6	122.5	37.6	74.0
C-value	...	0.88	1.00	0.60	0.69	0.80	0.81	0.50
Area with <= 10% Slope (%)	...	98%	100%	94%	71%	90%	98%	100%

A_T = 345.6 acres
A_D = 254.7 acres
C_w = 0.83
Retention Volume (acre-feetf) = 49.22 acre-ft
80% of Retention Volume = 39.38 acre-ft

S600

Land Use Class	...	DESERT	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	903.2	379.4
C-value	...	0.50	0.50
Area with <= 10% Slope (%)	...	17%	14%

A_T = 1282.6 acres
A_D = 0.0 acres
C_w = 0.00
Retention Volume (acre-feetf) = 0.00 acre-ft
80% of Retention Volume = 0.00 acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S601

Land Use Class	...	DESERT	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	429.3	142.5
C-value	...	0.50	0.50
Area with <= 10% Slope (%)	...	26%	44%

A_T	=	571.9	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S602

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	1205.3
C-value	...	0.50
Area with <= 10% Slope (%)	...	25%

A_T	=	1205.3	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S603

Land Use Class	...	DESERT	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	66.9	354.0
C-value	...	0.50	0.50
Area with <= 10% Slope (%)	...	1%	26%

A_T	=	420.9	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S604

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	1699.8
C-value	...	0.50
Area with <= 10% Slope (%)	...	20%

A_T	=	1699.8	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S605

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	694.6
C-value	...	0.50
Area with <= 10% Slope (%)	...	43%

A_T	=	694.6	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S606

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	422.4
C-value	...	*0.50*
Area with <= 10% Slope (%)	...	40%

A_T	=	422.4	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S607

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	474.4	51.4
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	61%	55%

A_T	=	525.8	acres
A_D	=	51.4	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	6.71	acre-ft
80% of Retention Volume	=	5.37	acre-ft

S608

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	239.0	86.3
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	45%	57%

A_T	=	325.3	*acres*
A_D	=	86.3	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	11.28	acre-ft
80% of Retention Volume	=	9.02	acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S609

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	261.1	97.6
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	45%	50%

A_T	=	358.6	acres
A_D	=	97.6	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	**12.75**	**acre-ft**
80% of Retention Volume	=	**10.20**	**acre-ft**

S610

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	188.3	197.9
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	29%	41%

A_T	=	386.2	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

S611

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	358.7	5.7
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	37%	16%

A_T	=	364.4	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

S612

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	148.6	368.9
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	32%	40%

A_T	=	517.4	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S613

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	509.5	640.3
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	50%	41%

A_T	=	1149.8	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S614

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	457.4	233.3
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	37%	38%

A_T	=	690.7	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S615

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	675.0
C-value	...	0.50
Area with <= 10% Slope (%)	...	22%

A_T	=	675.0	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S616

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	203.2	120.3
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	34%	52%

A_T	=	323.4	acres
A_D	=	120.3	acres
C_w	=	0.56	
Retention Volume (acre-feetf)	=	15.71	acre-ft
80% of Retention Volume	=	12.57	acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S617

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	241.6	190.7
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	52%	43%

A_T	=	432.2	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

S618

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	595.5	17.7
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	31%	34%

A_T	=	613.2	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

S619

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	529.0
C-value	...	0.50
Area with <= 10% Slope (%)	...	34%

A_T	=	529.0	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

S620

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	284.2
C-value	...	0.50
Area with <= 10% Slope (%)	...	14%

A_T	=	284.2	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	**0.00**	**acre-ft**
80% of Retention Volume	=	**0.00**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S621

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	359.4	231.3
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	25%	25%

A_T	=	590.8	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S622

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	556.6	17.5
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	33%	27%

A_T	=	574.1	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S700

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	50.6	339.7
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	32%	33%

A_T	=	390.3	acres
A_D	=	0.0	acres
C_w	=	0.00	
Retention Volume (acre-feetf)	=	0.00	acre-ft
80% of Retention Volume	=	0.00	acre-ft

S701

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	2.3	139.6	319.1
C-value	...	0.88	0.50	0.56
Area with <= 10% Slope (%)	...	88%	38%	41%

A_T	=	460.9	acres
A_D	=	2.3	acres
C_w	=	0.88	
Retention Volume (acre-feetf)	=	0.47	acre-ft
80% of Retention Volume	=	0.37	acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S702

Land Use Class	...	COMM	OPEN	VLDR
Natural or Developed	...	D	N	D
Sub-Area (acres)	...	38.2	28.9	97.5
C-value	...	0.88	0.50	0.56
Area with <= 10% Slope (%)	...	69%	34%	65%

A_T =	**164.5**	**acres**
A_D =	**135.6**	**acres**
C_w =	**0.65**	
Retention Volume (acre-feetf) =	**20.57**	**acre-ft**
80% of Retention Volume =	**16.46**	**acre-ft**

S703

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	115.7	48.9
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	37%	71%

A_T =	**164.6**	**acres**
A_D =	**48.9**	**acres**
C_w =	**0.56**	
Retention Volume (acre-feetf) =	**6.39**	**acre-ft**
80% of Retention Volume =	**5.12**	**acre-ft**

S704

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	104.6	156.6
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	10%	40%

A_T =	**261.2**	**acres**
A_D =	**0.0**	**acres**
C_w =	**0.00**	
Retention Volume (acre-feetf) =	**0.00**	**acre-ft**
80% of Retention Volume =	**0.00**	**acre-ft**

S705

Land Use Class	...	H20	MDR	MFR2	OPEN	VLDR
Natural or Developed	...	N	D	D	N	D
Sub-Area (acres)	...	22.9	181.3	118.7	13.6	146.2
C-value	...	1.00	0.69	0.80	0.50	0.56
Area with <= 10% Slope (%)	...	27%	40%	40%	20%	13%

A_T =	**482.7**	**acres**
A_D =	**0.0**	**acres**
C_w =	**0.00**	
Retention Volume (acre-feetf) =	**0.00**	**acre-ft**
80% of Retention Volume =	**0.00**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S705AF

Land Use Class	...	H20	MFR2	OPEN	VLDR
Natural or Developed	...	N	D	N	D
Sub-Area (acres)	...	6.2	4.2	59.6	46.0
C-value	...	1.00	0.80	0.50	0.56
Area with <= 10% Slope (%)	...	100%	100%	100%	100%

A_T = 116.0 acres
A_D = 50.2 acres
C_w = 0.58
Retention Volume (acre-feetf) = 6.80 acre-ft
80% of Retention Volume = 5.44 acre-ft

S706

Land Use Class	...	COMM	MDR	MFR2	MFR3	VLDR
Natural or Developed	...	D	D	D	D	D
Sub-Area (acres)	...	6.0	146.7	70.1	133.0	100.5
C-value	...	0.88	0.69	0.80	0.81	0.56
Area with <= 10% Slope (%)	...	100%	56%	69%	89%	25%

A_T = *456.3 acres*
A_D = 355.7 acres
C_w = 0.76
Retention Volume (acre-feetf) = 63.06 acre-ft
80% of Retention Volume = 50.45 acre-ft

S707

Land Use Class	...	COMM	IND	MDR	MFR3	OPEN	VLDR
Natural or Developed	...	D	D	D	D	N	D
Sub-Area (acres)	...	22.1	152.6	56.0	156.7	3.6	17.5
C-value	...	0.88	0.88	0.69	0.81	0.50	0.56
Area with <= 10% Slope (%)	...	100%	72%	41%	51%	98%	32%

A_T = 408.5 acres
A_D = 331.4 acres
C_w = 0.85
Retention Volume (acre-feetf) = 65.50 acre-ft
80% of Retention Volume = 52.40 acre-ft

S708

Land Use Class	...	H20	LDR	OPEN	VLDR
Natural or Developed	...	N	D	N	D
Sub-Area (acres)	...	0.3	129.7	55.3	266.8
C-value	...	1.00	0.60	0.50	0.56
Area with <= 10% Slope (%)	...	0%	94%	54%	54%

A_T = 452.1 acres
A_D = 396.6 acres
C_w = 0.57
Retention Volume (acre-feetf) = 53.03 acre-ft
80% of Retention Volume = *42.42 acre-ft*

Table H-1

Retention volume calculations for each HEC-1 subbasin

S709

Land Use Class	...	H20	LDR	OPEN	VLDR
Natural or Developed	...	N	D	N	D
Sub-Area (acres)	...	5.8	100.8	76.5	98.9
C-value	...	1.00	0.60	0.50	0.56
Area with <= 10% Slope (%)	...	27%	86%	90%	100%

A_T =	282.0	acres
A_D =	199.7	acres
C_w =	0.58	
Retention Volume (acre-feetf) =	**27.03**	**acre-ft**
80% of Retention Volume =	**21.62**	**acre-ft**

S710

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	N	D	N
Sub-Area (acres)	...	3.1	42.1	26.2
C-value	...	1.00	0.60	0.50
Area with <= 10% Slope (%)	...	72%	52%	99%

A_T =	71.4	acres
A_D =	42.1	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	**5.90**	**acre-ft**
80% of Retention Volume =	**4.72**	**acre-ft**

S711

Land Use Class	...	H20	LDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	8.5	93.4
C-value	...	1.00	0.60
Area with <= 10% Slope (%)	...	89%	99%

A_T =	101.8	acres
A_D =	93.4	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	**13.07**	**acre-ft**
80% of Retention Volume =	**10.46**	**acre-ft**

S712

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	N	D	N
Sub-Area (acres)	...	2.7	37.4	3.4
C-value	...	1.00	0.60	0.50
Area with <= 10% Slope (%)	...	90%	88%	99%

A_T =	43.5	acres
A_D =	37.4	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	**5.24**	**acre-ft**
80% of Retention Volume =	**4.19**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S713

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	N	D	N
Sub-Area (acres)	...	4.1	25.5	39.1
C-value	...	1.00	0.60	0.50
Area with <= 10% Slope (%)	...	76%	58%	97%

A_T =	68.7	acres
A_D =	25.5	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	**3.57**	**acre-ft**
80% of Retention Volume =	**2.85**	**acre-ft**

S714

Land Use Class	...	H20	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	0.0	38.3
C-value	...	1.00	0.50
Area with <= 10% Slope (%)	...	0%	93%

A_T =	38.3	acres
A_D =	0.0	acres
C_w =	0.00	
Retention Volume (acre-feetf) =	**0.00**	**acre-ft**
80% of Retention Volume =	**0.00**	**acre-ft**

S715

Land Use Class	...	LDR	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	37.0	103.5
C-value	...	0.60	0.50
Area with <= 10% Slope (%)	...	100%	99%

A_T =	140.5	acres
A_D =	37.0	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	**5.18**	**acre-ft**
80% of Retention Volume =	**4.15**	**acre-ft**

S716

Land Use Class	...	COMM	H20	IND	LDR	MDR	MFR2	OPEN
Natural or Developed	...	D	N	D	D	D	D	N
Sub-Area (acres)	...	25.3	10.7	30.4	345.2	231.3	1.2	77.9
C-value	...	0.88	1.00	0.88	0.60	0.69	0.80	0.50
Area with <= 10% Slope (%)	...	100%	100%	99%	96%	100%	100%	97%

A_T =	722.0	acres
A_D =	633.4	acres
C_w =	0.66	
Retention Volume (acre-feetf) =	**97.24**	**acre-ft**
80% of Retention Volume =	**77.79**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S717

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	N	D	N
Sub-Area (acres)	...	8.1	72.0	103.0
C-value	...	1.00	0.60	0.50
Area with <= 10% Slope (%)	...	99%	98%	98%

A_T =	183.0	acres
A_D =	72.0	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	**10.08**	**acre-ft**
80% of Retention Volume =	**8.06**	**acre-ft**

S718

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	N	D	N
Sub-Area (acres)	...	0.2	118.2	164.5
C-value	...	1.00	0.60	0.50
Area with <= 10% Slope (%)	...	96%	100%	100%

A_T =	282.9	acres
A_D =	118.2	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	**16.54**	**acre-ft**
80% of Retention Volume =	**13.23**	**acre-ft**

S719

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	N	D	N
Sub-Area (acres)	...	0.1	76.9	21.4
C-value	...	1.00	0.60	0.50
Area with <= 10% Slope (%)	...	0%	99%	98%

A_T =	98.4	acres
A_D =	76.9	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	**10.76**	**acre-ft**
80% of Retention Volume =	**8.61**	**acre-ft**

S720

Land Use Class	...	H20	IND	LDR	OPEN
Natural or Developed	...	N	D	D	N
Sub-Area (acres)	...	12.2	4.9	199.9	19.6
C-value	...	1.00	0.88	0.60	0.50
Area with <= 10% Slope (%)	...	95%	85%	97%	99%

A_T =	236.6	acres
A_D =	204.8	acres
C_w =	0.61	
Retention Volume (acre-feetf) =	**29.00**	**acre-ft**
80% of Retention Volume =	**23.20**	**acre-ft**

Table H-1

Retention volume calculations for each HEC-1 subbasin

S721

Land Use Class ...	COMM	H20	IND	MFR1	MFR2
Natural or Developed ...	D	N	D	D	D
Sub-Area (acres) ...	1.0	12.0	44.9	70.2	86.0
C-value ...	0.88	1.00	0.88	0.75	0.80
Area with <= 10% Slope (%) ...	0%	50%	98%	85%	92%

A_T = 214.2 acres
A_D = 201.2 acres
C_w = 0.80
Retention Volume (acre-feetf) = 37.57 acre-ft
80% of Retention Volume = 30.06 acre-ft

S722

Land Use Class ...	H20	IND	LDR	OPEN
Natural or Developed ...	N	D	D	N
Sub-Area (acres) ...	14.4	124.9	379.5	92.6
C-value ...	1.00	0.88	0.60	0.50
Area with <= 10% Slope (%) ...	71%	96%	96%	96%

A_T = 611.4 acres
A_D = 504.4 acres
C_w = 0.67
Retention Volume (acre-feetf) = 78.77 acre-ft
80% of Retention Volume = 63.02 acre-ft

S723

Land Use Class ...	IND	OPEN
Natural or Developed ...	D	N
Sub-Area (acres) ...	27.3	27.2
C-value ...	0.88	0.50
Area with <= 10% Slope (%) ...	100%	96%

A_T = 54.5 acres
A_D = 27.3 acres
C_w = 0.88
Retention Volume (acre-feetf) = 5.61 acre-ft
80% of Retention Volume = 4.49 acre-ft

S724

Land Use Class ...	H20	IND	LDR	OPEN
Natural or Developed ...	N	D	D	N
Sub-Area (acres) ...	6.2	582.7	41.8	109.2
C-value ...	1.00	0.88	0.60	0.50
Area with <= 10% Slope (%) ...	79%	94%	70%	91%

A_T = 739.8 acres
A_D = 624.4 acres
C_w = 0.86
Retention Volume (acre-feetf) = 125.49 acre-ft
80% of Retention Volume = 100.39 acre-ft

Table H-1

Retention volume calculations for each HEC-1 subbasin

S724

Land Use Class	...	H20	IND	LDR	OPEN
Natural or Developed	...	N	D	D	N
Sub-Area (acres)	...	6.2	582.7	41.8	109.2
C-value	...	1.00	0.88	0.60	0.50
Area with <= 10% Slope (%)	...	79%	94%	70%	91%

A_T = 739.8 acres
A_D = 624.4 acres
C_w = 0.86
Retention Volume (acre-feetf) = 125.49 acre-ft
80% of Retention Volume = 100.39 acre-ft

S726

Land Use Class	...	COMM	LDR	MFR2	OPEN
Natural or Developed	...	D	D	D	N
Sub-Area (acres)	...	23.6	103.8	37.9	48.5
C-value	...	0.88	0.60	0.80	0.50
Area with <= 10% Slope (%)	...	96%	58%	86%	5%

A_T = 213.8 acres
A_D = 165.3 acres
C_w = 0.69
Retention Volume (acre-feetf) = 26.46 acre-ft
80% of Retention Volume = 21.17 acre-ft

S727

Land Use Class	...	COMM	LDR	MFR2	MFR3	OPEN
Natural or Developed	...	D	D	D	D	N
Sub-Area (acres)	...	123.9	41.1	45.7	10.4	18.9
C-value	...	0.88	0.60	0.80	0.81	0.50
Area with <= 10% Slope (%)	...	93%	92%	100%	98%	92%

A_T = 240.0 acres
A_D = 221.1 acres
C_w = 0.81
Retention Volume (acre-feetf) = 41.70 acre-ft
80% of Retention Volume = 33.36 acre-ft

S728

Land Use Class	...	COMM	MDR	MFR3	OPEN
Natural or Developed	...	D	D	D	N
Sub-Area (acres)	...	96.2	4.7	6.3	68.4
C-value	...	0.88	0.69	0.81	0.50
Area with <= 10% Slope (%)	...	97%	100%	96%	99%

A_T = 175.5 acres
A_D = 107.1 acres
C_w = 0.87
Retention Volume (acre-feetf) = 21.69 acre-ft
80% of Retention Volume = 17.35 acre-ft

Table H-2

Retention volume calculations for each Rational Method subbasin

R100

Land Use Class	...	OPEN
Natural or Developed	...	N
Sub-Area (acres)	...	61.4
C-value	...	0.50
Area with <= 10% Slope (%)	...	23%

A_T	=	61.4 acres
A_D	=	0.0 acres
C_w	=	0.00
Retention Volume (acre-feetf)	=	0.00 acre-ft
80% of Retention Volume	=	0.00 acre-ft

R101

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	52.4	1.5
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	23%	30%

A_T	=	53.9 acres
A_D	=	0.0 acres
C_w	=	0.00
Retention Volume (acre-feetf)	=	0.00 acre-ft
80% of Retention Volume	=	0.00 acre-ft

R102

Land Use Class	...	OPEN	VLDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	25.0	39.1
C-value	...	0.50	0.56
Area with <= 10% Slope (%)	...	12%	26%

A_T	=	64.0 acres
A_D	=	0.0 acres
C_w	=	0.00
Retention Volume (acre-feetf)	=	0.00 acre-ft
80% of Retention Volume	=	0.00 acre-ft

R103

Land Use Class	...	H20	MFR2	VLDR
Natural or Developed	...	N	D	D
Sub-Area (acres)	...	6.2	73.1	35.0
C-value	...	1.00	0.80	0.56
Area with <= 10% Slope (%)	...	100%	80%	51%

A_T	=	114.3 acres
A_D	=	108.1 acres
C_w	=	0.72
Retention Volume (acre-feetf)	=	18.21 acre-ft
80% of Retention Volume	=	14.57 acre-ft

Table H-2

Retention volume calculations for each Rational Method subbasin

R104

Land Use Class	...	MDR	MFR2	MFR3
Natural or Developed	...	D	D	D
Sub-Area (acres)	...	20.7	50.4	15.0
C-value	...	0.69	0.80	0.81
Area with <= 10% Slope (%)	...	100%	82%	93%

A_T =	86.1	acres
A_D =	86.1	acres
C_w =	0.78	
Retention Volume (acre-feetf) =	15.58	acre-ft
80% of Retention Volume =	12.47	acre-ft

R105

Land Use Class	...	COMM	IND
Natural or Developed	...	D	D
Sub-Area (acres)	...	0.1	25.9
C-value	...	0.88	0.88
Area with <= 10% Slope (%)	...	0%	72%

A_T =	26.0	acres
A_D =	25.9	acres
C_w =	0.88	
Retention Volume (acre-feetf) =	5.31	acre-ft
80% of Retention Volume =	4.25	acre-ft

R106

Land Use Class	...	IND	LDR	OPEN	VLDR
Natural or Developed	...	D	D	N	D
Sub-Area (acres)	...	17.0	0.9	21.2	44.9
C-value	...	0.88	0.60	0.50	0.56
Area with <= 10% Slope (%)	...	99%	52%	82%	93%

A_T =	84.0	acres
A_D =	62.8	acres
C_w =	0.65	
Retention Volume (acre-feetf) =	9.48	acre-ft
80% of Retention Volume =	7.58	acre-ft

R107

Land Use Class	...	H20	LDR	MDR
Natural or Developed	...	N	D	D
Sub-Area (acres)	...	3.5	181.2	7.0
C-value	...	1.00	0.60	0.69
Area with <= 10% Slope (%)	...	70%	100%	95%

A_T =	191.7	acres
A_D =	188.2	acres
C_w =	0.60	
Retention Volume (acre-feetf) =	26.50	acre-ft
80% of Retention Volume =	21.20	acre-ft

Table H-2

Retention volume calculations for each Rational Method subbasin

R108

Land Use Class	...	H20	LDR	MFR2	OPEN	VLDR
Natural or Developed	...	N	D	D	N	D
Sub-Area (acres)	...	20.7	1.1	22.0	90.8	61.8
C-value	...	1.00	0.60	0.80	0.50	0.56
Area with <= 10% Slope (%)	...	99%	78%	93%	97%	97%

A_T	=	196.5	acres
A_D	=	85.0	acres
C_w	=	0.62	
Retention Volume (acre-feetf)	=	12.35	acre-ft
80% of Retention Volume	=	9.88	acre-ft

R109

Land Use Class	...	COMM	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	57.8	26.6
C-value	...	0.88	0.50
Area with <= 10% Slope (%)	...	100%	100%

A_T	=	84.4	acres
A_D	=	57.8	acres
C_w	=	0.88	
Retention Volume (acre-feetf)	=	11.88	acre-ft
80% of Retention Volume	=	9.50	acre-ft

R110

Land Use Class	...	COMM	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	1.0	26.8
C-value	...	0.88	0.50
Area with <= 10% Slope (%)	...	100%	100%

A_T	=	27.7	acres
A_D	=	1.0	acres
C_w	=	0.88	
Retention Volume (acre-feetf)	=	0.20	acre-ft
80% of Retention Volume	=	0.16	acre-ft

R111

Land Use Class	...	COMM	IND	MDR	OPEN
Natural or Developed	...	D	D	D	N
Sub-Area (acres)	...	66.5	8.9	43.9	1.1
C-value	...	0.88	0.88	0.69	0.50
Area with <= 10% Slope (%)	...	100%	98%	97%	100%

A_T	=	120.3	acres
A_D	=	119.3	acres
C_w	=	0.81	
Retention Volume (acre-feetf)	=	22.54	acre-ft
80% of Retention Volume	=	18.04	acre-ft

Table H-2

Retention volume calculations for each Rational Method subbasin

R112

Land Use Class	...	COMM	IND	MDR
Natural or Developed	...	D	D	D
Sub-Area (acres)	...	1.2	1.2	56.5
C-value	...	0.88	0.88	0.69
Area with <= 10% Slope (%)	...	*100%*	*91%*	*99%*

A_T =	**58.9**	**acres**
A_D =	**58.9**	**acres**
C_w =	**0.70**	
Retention Volume (acre-feetf) =	**9.58**	**acre-ft**
80% of Retention Volume =	**7.67**	**acre-ft**

R113

Land Use Class	...	MDR
Natural or Developed	...	D
Sub-Area (acres)	...	24.5
C-value	...	0.69
Area with <= 10% Slope (%)	...	100%

A_T =	**24.5**	**acres**
A_D =	**24.5**	**acres**
C_w =	**0.69**	
Retention Volume (acre-feetf) =	**3.94**	**acre-ft**
80% of Retention Volume =	**3.15**	**acre-ft**

R114

Land Use Class	...	MDR
Natural or Developed	...	D
Sub-Area (acres)	...	62.0
C-value	...	0.69
Area with <= 10% Slope (%)	...	*99%*

A_T =	**62.0**	**acres**
A_D =	**62.0**	**acres**
C_w =	**0.69**	
Retention Volume (acre-feetf) =	**9.99**	**acre-ft**
80% of Retention Volume =	**7.99**	**acre-ft**

R115

Land Use Class	...	MDR
Natural or Developed	...	D
Sub-Area (acres)	...	43.4
C-value	...	0.69
Area with <= 10% Slope (%)	...	100%

A_T =	**43.4**	**acres**
A_D =	**43.4**	**acres**
C_w =	**0.69**	
Retention Volume (acre-feetf) =	**6.99**	**acre-ft**
80% of Retention Volume =	**5.60**	**acre-ft**

Table H-2

Retention volume calculations for each Rational Method subbasin

R116

Land Use Class	...	H20	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	6.4	30.6
C-value	...	1.00	0.50
Area with <= 10% Slope (%)	...	45%	52%

A_T =	37.0	acres
A_D =	0.0	acres
C_w =	0.00	
Retention Volume (acre-feetf) =	**0.00**	**acre-ft**
80% of Retention Volume =	**0.00**	**acre-ft**

R117

Land Use Class	...	H20	OPEN	VLDR
Natural or Developed	...	N	N	D
Sub-Area (acres)	...	3.7	12.3	0.9
C-value	...	1.00	0.50	0.56
Area with <= 10% Slope (%)	...	36%	69%	77%

A_T =	16.9	acres
A_D =	0.9	acres
C_w =	0.56	
Retention Volume (acre-feetf) =	**0.11**	**acre-ft**
80% of Retention Volume =	**0.09**	**acre-ft**

R118

Land Use Class	...	H20	OPEN
Natural or Developed	...	N	N
Sub-Area (acres)	...	1.3	25.1
C-value	...	1.00	0.50
Area with <= 10% Slope (%)	...	33%	50%

A_T =	26.4	acres
A_D =	0.0	acres
C_w =	0.00	
Retention Volume (acre-feetf) =	**0.00**	**acre-ft**
80% of Retention Volume =	**0.00**	**acre-ft**

R119

Land Use Class	...	H20	LDR	OPEN
Natural or Developed	...	N	D	N
Sub-Area (acres)	...	3.4	11.8	15.7
C-value	...	1.00	0.60	0.50
Area with <= 10% Slope (%)	...	100%	45%	72%

A_T =	30.9	acres
A_D =	0.0	acres
C_w =	0.00	
Retention Volume (acre-feetf) =	**0.00**	**acre-ft**
80% of Retention Volume =	**0.00**	**acre-ft**

Table H-2

Retention volume calculations for each Rational Method subbasin

R120

Land Use Class	...	H20	LDR	MDR
Natural or Developed	...	*N*	*D*	*D*
Sub-Area (acres)	...	2.4	47.9	8.3
C-value	...	1.00	0.60	0.69
Area with <= 10% Slope (%)	...	73%	100%	100%

A_T	=	58.6	acres
A_D	=	56.2	acres
C_w	=	0.61	
Retention Volume (acre-feetf)	=	8.04	acre-ft
80% of Retention Volume	=	6.43	acre-ft

R121

Land Use Class	...	H20	LDR
Natural or Developed	...	N	D
Sub-Area (acres)	...	4.6	83.2
C-value	...	1.00	0.60
Area with <= 10% Slope (%)	...	100%	97%

A_T	=	87.9	acres
A_D	=	83.2	acres
C_w	=	0.60	
Retention Volume (acre-feetf)	=	11.65	acre-ft
80% of Retention Volume	=	9.32	acre-ft

R122

Land Use Class	...	LDR	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	0.3	70.8
C-value	...	0.60	0.50
Area with <= 10% Slope (%)	...	100%	99%

A_T	=	71.1	acres
A_D	=	0.3	acres
C_w	=	0.60	
Retention Volume (acre-feetf)	=	0.04	acre-ft
80% of Retention Volume	=	0.03	acre-ft

R123

Land Use Class	...	IND	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	19.6	11.4
C-value	...	0.88	0.50
Area with <= 10% Slope (%)	...	93%	95%

A_T	=	31.0	acres
A_D	=	19.6	acres
C_w	=	0.88	
Retention Volume (acre-feetf)	=	4.02	acre-ft
80% of Retention Volume	=	3.22	acre-ft

Table H-2

Retention volume calculations for each Rational Method subbasin

R124

Land Use Class	...	IND	MFR2	OPEN
Natural or Developed	...	D	D	N
Sub-Area (acres)	...	32.8	1.7	2.8
C-value	...	0.88	0.80	0.50
Area with <= 10% Slope (%)	...	99%	100%	63%

A_T	=	37.3	acres
A_D	=	34.5	acres
C_w	=	0.88	
Retention Volume (acre-feetf)	**=**	**7.06**	**acre-ft**
80% of Retention Volume	**=**	**5.65**	**acre-ft**

R125

Land Use Class	...	LDR	OPEN
Natural or Developed	...	D	N
Sub-Area (acres)	...	41.5	6.0
C-value	...	0.60	0.50
Area with <= 10% Slope (%)	...	89%	59%

A_T	=	47.5	acres
A_D	=	41.5	acres
C_w	=	0.60	
Retention Volume (acre-feetf)	**=**	**5.81**	**acre-ft**
80% of Retention Volume	**=**	**4.65**	**acre-ft**

APPENDIX I: HEC-1 MODEL OUTPUT

Existing Condition 100-Year, 6-Hour HEC-1 Model Output

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   09AUG01  TIME  14:57:34  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX          XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.......1.......2.......3.....4.......5.......6.......7.......8.......9......10

   1          ID     N. Peoria Area Drainage Master Plan                File: EX100-6.IH1
   2          ID        For Maricopa County FCD 99-45                Original:05-04-00     MCG
   3          ID        By Stantec Consulting, Inc. P82000146         Revised:02-01-01     MMZ
   4          ID
   5          ID     The N. Peoria Area ADMP study limits consists of several small tributary
   6          ID     watersheds to the Agua Fria River.  This model is for the existing
   7          ID     condition 100-year, 6-hour storm event.  A companion model is also created
   8          ID     for the existing condition 100-year, 24-hour storm event.  Both models
   9          ID     100-year, 6- and 24-hour) should be referenced for the determination of
  10          ID     storm event produces the highest peak discharge.
  11          ID
  12          ID     Modeling of the watersheds is performed using the following:
  13          ID        100-year, 6-hour rainfall with FCDMC design rainfall distributions
  14          ID        Green & Ampt Loss Rate Method
  15          ID        NMIN = 2 minutes
  16          ID        Clark Unit Hydrograph
  17          ID        Modified Puls channel storage routing
  18          ID
  19          ID     Watershed delineation performed using USGS 7.5 Minute Series Quadrangles
              *
              *DIAGRAM
              *
  20          IT       2                    1000
  21          IO       5
  22          IN      15
              *
              *       Depth-area reduction factors taken from Table 2.2 of FCDMC Drainage
              *       Design Manual
              *       6-hr rainfall distributions per Table 2.4 and Figure 2.17 of the Manual
              *
  23          JD    3.35    0.01
  24          PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
  25          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
  26          PC   0.962   0.972   0.983   0.991   1.000
  27          JD    3.33    0.50
  28          JD    3.28    2.80
  29          PC   0.000   0.009   0.016   0.025   0.034   0.042   0.051   0.059   0.067   0.076
  30          PC   0.087   0.100   0.120   0.163   0.252   0.451   0.694   0.837   0.900   0.938
  31          PC   0.950   0.963   0.975   0.988   1.000
  32          JD    3.09    16.0
  33          PC   0.000   0.015   0.020   0.030   0.048   0.063   0.076   0.090   0.105   0.119
  34          PC   0.135   0.152   0.175   0.222   0.304   0.472   0.670   0.796   0.868   0.912
  35          PC   0.946   0.960   0.973   0.987   1.000
  36          JD    2.71    90.0
  37          PC   0.000   0.021   0.035   0.051   0.071   0.087   0.105   0.125   0.143   0.160
```

```
 38          PC   0.179   0.201   0.232   0.281   0.364   0.500   0.658   0.773   0.841   0.888
 39          PC   0.927   0.945   0.964   0.982   1.000
             *
             *  ***********************************************************************
             *                Begin Major Basin 100 (Unnamed Wash 1)
             *  ***********************************************************************
             *
1                                          HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 40          KK    S100
 41          KM   Sub-Basin   S100
 42          KM
 43          KM      The Clark Unit Hydrograph is used for this basin.
 44          KM          The Natural time-area relation is used for this basin.
 45          KM
 46          KM      Time of Concentration for this sub-basin is based on the following:
 47          KM          6-Hour Rainfall, Pattern No.  1.08
 48          KM          An rainfall areal reduction factor of 0.993
 49          KM
 50          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 51          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 52          KM   .43 .43 .43 .14 .10 .09 .04 .04 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
 53          KM
 54          KM          L=   1.811 miles, S=  149 feet/mile, Kb= .09
 55          KM
 56          BA   0.574
 57          LG    0.19    0.35    4.65    0.34   25.00
 58          UC   0.646   0.503
 59          UA       0       3       5       8      12      20      43      75      90      96
 60          UA     100
             *

 61          KK  100102
 62          KM        Normal depth route from S100 to C102R
 63          KM        Source: Field Reconnaissance
 64          RS       7    FLOW      -1
 65          RC     .05    .039     .06    6535   .0138
 66          RX    1000  1012.7  1037.5  1047.7    1060  1072.4  1087.8  1098.8
 67          RY   104.8   102.3   102.3   100.1     100   102.7   103.5   106.7
             *

 68          KK    S101
 69          KM   Sub-Basin   S101
 70          KM
 71          KM      The Clark Unit Hydrograph is used for this basin.
 72          KM          The Natural time-area relation is used for this basin.
 73          KM
 74          KM      Time of Concentration for this sub-basin is based on the following:
 75          KM          6-Hour Rainfall, Pattern No.  1.13
 76          KM          An rainfall areal reduction factor of 0.992
 77          KM
 78          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 79          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 80          KM   .42 .41 .41 .13 .10 .09 .05 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
 81          KM
 82          KM          L=   1.544 miles, S=  155 feet/mile, Kb= .08
 83          KM
 84          BA   0.631
 85          LG    0.26    0.37    5.30    0.25   15.00
 86          UC   0.521   0.330
 87          UA       0       3       5       8      12      20      43      75      90      96
 88          UA     100
             *
1                                          HEC-1 INPUT                                          PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 89          KK   C102R
 90          KM        Combine routed hydrograph from S100 w/runoff from S101
 91          HC       2
             *

 92          KK    S102
 93          KM   Sub-Basin   S102
 94          KM
 95          KM      The Clark Unit Hydrograph is used for this basin.
 96          KM          The Natural time-area relation is used for this basin.
```

```
 97          KM
 98          KM      Time of Concentration for this sub-basin is based on the following:
 99          KM          6-Hour Rainfall, Pattern No.  1.00
100          KM          An rainfall areal reduction factor of 0.994
101          KM
102          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
103          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
104          KM   .45 .45 .44 .13 .10 .09 .04 .04 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
105          KM
106          KM          L=   1.487 miles, S=  108 feet/mile, Kb= .11
107          KM
108          BA   0.449
109          LG    0.15    0.35    4.45    0.39   30.00
110          UC   0.746   0.579
111          UA       0       3       5       8      12      20      43      75      90      96
112          UA     100
             *

113          KK  101102
114          KM        Normal depth route from S102 to C102
115          KM        Source: Field Reconnaissance
116          RS       6    FLOW      -1
117          RC    .045     .04    .045    7254  0.0138
118          RX     100     106     114     120     134     143     155     164
119          RY     110     107     103     100     100     103     107     110
             *

120          KK    S103
121          KM   Sub-Basin   S103
122          KM
123          KM      The Clark Unit Hydrograph is used for this basin.
124          KM          The Natural time-area relation is used for this basin.
125          KM
126          KM      Time of Concentration for this sub-basin is based on the following:
127          KM          6-Hour Rainfall, Pattern No.  1.00
128          KM          An rainfall areal reduction factor of 0.995
129          KM
130          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
131          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
132          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
133          KM
134          KM          L=   1.321 miles, S=   76 feet/mile, Kb= .11
135          KM
136          BA   0.395
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

137          LG    0.24    0.38    5.60    0.22   17.00
138          UC   0.796   0.609
139          UA       0       3       5       8      12      20      43      75      90      96
140          UA     100
             *

141          KK   C102L
142          KM        Combine routed hydrgraph from S102 with runoff from S103
143          HC       2
             *

144          KK    C102
145          KM        Combine hydrgraphs from C102L and C102R
146          HC       2
             *

147          KK  102103
148          KM        Normal depth route from C102 to C103R
149          KM        Source: Field Reconnaissance
150          RS       7    FLOW      -1
151          RC     .05    .039     .06    8068  0.0124
152          RX    1000    1029  1057.9    1072  1089.6  1099.4  1109.9  1173.1
153          RY     106   103.9   101.8   100.3     100   102.2   103.3   110.0
             *

154          KK    S104
155          KM   Sub-Basin   S104
156          KM
157          KM      The Clark Unit Hydrograph is used for this basin.
158          KM          The Natural time-area relation is used for this basin.
159          KM
160          KM      Time of Concentration for this sub-basin is based on the following:
161          KM          6-Hour Rainfall, Pattern No.  1.34
```

```
162          KM          An rainfall areal reduction factor of 0.988
163          KM
164          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
165          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
166          KM   .37 .37 .36 .14 .12 .11 .06 .06 .06 .01 .01 .01 .01 .01 .00 .00 .00 .00
167          KM
168          KM          L=   1.624 miles, S=  111 feet/mile, Kb= .10
169          KM
170          BA   0.900
171          LG    0.22    0.38    5.60    0.22   13.00
172          UC   0.754   0.423
173          UA       0       3       5       8      12      20      43      75      90      96
174          UA     100
             *

175          KK   C103R
176          KM        Combine routed hydrograph from 102103 w/runoff from S104
177          HC       2
             *
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

178          KK    S105
179          KM   Sub-Basin   S105
180          KM
181          KM      The Clark Unit Hydrograph is used for this basin.
182          KM          The Natural time-area relation is used for this basin.
183          KM
184          KM      Time of Concentration for this sub-basin is based on the following:
185          KM          6-Hour Rainfall, Pattern No.  1.10
186          KM          An rainfall areal reduction factor of 0.992
187          KM
188          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
189          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
190          KM   .43 .43 .42 .14 .10 .09 .05 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
191          KM
192          KM          L=   1.976 miles, S=   96 feet/mile, Kb= .10
193          KM
194          BA   0.594
195          LG    0.22    0.38    5.60    0.22   13.00
196          UC   0.917   0.780
197          UA       0       3       5       8      12      20      43      75      90      96
198          UA     100
             *

199          KK    C103
200          KM        Combine hydrograph from C103R w/runoff from S105
201          HC       2
             *

202          KK  103104
203          KM        Normal depth route from C103 to C104
204          KM        Source: Field Reconnaissance
205          RS       4    FLOW      -1
206          RC    .053    .053    .053    8625  0.0162
207          RX    1000  1001.5    1003    1011    1033    1047  1050.6  1067.2
208          RY   107.4   106.4   105.4     100   100.5   104.4   105.4   110.0
             *

209          KK    S106
210          KM   Sub-Basin   S106
211          KM
212          KM      The Clark Unit Hydrograph is used for this basin.
213          KM          The Natural time-area relation is used for this basin.
214          KM
215          KM      Time of Concentration for this sub-basin is based on the following:
216          KM          6-Hour Rainfall, Pattern No.  1.07
217          KM          An rainfall areal reduction factor of 0.993
218          KM
219          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
220          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
221          KM   .43 .42 .42 .13 .09 .08 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
222          KM
223          KM          L=   1.770 miles, S=  158 feet/mile, Kb= .10
224          KM
225          BA   0.567
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
226          LG    0.19    0.37    5.20    0.26    7.00
227          UC   0.679   0.525
228          UA       0       3       5       8      12      20      43      75      90      96
229          UA     100
             *

230          KK    C104
231          KM        Combine routed hydrograph 103104 w/runoff from S106
232          HC       2
             *

233          KK  104105
234          KM        Normal depth route from C104 to C105
235          KM        Source: Field Reconnaissance
236          RS       6    FLOW      -1
237          RC    .053    .053    .053    6956  0.0115
238          RX    1000  1002.3  1004.6  1019.3  1041.1  1069.4  1111.7  1128.8
239          RY     108   107.5     107   100.2     100   103.4   102.3   107.3
             *

240          KK    S107
241          KM   Sub-Basin   S107
242          KM
243          KM      The Clark Unit Hydrograph is used for this basin.
244          KM          The Natural time-area relation is used for this basin.
245          KM
246          KM      Time of Concentration for this sub-basin is based on the following:
247          KM          6-Hour Rainfall, Pattern No.  1.36
248          KM          An rainfall areal reduction factor of 0.988
249          KM
250          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
251          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
252          KM   .35 .35 .34 .13 .10 .09 .05 .05 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
253          KM
254          KM          L=   2.593 miles, S=  204 feet/mile, Kb= .10
255          KM
256          BA   0.936
257          LG    0.15    0.35    4.90    0.30    0.00
258          UC   0.858   0.695
259          UA       0       3       5       8      12      20      43      75      90      96
260          UA     100
             *

261          KK   C105L
262          KM        Combine routed hydrograph from 104105 w/runoff from S107
263          HC       2
             *
             *  ***************************************************************************
             *                Begin Major Basin 200 (Unnamed Wash 2)
             *  ***************************************************************************
             *
1                                          HEC-1 INPUT                                          PAGE  7

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

264          KK    S200
265          KM   Sub-Basin   S200
266          KM
267          KM      The Clark Unit Hydrograph is used for this basin.
268          KM          The Natural time-area relation is used for this basin.
269          KM
270          KM      Time of Concentration for this sub-basin is based on the following:
271          KM          6-Hour Rainfall, Pattern No.  1.38
272          KM          An rainfall areal reduction factor of 0.988
273          KM
274          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
275          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
276          KM   .36 .35 .35 .14 .11 .10 .06 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
277          KM
278          KM          L=   1.665 miles, S=  192 feet/mile, Kb= .10
279          KM
280          BA   0.959
281          LG    0.25    0.35    4.25    0.44   35.00
282          UC   0.621   0.336
283          UA       0       3       5       8      12      20      43      75      90      96
284          UA     100
             *

285          KK  200201
```

```
286          KM        Normal depth route from hydrograph S200 to C201
287          KM        Source: Field Reconnaissance
288          RS       1    FLOW      -1
289          RC     .05      .03      .05     3952  0.0228
290          RX    1000     1001     1002     1005    1026    1032    1034    1036
291          RY     105      104      103      100     100     103     104     105
             *

292          KK    S201
293          KM   Sub-Basin   S201
294          KM
295          KM      The Clark Unit Hydrograph is used for this basin.
296          KM          The Natural time-area relation is used for this basin.
297          KM
298          KM      Time of Concentration for this sub-basin is based on the following:
299          KM          6-Hour Rainfall, Pattern No.  1.00
300          KM          An rainfall areal reduction factor of 0.995
301          KM
302          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
303          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
304          KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
305          KM
306          KM          L=   1.182 miles, S=  195 feet/mile, Kb= .11
307          KM
308          BA   0.350
309          LG    0.25     0.35     4.25     0.44    35.00
310          UC   0.483    0.343
311          UA       0        3        5        8       12       20       43       75       90       96
312          UA     100
             *
1                                          HEC-1 INPUT                                                PAGE  8

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

313          KK    C201
314          KM        Combine routed hydrograph 200201 w/runoff from S201
315          HC       2
             *

316          KK  201203
317          KM        Normal depth route from C201 to C203R
318          KM        Source: Field Reconnaissance
319          RS       2    FLOW      -1
320          RC    .055     .039     .055     3233  0.0155
321          RX    1000   1008.4   1057.5   1066.3  1098.4  1102.8    1105  1107.6
322          RY     105    101.1      102    100.3     100     102     103   104.2
             *

323          KK    S202
324          KM   Sub-Basin   S202
325          KM
326          KM      The Clark Unit Hydrograph is used for this basin.
327          KM          The Natural time-area relation is used for this basin.
328          KM
329          KM      Time of Concentration for this sub-basin is based on the following:
330          KM          6-Hour Rainfall, Pattern No.  1.00
331          KM          An rainfall areal reduction factor of 0.998
332          KM
333          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
334          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
335          KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
336          KM
337          KM          L=   0.689 miles, S=  271 feet/mile, Kb= .12
338          KM
339          BA   0.127
340          LG    0.25     0.35     4.25     0.44    35.00
341          UC   0.308    0.241
342          UA       0        3        5        8       12       20       43       75       90       96
343          UA     100
             *

344          KK  202203
345          KM        Normal depth route from S202 to C203R
346          KM        Source: Field Reconnaissance
347          RS       3    FLOW      -1
348          RC     .05      .03      .05     2353    .0170
349          RX    1000   1008.4   1057.5   1066.3  1098.4  1102.8    1105  1107.6
350          RY   103.6    101.1      102    100.3     100     102    103.   104.2
             *
```

```
 351          KK    S203
 352          KM   Sub-Basin   S203
 353          KM
 354          KM      The Clark Unit Hydrograph is used for this basin.
 355          KM          The Natural time-area relation is used for this basin.
 356          KM
 357          KM      Time of Concentration for this sub-basin is based on the following:
 358          KM          6-Hour Rainfall, Pattern No.  1.00
1                                        HEC-1 INPUT                                          PAGE  9

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 359          KM          An rainfall areal reduction factor of 0.995
 360          KM
 361          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 362          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 363          KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
 364          KM
 365          KM          L=   1.683 miles, S=  154 feet/mile, Kb= .11
 366          KM
 367          BA   0.373
 368          LG    0.25    0.35    4.25    0.44   35.00
 369          UC   0.696   0.658
 370          UA       0       3       5       8      12      20      43      75      90      96
 371          UA     100
              *

 372          KK   C203R
 373          KM        Combine routed hydrographs 201203 and 202203 with runoff from S203
 374          HC       3
              *

 375          KK    S204
 376          KM   Sub-Basin   S204
 377          KM
 378          KM      The Clark Unit Hydrograph is used for this basin.
 379          KM          The Natural time-area relation is used for this basin.
 380          KM
 381          KM      Time of Concentration for this sub-basin is based on the following:
 382          KM          6-Hour Rainfall, Pattern No.  1.37
 383          KM          An rainfall areal reduction factor of 0.988
 384          KM
 385          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 386          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 387          KM   .36 .35 .35 .14 .11 .09 .06 .06 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
 388          KM
 389          KM          L=   1.959 miles, S=  174 feet/mile, Kb= .10
 390          KM
 391          BA   0.951
 392          LG    0.25    0.35    4.25    0.44   32.00
 393          UC   0.729   0.459
 394          UA       0       3       5       8      12      20      43      75      90      96
 395          UA     100
              *

 396          KK    C203
 397          KM        Combine hydrograph from C203R with runoff from S204
 398          HC       2
              *

 399          KK  203204
 400          KM        Normal depth route from C203 to C204
 401          KM        Source: Field Reconnaissance
 402          RS       1    FLOW      -1
 403          RC    .055    .039    .055    1325  0.0151
 404          RX   989.2  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1120.2
 405          RY     110   101.1     102   100.3     100     102     103   110.0
              *
1                                        HEC-1 INPUT                                          PAGE 10

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 406          KK    S205
 407          KM   Sub-Basin   S205
 408          KM
 409          KM      The Clark Unit Hydrograph is used for this basin.
 410          KM          The Natural time-area relation is used for this basin.
 411          KM
 412          KM      Time of Concentration for this sub-basin is based on the following:
 413          KM          6-Hour Rainfall, Pattern No.  1.00
```

```
414          KM          An rainfall areal reduction factor of 0.995
415          KM
416          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
417          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
418          KM   .45 .44 .44 .13 .09 .08 .03 .03 .03 .02 .02 .02 .00 .00 .00 .00 .00 .00
419          KM
420          KM          L=   1.485 miles, S=  175 feet/mile, Kb= .11
421          KM
422          BA   0.413
423          LG    0.21    0.35    4.60    0.35   21.00
424          UC   0.604   0.480
425          UA       0       3       5       8      12      20      43      75      90      96
426          UA     100
             *

427          KK    C204
428          KM        Combine routed hydrograph 203204 w/runoff from S205
429          HC       2
             *

430          KK  204205
431          KM        Normal depth route from C204 to C205L
432          KM        Source: Field Reconnaissance
433          RS       4    FLOW      -1
434          RC     .05    .039     .05    5007  0.0140
435          RX    1000  1010.6  1053.2  1064.9  1094.7  1103.1  1105.9  1113.8
436          RY   105.6   102.5   103.3   100.4     100     103     104   106.8
             *

437          KK    S206
438          KM   Sub-Basin   S206
439          KM
440          KM      The Clark Unit Hydrograph is used for this basin.
441          KM          The Natural time-area relation is used for this basin.
442          KM
443          KM      Time of Concentration for this sub-basin is based on the following:
444          KM          6-Hour Rainfall, Pattern No.  1.31
445          KM          An rainfall areal reduction factor of 0.989
446          KM
447          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
448          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
449          KM   .38 .37 .37 .14 .11 .10 .06 .06 .05 .02 .02 .02 .01 .01 .01 .01 .01 .01
450          KM
451          KM          L=   2.296 miles, S=  118 feet/mile, Kb= .10
452          KM
453          BA   0.853
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

454          LG    0.25    0.35    4.65    0.34   27.00
455          UC   0.954   0.748
456          UA       0       3       5       8      12      20      43      75      90      96
457          UA     100
             *

458          KK   C205L
459          KM        Combine routed hydrograph 204205 w/runoff from S206
460          HC       2
             *

461          KK    S207
462          KM   Sub-Basin   S207
463          KM
464          KM      The Clark Unit Hydrograph is used for this basin.
465          KM          The Natural time-area relation is used for this basin.
466          KM
467          KM      Time of Concentration for this sub-basin is based on the following:
468          KM          6-Hour Rainfall, Pattern No.  1.38
469          KM          An rainfall areal reduction factor of 0.988
470          KM
471          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
472          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
473          KM   .36 .36 .35 .14 .11 .10 .06 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
474          KM
475          KM          L=   2.315 miles, S=  117 feet/mile, Kb= .10
476          KM
477          BA   0.957
478          LG    0.25    0.35    4.35    0.41   34.00
479          UC   0.967   0.715
480          UA       0       3       5       8      12      20      43      75      90      96
```

```
481          UA     100
             *

482          KK    C205
483          KM        Combine hydrograph from C205L w/runoff from S207
484          HC       2
             *

485          KK  205206
486          KM        Normal depth route from C205 to C206
487          KM        Source: Field Reconnaissance
488          RS      10    FLOW      -1
489          RC     .05    .039     .05   11893  0.0063
490          RX    1000  1002.5    1005  1019.1  1052.5  1070.5  1120.8  1146.9
491          RY   110.1   107.6   105.1     100   100.2   104.6   103.7   109.5
             *

492          KK    S208
493          KM   Sub-Basin   S208
494          KM
495          KM      The Clark Unit Hydrograph is used for this basin.
496          KM          The Natural time-area relation is used for this basin.
497          KM
498          KM      Time of Concentration for this sub-basin is based on the following:
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

499          KM          6-Hour Rainfall, Pattern No.  1.46
500          KM          An rainfall areal reduction factor of 0.986
501          KM
502          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
503          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
504          KM   .35 .34 .34 .15 .13 .12 .08 .07 .07 .02 .02 .02 .01 .01 .01 .01 .01 .01
505          KM
506          KM          L=   2.205 miles, S=   93 feet/mile, Kb= .10
507          KM
508          BA   1.103
509          LG    0.23    0.37    5.30    0.25   24.00
510          UC   1.033   0.683
511          UA       0       3       5       8      12      20      43      75      90      96
512          UA     100
             *

513          KK    C206
514          KM        Combine routed hydrograph 205206 w/runoff from S208
515          HC       2
             *

516          KK  206207
517          KM        Normal depth route from C206 to C207R
518          KM        Source: Field Reconnaissance
519          RS       2    FLOW      -1
520          RC    .055    .039    .055    4972  0.0312
521          RX    1000  1007.4  1014.8  1022.2  1057.6  1068.1  1088.2  1094.2
522          RY     106     104     102     100   100.2   102.2   102.9   105.9
             *

523          KK    S209
524          KM   Sub-Basin   S209
525          KM
526          KM      The Clark Unit Hydrograph is used for this basin.
527          KM          The Natural time-area relation is used for this basin.
528          KM
529          KM      Time of Concentration for this sub-basin is based on the following:
530          KM          6-Hour Rainfall, Pattern No.  1.15
531          KM          An rainfall areal reduction factor of 0.992
532          KM
533          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
534          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
535          KM   .41 .41 .40 .13 .10 .09 .05 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
536          KM
537          KM          L=   1.358 miles, S=  133 feet/mile, Kb= .12
538          KM
539          BA   0.650
540          LG    0.22    0.36    5.00    0.29   15.00
541          UC   0.700   0.407
542          UA       0       3       5       8      12      20      43      75      90      96
543          UA     100
             *
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 544          KK   C207R
 545          KM        Combine routed hydrograph 206207 w/runoff from S209
 546          HC       2
              *

 547          KK    S210
 548          KM   Sub-Basin   S210
 549          KM
 550          KM      The Clark Unit Hydrograph is used for this basin.
 551          KM          The Natural time-area relation is used for this basin.
 552          KM
 553          KM      Time of Concentration for this sub-basin is based on the following:
 554          KM          6-Hour Rainfall, Pattern No.  1.00
 555          KM          An rainfall areal reduction factor of 0.994
 556          KM
 557          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 558          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 559          KM   .44 .44 .43 .12 .08 .07 .03 .02 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
 560          KM
 561          KM          L=   1.274 miles, S=  181 feet/mile, Kb= .11
 562          KM
 563          BA   0.481
 564          LG    0.16    0.36    5.00    0.29    2.00
 565          UC   0.538   0.342
 566          UA       0       3       5       8      12      20      43      75      90      96
 567          UA     100
              *

 568          KK    C207
 569          KM        Combine hydrograph from C207R w/runoff from S210
 570          HC       2
              *

 571          KK  207105
 572          KM        Normal depth route from C207 to C105
 573          KM        Source: Field Reconnaissance
 574          RS       2    FLOW      -1
 575          RC    .055    .039    .055    7176  0.0167
 576          RX    1000    1003    1006    1009  1038.5  1041.5  1047.5  1053.5
 577          RY     109     106     103     100     100     102     106     110
              *

 578          KK    S211
 579          KM   Sub-Basin   S211
 580          KM
 581          KM      The Clark Unit Hydrograph is used for this basin.
 582          KM          The Natural time-area relation is used for this basin.
 583          KM
 584          KM      Time of Concentration for this sub-basin is based on the following:
 585          KM          6-Hour Rainfall, Pattern No.  1.00
 586          KM          An rainfall areal reduction factor of 0.994
 587          KM
 588          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 589          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 590          KM   .45 .44 .44 .12 .09 .08 .03 .03 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
 591          KM
 592          KM          L=   1.359 miles, S=  162 feet/mile, Kb= .13
 593          KM
 594          BA   0.488
 595          LG    0.19    0.37    5.20    0.26    4.00
 596          UC   0.671   0.457
 597          UA       0       3       5       8      12      20      43      75      90      96
 598          UA     100
              *

 599          KK   C105R
 600          KM        Combine routed hydrograph 207105 w/runoff from S211
 601          HC       2
              *

 602          KK    C105
 603          KM        Combine hydrographs from C105L and C105R
 604          HC       2
```

```
                    *
                    *  ****************************************************************************
                    *                 Begin Major Basin 300 (Unnamed Wash 3)
                    *  ****************************************************************************
                    *

605                 KK    S300
606                 KM   Sub-Basin   S300
607                 KM
608                 KM      The Clark Unit Hydrograph is used for this basin.
609                 KM          The Natural time-area relation is used for this basin.
610                 KM
611                 KM      Time of Concentration for this sub-basin is based on the following:
612                 KM          6-Hour Rainfall, Pattern No.  1.12
613                 KM          An rainfall areal reduction factor of 0.992
614                 KM
615                 KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
616                 KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
617                 KM   .42 .42 .41 .13 .10 .08 .04 .04 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
618                 KM
619                 KM          L=   1.776 miles, S=  129 feet/mile, Kb= .10
620                 KM
621                 BA   0.615
622                 LG    0.25    0.35    4.55    0.36   25.00
623                 UC   0.746   0.558
624                 UA      0       3       5       8      12      20      43      75      90      96
625                 UA    100
                    *

626                 KK    S301
627                 KM   Sub-Basin   S301
628                 KM
629                 KM      The Clark Unit Hydrograph is used for this basin.
630                 KM          The Natural time-area relation is used for this basin.
631                 KM
632                 KM      Time of Concentration for this sub-basin is based on the following:
```



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LINE                ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

633                 KM          6-Hour Rainfall, Pattern No.  1.40
634                 KM          An rainfall areal reduction factor of 0.987
635                 KM
636                 KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
637                 KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
638                 KM   .35 .35 .35 .14 .11 .10 .06 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
639                 KM
640                 KM          L=   2.001 miles, S=  190 feet/mile, Kb= .10
641                 KM
642                 BA   0.994
643                 LG    0.25    0.35    4.25    0.44   35.00
644                 UC   0.708   0.441
645                 UA      0       3       5       8      12      20      43      75      90      96
646                 UA    100
                    *

647                 KK    C300
648                 KM        Combine runoff from S300 and S301
649                 HC       2
                    *

650                 KK  300301
651                 KM        Normal depth route from C300 to C301
652                 KM        Source: Field Reconnaissance
653                 RS       3    FLOW      -1
654                 RC    .051    .044    .051    5117  0.0137
655                 RX    1000    1001    1002    1010    1047    1059  1060.5    1062
656                 RY     110     109     108     100     100     108     109     110
                    *

657                 KK    S302
658                 KM   Sub-Basin   S302
659                 KM
660                 KM      The Clark Unit Hydrograph is used for this basin.
661                 KM          The Natural time-area relation is used for this basin.
662                 KM
663                 KM      Time of Concentration for this sub-basin is based on the following:
664                 KM          6-Hour Rainfall, Pattern No.  1.00
665                 KM          An rainfall areal reduction factor of 0.994
666                 KM
667                 KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

```
668          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
669          KM   .45 .44 .44 .13 .09 .08 .03 .03 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
670          KM
671          KM          L=   1.095 miles, S=  137 feet/mile, Kb= .13
672          KM
673          BA   0.465
674          LG    0.24    0.35    4.55    0.36   24.00
675          UC   0.613   0.357
676          UA       0       3       5       8      12      20      43      75      90      96
677          UA     100
             *
1                                          HEC-1 INPUT                                          PAGE 16

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

678          KK    C301
679          KM        Combine routed hydrograph 300301 w/runoff from S302
680          HC       2
             *

681          KK  301302
682          KM        Normal depth route from C301 to C302
683          KM        Source: Field Reconnaissance
684          RS      10    FLOW      -1
685          RC    .051    .039    .051    8124  0.0086
686          RX    1000    1004  1200.3  1213.6  1240.6  1249.9  1344.4  1369.6
687          RY   110.6   108.6   103.5   100.2     100   104.2   107.4   110.4
             *

688          KK    S303
689          KM   Sub-Basin   S303
690          KM
691          KM      The Clark Unit Hydrograph is used for this basin.
692          KM          The Natural time-area relation is used for this basin.
693          KM
694          KM      Time of Concentration for this sub-basin is based on the following:
695          KM          6-Hour Rainfall, Pattern No.  1.20
696          KM          An rainfall areal reduction factor of 0.991
697          KM
698          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
699          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
700          KM   .39 .39 .38 .12 .09 .08 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
701          KM
702          KM          L=   1.539 miles, S=  188 feet/mile, Kb= .12
703          KM
704          BA   0.708
705          LG    0.22    0.35    4.60    0.35   10.00
706          UC   0.679   0.414
707          UA       0       3       5       8      12      20      43      75      90      96
708          UA     100
             *

709          KK    C302
710          KM        Combine routed hydrograph 301302 w/runoff from S303
711          HC       2
             *

712          KK  302303
713          KM        Normal depth route from C302 to C303
714          KM        Source: Field Reconniassance
715          RS       4    FLOW      -1
716          RC    .055    .048    .055    7304  0.0192
717          RX    1000  1009.4  1017.8  1026.5  1067.3  1068.7  1071.5  1075.5
718          RY   106.1     104     102     100     101     102     104   105.9
             *
1                                          HEC-1 INPUT                                          PAGE 17

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

719          KK    S304
720          KM   Sub-Basin   S304
721          KM
722          KM      The Clark Unit Hydrograph is used for this basin.
723          KM          The Natural time-area relation is used for this basin.
724          KM
725          KM      Time of Concentration for this sub-basin is based on the following:
726          KM          6-Hour Rainfall, Pattern No.  1.29
727          KM          An rainfall areal reduction factor of 0.989
728          KM
```

```
729          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
730          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
731          KM   .38 .37 .37 .13 .10 .09 .05 .05 .04 .00 .00 .00 .00 .00 .00 .00 .00 .00
732          KM
733          KM          L=   2.314 miles, S=  186 feet/mile, Kb= .10
734          KM
735          BA   0.823
736          LG    0.18    0.36    5.10    0.27    3.00
737          UC   0.796   0.628
738          UA       0       3       5       8      12      20      43      75      90      96
739          UA     100
             *

740          KK    C303
741          KM        Combine routed hydrograph 302303 w/runoff from S304
742          HC       2
             *

743          KK  WEST-1
744          KM        Dummy combine of major basins 100, 200 and 300
745          HC       2
             *
             *  ******************************************************************************
             *                 Begin Major Basin 400 (Caterpillar Tanks Wash)
             *  ******************************************************************************
             *

746          KK    S400
747          KM   Sub-Basin   S400
748          KM
749          KM      The Clark Unit Hydrograph is used for this basin.
750          KM          The Natural time-area relation is used for this basin.
751          KM
752          KM      Time of Concentration for this sub-basin is based on the following:
753          KM          6-Hour Rainfall, Pattern No.  1.43
754          KM          An rainfall areal reduction factor of 0.987
755          KM
756          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
757          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
758          KM   .36 .35 .35 .15 .13 .12 .08 .07 .07 .02 .01 .01 .01 .01 .01 .00 .00 .00
759          KM
760          KM          L=   1.864 miles, S=  110 feet/mile, Kb= .10
761          KM
762          BA   1.048
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

763          LG    0.23    0.34    5.40    0.21   14.00
764          UC   0.833   0.484
765          UA       0       3       5       8      12      20      43      75      90      96
766          UA     100
             *

767          KK   C4000
768          KM        Storage routing at crossing structure no. 78 (see Plate 5)
769          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
770          RS       1    STOR       0
771          SQ       0      62     200     400     540     625     750
772          SE    1508    1511    1514    1520    1526    1532    1540
773          SV       0     5.2    18.6    40.7    71.7   115.5   178.1   266.3
774          SE    1508    1516    1520    1524    1528    1532    1536    1540
             *

775          KK  400401
776          KM        Normal depth route from S400 to C401
777          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
778          RS       9    FLOW      -1
779          RC    .045    .040    .045    7424  0.0101
780          RX  9729.2  9772.7  9849.9   10000 10007.8 10090.6 10147.3 10185.4
781          RY  1509.6  1508.8  1500.2  1475.5  1475.3  1495.3    1496  1497.5
             *

782          KK    S401
783          KM   Sub-Basin   S401
784          KM
785          KM      The Clark Unit Hydrograph is used for this basin.
786          KM          The Natural time-area relation is used for this basin.
787          KM
788          KM      Time of Concentration for this sub-basin is based on the following:
789          KM          6-Hour Rainfall, Pattern No.  1.15
```

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790          KM          An rainfall areal reduction factor of 0.992
791          KM
792          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
793          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
794          KM   .41 .40 .40 .13 .09 .08 .04 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
795          KM
796          KM          L=   1.349 miles, S=   74 feet/mile, Kb= .10
797          KM
798          BA   0.646
799          LG    0.30    0.36    5.10    0.26    7.00
800          UC   0.804   0.473
801          UA       0       3       5       8      12      20      43      75      90      96
802          UA     100
             *

803          KK    C401
804          KM        Combine routed hydrograph 400401 w/runoff from S401
805          HC       2
             *
1                                          HEC-1 INPUT                                          PAGE 19

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

806          KK  401402
807          KM        Normal depth route from C401 to C402
808          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
809          RS       9    FLOW      -1
810          RC    .045    .043    .045    8029  0.0112
811          RX  9581.3  9756.6  9997.5   10000 10022.2 10086.4 10119.5 10362.5
812          RY  1455.4  1419.3  1413.3  1410.9  1409.8  1414.4    1419  1428.6
             *

813          KK    S402
814          KM   Sub-Basin   S402
815          KM
816          KM      The Clark Unit Hydrograph is used for this basin.
817          KM          The Natural time-area relation is used for this basin.
818          KM
819          KM      Time of Concentration for this sub-basin is based on the following:
820          KM          6-Hour Rainfall, Pattern No.  1.23
821          KM          An rainfall areal reduction factor of 0.990
822          KM
823          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
824          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
825          KM   .39 .39 .38 .13 .10 .08 .05 .05 .04 .00 .00 .00 .00 .00 .00 .00 .00 .00
826          KM
827          KM          L=   1.468 miles, S=   75 feet/mile, Kb= .08
828          KM
829          BA   0.740
830          LG    0.31    0.38    5.60    0.21    3.00
831          UC   0.717   0.413
832          UA       0       3       5       8      12      20      43      75      90      96
833          UA     100
             *

834          KK    C402
835          KM        Combine routed hydrograph 401402 w/runoff from S402
836          HC       2
             *

837          KK  402403
838          KM        Normal depth route from C402 to C403
839          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
840          RS      11    FLOW      -1
841          RC    .045    .043    .045    6138  0.0049
842          RX   9267.  9571.2  9916.2  9988.7  9997.4 10095.3 10157.8   10641
843          RY  1395.9  1388.7  1383.7    1355    1355  1361.4  1359.6    1378
844          RL                    0.03  1355.0
             *

845          KK    S403
846          KM   Sub-Basin   S403
847          KM
848          KM      The Clark Unit Hydrograph is used for this basin.
849          KM          The Natural time-area relation is used for this basin.
850          KM
851          KM      Time of Concentration for this sub-basin is based on the following:
1                                          HEC-1 INPUT                                          PAGE 20

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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852          KM          6-Hour Rainfall, Pattern No.  1.06
853          KM          An rainfall areal reduction factor of 0.993
854          KM
855          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
856          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
857          KM   .46 .45 .45 .16 .13 .12 .06 .06 .06 .03 .02 .00 .00 .00 .00 .00 .00 .00
858          KM
859          KM          L=   1.638 miles, S=   52 feet/mile, Kb= .09
860          KM
861          BA   0.559
862          LG    0.30    0.30    8.00    0.08    0.00
863          UC   0.908   0.688
864          UA       0       3       5       8      12      20      43      75      90      96
865          UA     100
             *

866          KK    C403
867          KM        Combine routed hydrograph 402403 w/runoff from S403
868          HC       2
             *

869          KK  403404
870          KM        Normal depth route from C403 to C404
871          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
872          RS       3    FLOW      -1
873          RC    .045    .045    .045    4256   .0164
874          RX  9506.5  9551.7  9955.5    9995 10007.4 10060.9 10227.2 10315.3
875          RY  1300.9  1282.3  1282.7  1276.7  1276.5  1283.5  1283.3  1302.1
876          RL                    0.03  1276.5
             *

877          KK    S404
878          KM   Sub-Basin   S404
879          KM
880          KM     The Clark Unit Hydrograph is used for this basin.
881          KM         The Natural time-area relation is used for this basin.
882          KM
883          KM     Time of Concentration for this sub-basin is based on the following:
884          KM         6-Hour Rainfall, Pattern No.  1.00
885          KM         An rainfall areal reduction factor of 0.997
886          KM
887          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
888          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
889          KM   .46 .46 .45 .14 .11 .10 .04 .04 .04 .00 .00 .00 .00 .00 .00 .00 .00 .00
890          KM
891          KM          L=   0.773 miles, S=  181 feet/mile, Kb= .09
892          KM
893          BA   0.263
894          LG    0.27    0.37    6.60    0.14    0.00
895          UC   0.317   0.180
896          UA       0       3       5       8      12      20      43      75      90      96
897          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

898          KK    C404
899          KM        Combine routed hydrograph C403 w/runoff S404
900          HC       2
             *

901          KK  WEST-2
902          KM        Dummy combine of major basins 100, 200, 300 and 400
903          HC       2
             *
             *  ******************************************************************************
             *                 Begin Major Basin 500 (Twin Buttes Wash)
             *  ******************************************************************************
             *

904          KK    S500
905          KM   Sub-Basin   S500
906          KM
907          KM     The Clark Unit Hydrograph is used for this basin.
908          KM         The Natural time-area relation is used for this basin.
909          KM
910          KM     Time of Concentration for this sub-basin is based on the following:
911          KM         6-Hour Rainfall, Pattern No.  1.43
```

```
912          KM          An rainfall areal reduction factor of 0.987
913          KM
914          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
915          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
916          KM   .35 .34 .34 .14 .12 .10 .07 .06 .06 .03 .03 .03 .02 .02 .01 .01 .01 .01
917          KM
918          KM          L=   2.399 miles, S=  117 feet/mile, Kb= .10
919          KM
920          BA   1.054
921          LG    0.25    0.35    4.25    0.44   35.00
922          UC   1.004   0.726
923          UA       0       3       5       8      12      20      43      75      90      96
924          UA     100
             *

925          KK  500501
926          KM        Normal depth route from S500 to C501
927          KM        Source: Field Reconnaissance
928          RS       4    FLOW      -1
929          RC    0.05   0.035    0.05    5972  0.0134
930          RX    1000    1004    1032    1047    1069 1072.75  1075.9  1081.9
931          RY   105.7   101.7    99.6    96.8    97.1    99.6   101.7   105.7
             *

932          KK    S501
933          KM   Sub-Basin   S501
934          KM
935          KM      The Clark Unit Hydrograph is used for this basin.
936          KM          The Natural time-area relation is used for this basin.
937          KM
938          KM      Time of Concentration for this sub-basin is based on the following:
939          KM          6-Hour Rainfall, Pattern No.  1.12
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

940          KM          An rainfall areal reduction factor of 0.992
941          KM
942          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
943          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
944          KM   .42 .41 .41 .13 .09 .08 .04 .04 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
945          KM
946          KM          L=   1.486 miles, S=  135 feet/mile, Kb= .10
947          KM
948          BA   0.614
949          LG    0.22    0.35    4.45    0.39   23.00
950          UC   0.650   0.416
951          UA       0       3       5       8      12      20      43      75      90      96
952          UA     100
             *

953          KK    C501
954          KM        Combine routed hydrograph 500501 w/runoff from S501
955          HC       2
             *

956          KK  501502
957          KM        Normal depth route from C501 to C502L
958          KM        Source: Field Reconniassance
959          RS       2    FLOW      -1
960          RC    0.05   0.035    0.05    5021  0.0159
961          RX    1000    1001    1002    1006    1035    1039    1040    1041
962          RY     106     105     104     100     100     104     105     106
963          RL                    0.94   100.0
             *

964          KK    S502
965          KM   Sub-Basin   S502
966          KM
967          KM      The Clark Unit Hydrograph is used for this basin.
968          KM          The Natural time-area relation is used for this basin.
969          KM
970          KM      Time of Concentration for this sub-basin is based on the following:
971          KM          6-Hour Rainfall, Pattern No.  1.00
972          KM          An rainfall areal reduction factor of 0.995
973          KM
974          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
975          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
976          KM   .44 .44 .43 .12 .08 .06 .03 .03 .02 .01 .01 .01 .00 .00 .00 .00 .00 .00
977          KM
978          KM          L=   1.053 miles, S=  209 feet/mile, Kb= .13
```

```
 979          KM
 980          BA   0.403
 981          LG    0.27    0.35    4.50    0.35   14.00
 982          UC   0.500   0.300
 983          UA       0       3       5       8      12      20      43      75      90      96
 984          UA     100
              *
1                                          HEC-1 INPUT                                                PAGE 23

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 985          KK   C502L
 986          KM        Combine routed hydrograph 501502 w/runoff from S502
 987          HC       2
              *

 988          KK    S503
 989          KM   Sub-Basin   S503
 990          KM
 991          KM      The Clark Unit Hydrograph is used for this basin.
 992          KM          The Natural time-area relation is used for this basin.
 993          KM
 994          KM      Time of Concentration for this sub-basin is based on the following:
 995          KM          6-Hour Rainfall, Pattern No.  1.40
 996          KM          An rainfall areal reduction factor of 0.987
 997          KM
 998          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 999          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1000          KM   .36 .36 .35 .15 .13 .12 .07 .07 .07 .02 .02 .02 .01 .01 .01 .01 .01 .01
1001          KM
1002          KM          L=   1.891 miles, S=  116 feet/mile, Kb= .08
1003          KM
1004          BA   0.994
1005          LG    0.21    0.31    4.65    0.28   17.00
1006          UC   0.700   0.416
1007          UA       0       3       5       8      12      20      43      75      90      96
1008          UA     100
              *

1009          KK   C502I
1010          KM        Combine hydrograph from C502L w/runoff from S503
1011          HC       2
              *

1012          KK   C502O
1013          KM        Storage routing at crossing structure no. 81
1014          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1015          RS       1    STOR       0
1016          SQ       0     248     800    1600    2160    2500    2900    3200
1017          SE    1500    1503    1506    1512    1518    1524    1530    1536
1018          SV       0    2.37    9.23   20.95   37.67  122.58   212.7  516.24
1019          SE    1500    1508    1512    1516    1520    1528    1532    1540
              *

1020          KK  502505
1021          KM        Normal depth route from C502 to C505L
1022          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1023          RS       7    FLOW      -1
1024          RC    .046     .04    .046    8775  0.0091
1025          RX  9875.7  9921.8  9941.2  9962.7 10048.7 10088.3 10258.2 10339.9
1026          RY  1488.4  1476.5  1472.2    1469  1470.4  1480.9  1485.4  1497.1
1027          RL                    0.94    1469
              *
1                                          HEC-1 INPUT                                                PAGE 24

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1028          KK    S504
1029          KM   Sub-Basin   S504
1030          KM
1031          KM      The Clark Unit Hydrograph is used for this basin.
1032          KM          The Natural time-area relation is used for this basin.
1033          KM
1034          KM      Time of Concentration for this sub-basin is based on the following:
1035          KM          6-Hour Rainfall, Pattern No.  1.00
1036          KM          An rainfall areal reduction factor of 0.996
1037          KM
1038          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1039          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```

```
1040          KM   .43 .42 .41 .10 .05 .02 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
1041          KM
1042          KM          L=   1.571 miles, S=   64 feet/mile, Kb= .09
1043          KM
1044          BA   0.326
1045          LG    0.35    0.35    4.40    0.38    0.00
1046          UC   0.963   0.964
1047          UA       0       3       5       8      12      20      43      75      90      96
1048          UA     100
              *

1049          KK   C505L
1050          KM        Combine routed hydrograph 502505 w/runoff from S504
1051          HC       2
              *

1052          KK    S505
1053          KM   Sub-Basin   S505
1054          KM
1055          KM      The Clark Unit Hydrograph is used for this basin.
1056          KM          The Natural time-area relation is used for this basin.
1057          KM
1058          KM      Time of Concentration for this sub-basin is based on the following:
1059          KM          6-Hour Rainfall, Pattern No.  1.00
1060          KM          An rainfall areal reduction factor of 0.998
1061          KM
1062          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1063          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1064          KM   .44 .44 .43 .12 .08 .06 .03 .02 .02 .01 .01 .01 .00 .00 .00 .00 .00 .00
1065          KM
1066          KM          L=   0.472 miles, S=  365 feet/mile, Kb= .14
1067          KM
1068          BA   0.143
1069          LG    0.25    0.35    4.40    0.38   14.00
1070          UC   0.242   0.127
1071          UA       0       3       5       8      12      20      43      75      90      96
1072          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1073          KK   C503O
1074          KM        Storage routing at crossing structure no. 94
1075          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1076          RS       1    STOR       0
1077          SQ       0     7.5      22      45      71      93     110
1078          SE    1519  1520.25 1521.5    1524    1529    1534    1540
1079          SV       0    0.61    2.78    8.03   18.24
1080          SE    1519    1528    1532    1536    1540
              *

1081          KK  503505
1082          KM        Normal depth route from S505 to C505
1083          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1084          RS      15    FLOW      -1
1085          RC    .045    .047    .043    9136   .0115
1086          RX    9715  9892.4    9965  9996.6   10000 10044.9 10077.4 10088.5
1087          RY  1504.8  1497.4  1487.9  1471.1  1471.6  1487.4  1484.4  1483.1
1088          RL                    0.63  1471.1
              *

1089          KK    S506
1090          KM   Sub-Basin   S506
1091          KM
1092          KM      The Clark Unit Hydrograph is used for this basin.
1093          KM          The Natural time-area relation is used for this basin.
1094          KM
1095          KM      Time of Concentration for this sub-basin is based on the following:
1096          KM          6-Hour Rainfall, Pattern No.  1.00
1097          KM          An rainfall areal reduction factor of 0.998
1098          KM
1099          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1100          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1101          KM   .46 .45 .45 .13 .10 .08 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
1102          KM
1103          KM          L=   0.726 miles, S=  307 feet/mile, Kb= .14
1104          KM
1105          BA   0.151
1106          LG    0.29    0.39    5.70    0.20    9.00
```

```
1107          UC   0.338   0.252
1108          UA       0       3       5       8      12      20      43      75      90      96
1109          UA     100
              *

1110          KK   C5040
1111          KM        Storage routing at crossing structure no. 93
1112          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1113          RS       1    STOR       0
1114          SQ       0     7.5      22      52      72      90     103     115
1115          SE  1513.9  1515.2  1516.4  1520.2  1524.2  1528.2  1532.2    1540
1116          SV       0     0.1    0.18    1.89    5.34   11.99   24.05    43.4
1117          SE  1513.9  1517.8    1520    1524    1528    1532    1536    1540
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1118          KK  504505
1119          KM        Normal depth route from S506 to C505
1120          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1121          RS      11    FLOW      -1
1122          RC    .045    .043    .044    7754  0.0129
1123          RX  9785.2  9855.2  9914.4  9959.2 10013.6 10041.2 10119.8 10183.2
1124          RY    1501  1493.8  1487.5    1473  1468.9  1480.7  1487.9  1494.5
              *

1125          KK    S507
1126          KM   Sub-Basin   S507
1127          KM
1128          KM      The Clark Unit Hydrograph is used for this basin.
1129          KM          The Natural time-area relation is used for this basin.
1130          KM
1131          KM      Time of Concentration for this sub-basin is based on the following:
1132          KM          6-Hour Rainfall, Pattern No.  1.17
1133          KM          An rainfall areal reduction factor of 0.991
1134          KM
1135          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1136          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1137          KM   .41 .40 .40 .13 .09 .07 .05 .04 .04 .00 .00 .00 .00 .00 .00 .00 .00 .00
1138          KM
1139          KM          L=   1.467 miles, S=   68 feet/mile, Kb= .08
1140          KM
1141          BA   0.666
1142          LG    0.34    0.39    5.70    0.20    1.00
1143          UC   0.746   0.458
1144          UA       0       3       5       8      12      20      43      75      90      96
1145          UA     100
              *

1146          KK   C505R
1147          KM        Combine routed hydrographs 503505 and 504505 w/runoff from S507
1148          HC       3
              *

1149          KK    C505
1150          KM        Combine hydrographs from C505L and C505R
1151          HC       2
              *

1152          KK  505509
1153          KM        Normal depth route from C505 to C509L
1154          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1155          RS       8    FLOW      -1
1156          RC    .046    .047    .036    6213  0.0064
1157          RX  9136.7  9456.9  9928.8   10000 10150.9 10209.7   10414 10505.9
1158          RY  1419.5  1401.9    1395    1390  1390.3  1398.3  1395.1  1398.3
1159          RL                    0.94  1390.0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1160          KK    S508
1161          KM   Sub-Basin   S508
1162          KM
1163          KM      The Clark Unit Hydrograph is used for this basin.
1164          KM          The Natural time-area relation is used for this basin.
1165          KM
```

```
1166          KM      Time of Concentration for this sub-basin is based on the following:
1167          KM          6-Hour Rainfall, Pattern No.  1.00
1168          KM          An rainfall areal reduction factor of 0.996
1169          KM
1170          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1171          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1172          KM   .44 .44 .43 .12 .08 .06 .03 .03 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
1173          KM
1174          KM          L=   1.082 miles, S=   92 feet/mile, Kb= .09
1175          KM
1176          BA   0.295
1177          LG    0.33    0.37    5.30    0.24    0.00
1178          UC   0.563   0.417
1179          UA       0       3       5       8      12      20      43      75      90      96
1180          UA     100
              *

1181          KK   C509L
1182          KM        Combine routed hydrograph 505509 w/runoff from S508
1183          HC       2
              *

1184          KK    S509
1185          KM   Sub-Basin   S509
1186          KM
1187          KM      The Clark Unit Hydrograph is used for this basin.
1188          KM          The Natural time-area relation is used for this basin.
1189          KM
1190          KM      Time of Concentration for this sub-basin is based on the following:
1191          KM          6-Hour Rainfall, Pattern No.  1.00
1192          KM          An rainfall areal reduction factor of 0.998
1193          KM
1194          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1195          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1196          KM   .46 .45 .44 .13 .09 .08 .04 .04 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
1197          KM
1198          KM          L=   0.721 miles, S=  304 feet/mile, Kb= .10
1199          KM
1200          BA   0.170
1201          LG    0.28    0.35    4.65    0.32   23.00
1202          UC   0.267   0.180
1203          UA       0       3       5       8      12      20      43      75      90      96
1204          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1205          KK   C506O
1206          KM        Storage routing at crossing structure no. 84
1207          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1208          RS       1    STOR       0
1209          SQ       0     7.5      22      45      71      93     110
1210          SE    1519 1520.25  1521.5    1524    1529    1534    1540
1211          SV       0     .77    4.36   15.19   35.89
1212          SE    1519    1528    1532    1536    1540
              *

1213          KK  506508
1214          KM        Normal depth route from S506 to C508
1215          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1216          RS       6    FLOW      -1
1217          RC    .045    .045    .035    4023   .0149
1218          RX  9717.6  9800.2  9981.4   10000 10010.3 10036.3 10068.8 10227.2
1219          RY  1512.9  1510.9  1508.9    1502    1499  1505.7  1511.5  1512.3
              *

1220          KK    S510
1221          KM   Sub-Basin   S510
1222          KM
1223          KM      The Clark Unit Hydrograph is used for this basin.
1224          KM          The Natural time-area relation is used for this basin.
1225          KM
1226          KM      Time of Concentration for this sub-basin is based on the following:
1227          KM          6-Hour Rainfall, Pattern No.  1.00
1228          KM          An rainfall areal reduction factor of 0.998
1229          KM
1230          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1231          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1232          KM   .47 .47 .46 .15 .12 .11 .05 .05 .05 .02 .01 .01 .00 .00 .00 .00 .00 .00
```

```
1233          KM
1234          KM          L=   0.803 miles, S=   75 feet/mile, Kb= .10
1235          KM
1236          BA   0.127
1237          LG    0.32    0.33    7.30    0.11    6.00
1238          UC   0.500   0.466
1239          UA       0       3       5       8      12      20      43      75      90      96
1240          UA     100
              *

1241          KK   C508R
1242          KM        Combine routed hydrograph 506508 w/runoff from S510
1243          HC       2
              *

1244          KK    S511
1245          KM   Sub-Basin   S511
1246          KM
1247          KM      The Clark Unit Hydrograph is used for this basin.
1248          KM          The Natural time-area relation is used for this basin.
1249          KM
1250          KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1251          KM          6-Hour Rainfall, Pattern No.  1.00
1252          KM          An rainfall areal reduction factor of 0.995
1253          KM    .
1254          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1255          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1256          KM   .46 .45 .45 .14 .10 .09 .04 .04 .04 .02 .02 .02 .00 .00 .00 .00 .00 .00
1257          KM
1258          KM          L=   1.319 miles, S=  270 feet/mile, Kb= .09
1259          KM
1260          BA   0.385
1261          LG    0.29    0.39    5.70    0.20   19.00
1262          UC   0.388   0.278
1263          UA       0       3       5       8      12      20      43      75      90      96
1264          UA     100
              *

1265          KK   C507O
1266          KM        Storage routing at crossing structure no. 82
1267          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1268          RS       1    STOR       0
1269          SQ       0     7.5      22      45      71      93     108     115
1270          SE    1516 1517.25  1518.5    1521    1526    1531    1536    1540
1271          SV       0     .75    4.47   19.99   60.85  133.63
1272          SE    1520    1524    1528    1532    1536    1540
              *

1273          KK  507508
1274          KM        Normal depth route from S511 to C508
1275          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1276          RS       8    FLOW      -1
1277          RC    .045    .045    .035    5400   .0111
1278          RX  9723.2  9781.7   9912.  9989.1   10000 10022.9 10089.7 10209.7
1279          RY  1491.1  1490.1  1489.9  1476.5  1477.1  1483.3  1486.2  1492.1
1280          RL                    0.39  1476.5
              *

1281          KK    S512
1282          KM   Sub-Basin   S512
1283          KM
1284          KM      The Clark Unit Hydrograph is used for this basin.
1285          KM          The Natural time-area relation is used for this basin.
1286          KM
1287          KM      Time of Concentration for this sub-basin is based on the following:
1288          KM          6-Hour Rainfall, Pattern No.  1.00
1289          KM          An rainfall areal reduction factor of 0.997
1290          KM
1291          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1292          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1293          KM   .48 .47 .47 .16 .12 .12 .06 .05 .05 .03 .01 .00 .00 .00 .00 .00 .00 .00
1294          KM
1295          KM          L=   0.974 miles, S=   62 feet/mile, Kb= .10
1296          KM
1297          BA   0.214
1298          LG    0.35    0.30    8.00    0.08    0.00
1299          UC   0.617   0.510
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1300          UA       0       3       5       8      12      20      43      75      90      96
1301          UA     100
              *

1302          KK   C508L
1303          KM        Combine routed hydrograph 507508 w/runoff from S512
1304          HC       2
              *

1305          KK    C508
1306          KM        Combine hydrographs from C508L and C508R
1307          HC       2
              *

1308          KK  508509
1309          KM        Normal depth route from C508 to C509
1310          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1311          RS      14    FLOW      -1
1312          RC    .045    .041    .045   10349  0.0077
1313          RX  9573.3  9869.3    9973  9985.2   10000   10053 10231.6 10511.6
1314          RY  1439.9  1425.1  1424.7  1422.1  1419.1  1425.1  1437.1  1444.5
1315          RL                    0.94  1419.1
              *

1316          KK    S513
1317          KM   Sub-Basin   S513
1318          KM
1319          KM      The Clark Unit Hydrograph is used for this basin.
1320          KM          The Natural time-area relation is used for this basin.
1321          KM
1322          KM      Time of Concentration for this sub-basin is based on the following:
1323          KM          6-Hour Rainfall, Pattern No.  1.26
1324          KM          An rainfall areal reduction factor of 0.990
1325          KM
1326          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1327          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1328          KM   .38 .38 .37 .13 .10 .08 .05 .05 .04 .00 .00 .00 .00 .00 .00 .00 .00 .00
1329          KM
1330          KM          L=   2.301 miles, S=   52 feet/mile, Kb= .08
1331          KM
1332          BA   0.778
1333          LG    0.32    0.38    5.40    0.22    1.00
1334          UC   1.246   1.061
1335          UA       0       3       5       8      12      20      43      75      90      96
1336          UA     100
              *

1337          KK   C509R
1338          KM        Combine routed hydrograph 508509 w/runoff from S513
1339          HC       2
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1340          KK    C509
1341          KM        Combine hydrographs from C509L and C509R
1342          HC       2
              *

1343          KK  509510
1344          KM        Normal depth route from C509 to C510
1345          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1346          RS       3    FLOW      -1
1347          RC    .046    .043    .045    1958   .0102
1348          RX  9605.5  9805.1  9911.8   10000 10026.3 10119.6 10293.4 10613.5
1349          RY  1374.6  1369.2  1370.3  1365.5  1365.6  1379.6  1383.9  1390.1
1350          RL                    0.38  1365.5
              *

1351          KK    S514
1352          KM   Sub-Basin   S514
1353          KM
1354          KM      The Clark Unit Hydrograph is used for this basin.
1355          KM          The Natural time-area relation is used for this basin.
1356          KM
```

```
1357          KM      Time of Concentration for this sub-basin is based on the following:
1358          KM          6-Hour Rainfall, Pattern No.  1.15
1359          KM          An rainfall areal reduction factor of 0.992
1360          KM
1361          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1362          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1363          KM   .44 .43 .43 .16 .13 .12 .07 .06 .06 .03 .02 .00 .00 .00 .00 .00 .00 .00
1364          KM
1365          KM          L=   2.147 miles, S=   65 feet/mile, Kb= .08
1366          KM
1367          BA   0.650
1368          LG    0.28    0.32    7.60    0.09    0.00        .
1369          UC   0.929   0.803
1370          UA       0       3       5       8      12      20      43      75      90      96
1371          UA     100
              *

1372          KK    C510
1373          KM        Combine routed hydrograph 509510 w/runoff from S514
1374          HC       2
              *

1375          KK  510511
1376          KM        Normal depth route from C510 to C511
1377          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1378          RS      10    FLOW      -1
1379          RC    .046    .044    .046    6722  0.0067
1380          RX  9361.9  9781.7  9944.4  9985.6   10000 10040.8   10420 11470.9
1381          RY  1382.6  1375.5  1364.2  1355.1  1355.4  1360.8  1363.1  1381.1
1382          RL                    0.38  1355.1
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1383          KK    S515
1384          KM   Sub-Basin   S515
1385          KM
1386          KM      The Clark Unit Hydrograph is used for this basin.
1387          KM          The Natural time-area relation is used for this basin.
1388          KM
1389          KM      Time of Concentration for this sub-basin is based on the following:
1390          KM          6-Hour Rainfall, Pattern No.  1.46
1391          KM          An rainfall areal reduction factor of 0.986
1392          KM
1393          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1394          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1395          KM   .37 .36 .36 .18 .16 .15 .09 .09 .09 .05 .04 .03 .02 .02 .02 .01 .01 .01
1396          KM
1397          KM          L=   1.948 miles, S=   54 feet/mile, Kb= .08
1398          KM
1399          BA   1.102
1400          LG    0.32    0.27    8.80    0.06    0.00
1401          UC   0.942   0.558
1402          UA       0       3       5       8      12      20      43      75      90      96
1403          UA     100
              *

1404          KK    C511
1405          KM        Combine routed hydrograph 510511 w/runoff from S515
1406          HC       2
              *

1407          KK  511512
1408          KM        Normal depth route from C511 to C512
1409          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1410          RS       9    FLOW      -1
1411          RC    .046    .044    .046    9226  0.0081
1412          RX  9565.4  9665.5  9852.4   10000 10019.5 10074.2 10242.6   10760
1413          RY  1305.6  1305.6  1303.1  1297.8  1296.9  1336.3  1339.9  1336.5
1414          RL                    0.40  1296.9
              *

1415          KK    S516
1416          KM   Sub-Basin   S516
1417          KM
1418          KM      The Clark Unit Hydrograph is used for this basin.
1419          KM          The Natural time-area relation is used for this basin.
1420          KM
1421          KM      Time of Concentration for this sub-basin is based on the following:
```

```
1422          KM          6-Hour Rainfall, Pattern No.  1.04
1423          KM          An rainfall areal reduction factor of 0.993
1424          KM
1425          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1426          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1427          KM   .43 .42 .41 .11 .07 .05 .03 .02 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
1428          KM
1429          KM          L=   1.747 miles, S=   66 feet/mile, Kb= .09
1430          KM
1                                          HEC-1 INPUT                                          PAGE 33

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1431          BA   0.540
1432          LG    0.35    0.35    4.80    0.29    0.00
1433          UC   0.988   0.810
1434          UA       0       3       5       8      12      20      43      75      90      96
1435          UA     100
              *

1436          KK    C512
1437          KM        Combine routed hydrograph 511512 w/runoff from S516
1438          HC       2
              *

1439          KK  WEST-3
1440          KM        Dummy combine of major basins S100, S200, S300, S400 and S500
1441          HC       2
              *
              *  ****************************************************************************
              *                  Begin Major Basin 600 (Morgan City Wash)
              *  ****************************************************************************
              *

1442          KK    S600
1443          KM   Sub-Basin   S600
1444          KM
1445          KM      The Clark Unit Hydrograph is used for this basin.
1446          KM          The Natural time-area relation is used for this basin.
1447          KM
1448          KM      Time of Concentration for this sub-basin is based on the following:
1449          KM          6-Hour Rainfall, Pattern No.  1.81
1450          KM          An rainfall areal reduction factor of 0.980
1451          KM
1452          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1453          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1454          KM   .24 .24 .23 .13 .12 .10 .08 .08 .08 .02 .02 .02 .01 .01 .01 .01 .01 .01
1455          KM
1456          KM          L=   2.796 miles, S=  271 feet/mile, Kb= .09
1457          KM
1458          BA   2.018
1459          LG    0.25    0.35    4.00    0.49   22.00
1460          UC   0.796   0.438
1461          UA       0       3       5       8      12      20      43      75      90      96
1462          UA     100
              *

1463          KK  600601
1464          KM        Normal depth route from S600 to C601
1465          KM        Source: Morgan City Wash FDS, FCD 89-15
1466          RS       2    FLOW      -1
1467          RC    0.05   0.035    0.05    3463   .0332
1468          RX     100     110     135     200     220     260     275     290
1469          RY    2516    2512    2504    2500    2510    2520    2530    2540
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1470          KK    S601
1471          KM   Sub-Basin   S601
1472          KM
1473          KM      The Clark Unit Hydrograph is used for this basin.
1474          KM          The Natural time-area relation is used for this basin.
1475          KM
1476          KM      Time of Concentration for this sub-basin is based on the following:
1477          KM          6-Hour Rainfall, Pattern No.  1.34
1478          KM          An rainfall areal reduction factor of 0.988
1479          KM
1480          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

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1481          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1482          KM   .39 .39 .38 .17 .14 .13 .08 .08 .08 .04 .04 .04 .02 .02 .02 .01 .01 .01
1483          KM
1484          KM          L=   1.840 miles, S=  232 feet/mile, Kb= .10
1485          KM
1486          BA   0.901
1487          LG    0.25    0.39    5.70    0.21   44.00
1488          UC   0.575   0.346
1489          UA       0       3       5       8      12      20      43      75      90      96
1490          UA     100
              *

1491          KK    C601
1492          KM        Combine routed hydrograph from S600 w/runoff from S601
1493          HC       2
              *

1494          KK  601602
1495          KM        Normal depth route from S601 to C602
1496          KM        Source: Morgan City Wash FDS, FCD 89-15
1497          RS       3    FLOW      -1
1498          RC    0.05   0.035    0.05    6017   .0266
1499          RX     100     130     140     155     245     255     270     340
1500          RY    2380    2360    2356    2352    2352    2356    2360    2380
              *

1501          KK    S603
1502          KM   Sub-Basin   S603
1503          KM
1504          KM      The Clark Unit Hydrograph is used for this basin.
1505          KM          The Natural time-area relation is used for this basin.
1506          KM
1507          KM      Time of Concentration for this sub-basin is based on the following:
1508          KM          6-Hour Rainfall, Pattern No.  1.17
1509          KM          An rainfall areal reduction factor of 0.991
1510          KM
1511          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1512          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1513          KM   .43 .43 .43 .16 .13 .12 .07 .07 .06 .04 .04 .04 .01 .01 .01 .01 .01 .01
1514          KM
1515          KM          L=   1.377 miles, S=  326 feet/mile, Kb= .10
1516          KM
1517          BA   0.665
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1518          LG    0.25    0.39    5.80    0.20   41.00
1519          UC   0.400   0.218
1520          UA       0       3       5       8      12      20      43      75      90      96
1521          UA     100
              *

1522          KK   C602L
1523          KM        Combine routed hydrogaph 601602 w/runoff from S603
1524          HC       2
              *

1525          KK    S602
1526          KM   Sub-Basin   S602
1527          KM
1528          KM      The Clark Unit Hydrograph is used for this basin.
1529          KM          The Natural time-area relation is used for this basin.
1530          KM
1531          KM      Time of Concentration for this sub-basin is based on the following:
1532          KM          6-Hour Rainfall, Pattern No.  1.77
1533          KM          An rainfall areal reduction factor of 0.981
1534          KM
1535          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1536          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1537          KM   .27 .26 .26 .15 .14 .13 .09 .09 .09 .03 .03 .03 .02 .02 .02 .02 .01 .01
1538          KM
1539          KM          L=   3.035 miles, S=  258 feet/mile, Kb= .09
1540          KM
1541          BA   1.883
1542          LG    0.25    0.35    4.35    0.41   35.00
1543          UC   0.800   0.489
1544          UA       0       3       5       8      12      20      43      75      90      96
1545          UA     100
              *
```

```
1546        KK    C602
1547        KM        Combine hydrograph at C602L w/runoff from S602
1548        HC       2
            *

1549        KK  602603
1550        KM        Normal depth route from C602 to C603L
1551        KM        Source: Morgan City Wash FDS, FCD 89-15
1552        RS       7    FLOW      -1
1553        RC    0.05   0.035    0.05    7614   .0171
1554        RX    1000    1020    1045    1065    1322    1340    1372    1405
1555        RY    2228    2224    2220    2212    2212    2220    2240    2260
1556        RL                    0.96  2212.0
            *

1557        KK    S606
1558        KM   Sub-Basin   S606
1559        KM
1560        KM      The Clark Unit Hydrograph is used for this basin.
1561        KM          The Natural time-area relation is used for this basin.
1562        KM
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1563        KM      Time of Concentration for this sub-basin is based on the following:
1564        KM          6-Hour Rainfall, Pattern No.  1.16
1565        KM          An rainfall areal reduction factor of 0.991
1566        KM
1567        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1568        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1569        KM   .42 .41 .41 .14 .11 .09 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1570        KM
1571        KM          L=   2.111 miles, S=  300 feet/mile, Kb= .10
1572        KM
1573        BA   0.660
1574        LG    0.26    0.35    4.50    0.37   35.00
1575        UC   0.575   0.461
1576        UA       0       3       5       8      12      20      43      75      90      96
1577        UA     100
            *

1578        KK   C603L
1579        KM        Combine routed hydrograph 602603 w/runoff from S606
1580        HC       2
            *

1581        KK    S605
1582        KM   Sub-Basin   S605
1583        KM
1584        KM      The Clark Unit Hydrograph is used for this basin.
1585        KM          The Natural time-area relation is used for this basin.
1586        KM
1587        KM      Time of Concentration for this sub-basin is based on the following:
1588        KM          6-Hour Rainfall, Pattern No.  1.45
1589        KM          An rainfall areal reduction factor of 0.986
1590        KM
1591        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1592        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1593        KM   .34 .34 .34 .14 .12 .11 .07 .07 .07 .03 .03 .03 .02 .02 .01 .01 .01 .01
1594        KM
1595        KM          L=   2.322 miles, S=  229 feet/mile, Kb= .10
1596        KM
1597        BA   1.085
1598        LG    0.25    0.35    4.35    0.41   35.00
1599        UC   0.725   0.485
1600        UA       0       3       5       8      12      20      43      75      90      96
1601        UA     100
            *

1602        KK    S604
1603        KM   Sub-Basin   S604
1604        KM
1605        KM      The Clark Unit Hydrograph is used for this basin.
1606        KM          The Natural time-area relation is used for this basin.
1607        KM
1608        KM      Time of Concentration for this sub-basin is based on the following:
1609        KM          6-Hour Rainfall, Pattern No.  1.97
1610        KM          An rainfall areal reduction factor of 0.976
1611        KM
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1612          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1613          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1614          KM   .22 .22 .21 .16 .15 .14 .11 .10 .10 .03 .03 .03 .02 .02 .02 .02 .02 .02
1615          KM
1616          KM          L=   4.105 miles, S=  207 feet/mile, Kb= .09
1617          KM
1618          BA   2.656
1619          LG    0.25    0.35    4.35    0.41   35.00
1620          UC   1.121   0.745
1621          UA       0       3       5       8      12      20      43      75      90      96
1622          UA     100
              *

1623          KK    C603
1624          KM        Combine hydrograph from C603L w/runoff from  S605, and S604
1625          HC       3
              *

1626          KK  603604
1627          KM        Normal depth route from C603 to C604R
1628          KM        Source: Morgan City Wash FDS, FCD 89-15
1629          RS       4    FLOW      -1
1630          RC    0.05   0.035    0.05    7830   .0192
1631          RX    1000    1022    1038    1053    1328    1375    1410    1430
1632          RY    2108    2104    2100    2088    2088    2100    2108    2112
1633          RL                    0.96  2088.0
              *

1634          KK    S609
1635          KM   Sub-Basin   S609
1636          KM
1637          KM      The Clark Unit Hydrograph is used for this basin.
1638          KM          The Natural time-area relation is used for this basin.
1639          KM
1640          KM      Time of Concentration for this sub-basin is based on the following:
1641          KM          6-Hour Rainfall, Pattern No.  1.07
1642          KM          An rainfall areal reduction factor of 0.993
1643          KM
1644          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1645          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1646          KM   .43 .42 .41 .12 .08 .06 .03 .03 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1647          KM
1648          KM          L=   2.239 miles, S=  214 feet/mile, Kb= .10
1649          KM
1650          BA   0.560
1651          LG    0.27    0.35    4.10    0.47   27.00
1652          UC   0.721   0.682
1653          UA       0       3       5       8      12      20      43      75      90      96
1654          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1655          KK   C604R
1656          KM        Combine routed hydrograph 603604 w/runoff from S609
1657          HC       2
              *

1658          KK    S607
1659          KM   Sub-Basin   S607
1660          KM
1661          KM      The Clark Unit Hydrograph is used for this basin.
1662          KM          The Natural time-area relation is used for this basin.
1663          KM
1664          KM      Time of Concentration for this sub-basin is based on the following:
1665          KM          6-Hour Rainfall, Pattern No.  1.29
1666          KM          An rainfall areal reduction factor of 0.989
1667          KM
1668          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1669          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1670          KM   .39 .39 .39 .15 .13 .12 .07 .07 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
1671          KM
1672          KM          L=   2.567 miles, S=  257 feet/mile, Kb= .10
1673          KM
1674          BA   0.822
1675          LG    0.25    0.36    5.10    0.27   34.00
```

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1676          UC   0.700   0.592
1677          UA       0       3       5       8      12      20      43      75      90      96
1678          UA     100
              *

1679          KK    C604
1680          KM        Combine hydrograph from C604R w/runoff from S607
1681          HC       2
              *

1682          KK  604605
1683          KM        Normal depth route from C604 to C605
1684          KM        Source: Morgan City Wash FDS, FCD 89-15
1685          RS       1    FLOW      -1
1686          RC    0.05   0.035    0.05    1543   .0065
1687          RX    1000    1080    1110    1125    1210    1292    1340    1375
1688          RY    2016    2112    2000    1984    1984    1992    2000    2008
              *

1689          KK    S608
1690          KM   Sub-Basin   S608
1691          KM
1692          KM      The Clark Unit Hydrograph is used for this basin.
1693          KM          The Natural time-area relation is used for this basin.
1694          KM
1695          KM      Time of Concentration for this sub-basin is based on the following:
1696          KM          6-Hour Rainfall, Pattern No.  1.01
1697          KM          An rainfall areal reduction factor of 0.993
1698          KM
1699          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1700          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1701          KM   .47 .46 .46 .15 .12 .11 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1702          KM
1703          KM          L=   1.398 miles, S=  230 feet/mile, Kb= .11
1704          KM
1705          BA   0.508
1706          LG    0.25    0.39    5.80    0.20   37.00
1707          UC   0.483   0.318
1708          UA       0       3       5       8      12      20      43      75      90      96
1709          UA     100
              *

1710          KK    C605
1711          KM        Combine routed hydrograph from 604605 w/runoff from S608
1712          HC       2
              *

1713          KK  605606
1714          KM        Normal depth route from C605 to C606L
1715          KM        Source: Morgan City Wash FDS, FCD 89-15
1716          RS       3    FLOW      -1
1717          RC    0.05   0.035    0.05    5520   .0199
1718          RX    1000    1052    1190    1248    1281    1340    1368    1395
1719          RY    1940    1928    1928    1924    1924    1928    1936    1940
1720          RL                    0.96  1924.0
              *

1721          KK    S610
1722          KM   Sub-Basin   S610
1723          KM
1724          KM      The Clark Unit Hydrograph is used for this basin.
1725          KM          The Natural time-area relation is used for this basin.
1726          KM
1727          KM      Time of Concentration for this sub-basin is based on the following:
1728          KM          6-Hour Rainfall, Pattern No.  1.11
1729          KM          An rainfall areal reduction factor of 0.992
1730          KM
1731          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1732          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1733          KM   .44 .44 .43 .15 .12 .11 .06 .06 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1734          KM
1735          KM          L=   1.869 miles, S=  118 feet/mile, Kb= .10
1736          KM
1737          BA   0.603
1738          LG    0.26    0.36    5.10    0.27   39.00
1739          UC   0.763   0.603
1740          UA       0       3       5       8      12      20      43      75      90      96
```

```
1741          UA     100
              *

1742          KK   C606L
1743          KM        Combine routed hydrograph 605606 w/runoff from S610
1744          HC       2
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1745          KK    S612
1746          KM   Sub-Basin   S612
1747          KM
1748          KM      The Clark Unit Hydrograph is used for this basin.
1749          KM          The Natural time-area relation is used for this basin.
1750          KM
1751          KM      Time of Concentration for this sub-basin is based on the following:
1752          KM          6-Hour Rainfall, Pattern No.  1.28
1753          KM          An rainfall areal reduction factor of 0.989
1754          KM
1755          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1756          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1757          KM   .40 .40 .40 .16 .14 .13 .07 .07 .07 .03 .03 .03 .01 .01 .01 .01 .01 .01
1758          KM
1759          KM          L=   2.531 miles, S=  230 feet/mile, Kb= .10
1760          KM
1761          BA   0.808
1762          LG    0.25     0.38     6.40     0.16    31.00
1763          UC   0.713    0.603
1764          UA       0        3        5        8       12       20       43       75       90       96
1765          UA     100
              *

1766          KK    C606
1767          KM        Combine hydrograph from C606L w/runoff from S612
1768          HC       2
              *

1769          KK  606608
1770          KM        Normal depth route from C606 to C608
1771          KM        Source: Morgan City Wash FDS, FCD 89-15
1772          RS       1    FLOW      -1
1773          RC    0.05   0.035    0.05    1141   .0175
1774          RX    1000    1034    1070    1150    1237    1280    1378    1420
1775          RY    1888    1880    1876    1868    1868    1876    1900    1920
1776          RL                    0.96  1868.0
              *

1777          KK    S611
1778          KM   Sub-Basin   S611
1779          KM
1780          KM      The Clark Unit Hydrograph is used for this basin.
1781          KM          The Natural time-area relation is used for this basin.
1782          KM
1783          KM      Time of Concentration for this sub-basin is based on the following:
1784          KM          6-Hour Rainfall, Pattern No.  1.07
1785          KM          An rainfall areal reduction factor of 0.993
1786          KM
1787          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1788          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1789          KM   .44 .43 .43 .13 .10 .08 .04 .04 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
1790          KM
1791          KM          L=   1.286 miles, S=  270 feet/mile, Kb= .12
1792          KM
1                                        HEC-1 INPUT                                                    PAGE 41

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1793          BA   0.569
1794          LG    0.25     0.35     4.35     0.41    35.00
1795          UC   0.479    0.276
1796          UA       0        3        5        8       12       20       43       75       90       96
1797          UA     100
              *

1798          KK  607608
1799          KM        Normal depth route from S611 to S613
1800          KM        Source: Field Reconnaissance
1801          RS       5    FLOW      -1
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1802          RC    .075      .03    .075   11167  0.0242
1803          RX     100      106     114     120     168     172     232     292
1804          RY     110      107     103     100     100     104     107     110
              *

1805          KK    S613
1806          KM   Sub-Basin   S613
1807          KM
1808          KM      The Clark Unit Hydrograph is used for this basin.
1809          KM          The Natural time-area relation is used for this basin.
1810          KM
1811          KM      Time of Concentration for this sub-basin is based on the following:
1812          KM          6-Hour Rainfall, Pattern No.  1.74
1813          KM          An rainfall areal reduction factor of 0.982
1814          KM
1815          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1816          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1817          KM   .28 .27 .27 .15 .14 .13 .09 .09 .09 .03 .03 .03 .02 .02 .02 .01 .01 .01
1818          KM
1819          KM          L=   2.525 miles, S=  131 feet/mile, Kb= .11
1820          KM
1821          BA   1.797
1822          LG    0.25    0.35    4.55    0.36   34.00
1823          UC   1.088   0.610
1824          UA       0       3       5       8      12      20      43      75      90      96
1825          UA     100
              *

1826          KK    C608
1827          KM        Combine routed hydrograph 606608 and 607608 w/runoff from S613
1828          HC       3
              *

1829          KK  608609
1830          KM        Normal depth route from C608 to C609
1831          KM        Source: Morgan City Wash FDS, FCD 89-15
1832          RS       4    FLOW      -1
1833          RC    0.05   0.035    0.05    6518   .0123
1834          RX    1000    1031    1052    1090    1132    1290    1320    1360
1835          RY    1860    1848    1844    1836    1836    1844    1848    1860
1836          RL                    0.94  1836.0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1837          KK    S614
1838          KM   Sub-Basin   S614
1839          KM
1840          KM      The Clark Unit Hydrograph is used for this basin.
1841          KM          The Natural time-area relation is used for this basin.
1842          KM
1843          KM      Time of Concentration for this sub-basin is based on the following:
1844          KM          6-Hour Rainfall, Pattern No.  1.45
1845          KM          An rainfall areal reduction factor of 0.986
1846          KM
1847          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1848          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1849          KM   .35 .34 .34 .14 .12 .11 .07 .07 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
1850          KM
1851          KM          L=   2.285 miles, S=  149 feet/mile, Kb= .11
1852          KM
1853          BA   1.079
1854          LG    0.24    0.35    4.40    0.40   34.00
1855          UC   0.929   0.633
1856          UA       0       3       5       8      12      20      43      75      90      96
1857          UA     100
              *

1858          KK    C609
1859          KM        Combine routed hydrograph 608609 w/runoff from S614
1860          HC       2
              *

1861          KK  609611
1862          KM        Normal depth route from C609 to C611R
1863          KM        Source: Morgan City Wash FDS, FCD 89-15
1864          RS       5    FLOW      -1
1865          RC    0.05   0.035    0.05    6519   .0031
1866          RX    1000    1070    1145    1230    1410    1430    1550    1642
```

```
1867          RY    1732    1720    1716    1708    1708    1716    1720    1740
1868          RL                    0.94  1708.0
              *

1869          KK    S617
1870          KM   Sub-Basin   S617
1871          KM
1872          KM      The Clark Unit Hydrograph is used for this basin.
1873          KM          The Natural time-area relation is used for this basin.
1874          KM
1875          KM      Time of Concentration for this sub-basin is based on the following:
1876          KM          6-Hour Rainfall, Pattern No.  1.17
1877          KM          An rainfall areal reduction factor of 0.991
1878          KM
1879          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1880          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1881          KM   .41 .41 .40 .14 .11 .09 .05 .05 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
1882          KM
1883          KM          L=   1.362 miles, S=   81 feet/mile, Kb= .10
1884          KM
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1885          BA   0.675
1886          LG    0.23    0.35    4.80    0.31   23.00
1887          UC   0.754   0.433
1888          UA       0       3       5       8      12      20      43      75      90      96
1889          UA     100
              *

1890          KK   C611R
1891          KM        Combine routed hydrograph 609611 w/runoff from S617
1892          HC       2
              *

1893          KK    S615
1894          KM   Sub-Basin   S615
1895          KM
1896          KM      The Clark Unit Hydrograph is used for this basin.
1897          KM          The Natural time-area relation is used for this basin.
1898          KM
1899          KM      Time of Concentration for this sub-basin is based on the following:
1900          KM          6-Hour Rainfall, Pattern No.  1.43
1901          KM          An rainfall areal reduction factor of 0.987
1902          KM
1903          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1904          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1905          KM   .38 .38 .37 .18 .16 .15 .10 .09 .09 .05 .05 .05 .02 .02 .02 .02 .02 .02
1906          KM
1907          KM          L=   2.059 miles, S=  136 feet/mile, Kb= .12
1908          KM
1909          BA   1.055
1910          LG    0.25    0.39    6.20    0.17   55.00
1911          UC   0.867   0.546
1912          UA       0       3       5       8      12      20      43      75      90      96
1913          UA     100
              *

1914          KK  610611
1915          KM        Normal depth route from S615 to C611
1916          KM        Source: Morgan City Wash FDS, FCD 89-15
1917          RS       5    FLOW      -1
1918          RC    0.05   0.035    0.05    7981   .0100
1919          RX    1000    1028    1041    1078    1087    1092    1100    1108
1920          RY    1860    1840    1820    1800    1800    1820    1840    1860
              *

1921          KK    S616
1922          KM   Sub-Basin   S616
1923          KM
1924          KM      The Clark Unit Hydrograph is used for this basin.
1925          KM          The Natural time-area relation is used for this basin.
1926          KM
1927          KM      Time of Concentration for this sub-basin is based on the following:
1928          KM          6-Hour Rainfall, Pattern No.  1.01
1929          KM          An rainfall areal reduction factor of 0.993
1930          KM
1931          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1932          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1933          KM   .45 .45 .44 .14 .10 .09 .04 .04 .03 .02 .02 .02 .00 .00 .00 .00 .00 .00
1934          KM
1935          KM          L=   1.738 miles, S=   46 feet/mile, Kb= .11
1936          KM
1937          BA   0.505
1938          LG    0.22    0.37    5.20    0.26   19.00
1939          UC   1.258   1.097
1940          UA       0       3       5       8      12      20      43      75      90      96
1941          UA     100
              *

1942          KK   C611L
1943          KM        Combine routed hydrograph 6110611 w/runoff frm S616
1944          HC       2
              *

1945          KK    C611
1946          KM        Combine hydrographs C611L and C611R
1947          HC       2
              *

1948          KK  611613
1949          KM        Normal depth route from C611 to C613
1950          KM        Source: Morgan City Wash FDS, FCD 89-15
1951          RS       2    FLOW      -1
1952          RC    0.05   0.035    0.05    4445   .0382
1953          RX    1000    1050    1080    1122    1210    1250    1305    1338
1954          RY    1644    1644    1628    1620    1620    1628    1660    1680
1955          RL                    0.94  1620.0
              *

1956          KK    S618
1957          KM   Sub-Basin   S618
1958          KM
1959          KM      The Clark Unit Hydrograph is used for this basin.
1960          KM          The Natural time-area relation is used for this basin.
1961          KM
1962          KM      Time of Concentration for this sub-basin is based on the following:
1963          KM          6-Hour Rainfall, Pattern No.  1.38
1964          KM          An rainfall areal reduction factor of 0.988
1965          KM
1966          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1967          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1968          KM   .37 .36 .36 .15 .12 .11 .07 .07 .06 .02 .02 .02 .01 .01 .01 .01 .01 .01
1969          KM
1970          KM          L=   2.364 miles, S=  199 feet/mile, Kb= .10
1971          KM
1972          BA   0.958
1973          LG    0.20    0.37    5.20    0.26   22.00
1974          UC   0.763   0.559
1975          UA       0       3       5       8      12      20      43      75      90      96
1976          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1977          KK   C613R
1978          KM        Combine routed hydrograph 611613 w/runoff from S618
1979          HC       2
              *

1980          KK    S619
1981          KM   Sub-Basin   S619
1982          KM
1983          KM      The Clark Unit Hydrograph is used for this basin.
1984          KM          The Natural time-area relation is used for this basin.
1985          KM
1986          KM      Time of Concentration for this sub-basin is based on the following:
1987          KM          6-Hour Rainfall, Pattern No.  1.29
1988          KM          An rainfall areal reduction factor of 0.989
1989          KM
1990          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1991          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1992          KM   .41 .40 .40 .17 .15 .14 .08 .08 .08 .04 .04 .04 .01 .01 .01 .01 .01 .01
1993          KM
1994          KM          L=   1.212 miles, S=   99 feet/mile, Kb= .12
```

```
1995          KM
1996          BA   0.827
1997          LG    0.27    0.36    6.80    0.14   39.00
1998          UC   0.688   0.317
1999          UA       0       3       5       8      12      20      43      75      90      96
2000          UA     100
              *

2001          KK  612613
2002          KM        Normal depth route from S619 to S620
2003          KM        Source: Morgan City Wash FDS, FCD 89-15
2004          RS       4    FLOW      -1
2005          RC    0.05   0.035    0.05    8752   .0331
2006          RX     100     103     106     110     180     184     187     190
2007          RY     110     107     104     100     100     104     107     110
              *

2008          KK    S620
2009          KM   Sub-Basin   S620
2010          KM
2011          KM      The Clark Unit Hydrograph is used for this basin.
2012          KM          The Natural time-area relation is used for this basin.
2013          KM
2014          KM      Time of Concentration for this sub-basin is based on the following:
2015          KM          6-Hour Rainfall, Pattern No.  1.00
2016          KM          An rainfall areal reduction factor of 0.994
2017          KM
2018          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2019          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2020          KM   .48 .47 .47 .16 .13 .12 .06 .06 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
2021          KM
2022          KM          L=   1.763 miles, S=  228 feet/mile, Kb= .13
2023          KM
2024          BA   0.444
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2025          LG    0.23    0.38    6.40    0.16   37.00
2026          UC   0.642   0.565
2027          UA       0       3       5       8      12      20      43      75      90      96
2028          UA     100
              *

2029          KK   C613L
2030          KM        Combine routed hydrograph 612613 w/runoff from S620
2031          HC       2
              *

2032          KK    C613
2033          KM        Combine hydrographs C613R and C613L
2034          HC       2
              *

2035          KK  613614
2036          KM        Normal depth route from C613 to C614
2037          KM        Source: Morgan City Wash FDS, FCD 89-15
2038          RS       3    FLOW      -1
2039          RC    0.05   0.035    0.05    5557   .0108
2040          RX    1000    1022    1050    1100    1180    1225    1260    1360
2041          RY    1640    1620    1580    1552    1552    1564    1576    1580
2042          RL                    0.94  1552.0
              *

2043          KK    S621
2044          KM   Sub-Basin   S621
2045          KM
2046          KM      The Clark Unit Hydrograph is used for this basin.
2047          KM          The Natural time-area relation is used for this basin.
2048          KM
2049          KM      Time of Concentration for this sub-basin is based on the following:
2050          KM          6-Hour Rainfall, Pattern No.  1.36
2051          KM          An rainfall areal reduction factor of 0.988
2052          KM
2053          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2054          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2055          KM   .36 .35 .35 .13 .10 .09 .05 .05 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
2056          KM
2057          KM          L=   1.470 miles, S=  170 feet/mile, Kb= .10
2058          KM
2059          BA   0.923
```

```
2060          LG    0.17    0.35    4.80    0.31    3.00
2061          UC   0.613   0.306
2062          UA       0       3       5       8      12      20      43      75      90      96
2063          UA     100
              *

2064          KK    C614
2065          KM        Combine routed hydrograph 613614 w/runoff from S621
2066          HC       2
              *
1                                          HEC-1 INPUT                                          PAGE 47

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2067          KK  614615
2068          KM        Normal depth route from C614 to C615
2069          KM        Source: Morgan City Wash FDS, FCD 89-15
2070          RS       3    FLOW      -1
2071          RC    0.05   0.035    0.05    7995   .0144
2072          RX    1000    1050    1088    1150    1195    1290    1340    1405
2073          RY    1496    1484    1476    1460    1460    1476    1484    1516
2074          RL                    0.94  1460.0
              *

2075          KK    S622
2076          KM   Sub-Basin   S622
2077          KM
2078          KM      The Clark Unit Hydrograph is used for this basin.
2079          KM          The Natural time-area relation is used for this basin.
2080          KM
2081          KM      Time of Concentration for this sub-basin is based on the following:
2082          KM          6-Hour Rainfall, Pattern No.  1.34
2083          KM          An rainfall areal reduction factor of 0.988
2084          KM
2085          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2086          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2087          KM   .36 .36 .35 .13 .10 .09 .05 .05 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
2088          KM
2089          KM          L=   2.004 miles, S=  152 feet/mile, Kb= .12
2090          KM
2091          BA   0.897
2092          LG    0.18    0.35    4.90    0.30    4.00
2093          UC   0.929   0.633
2094          UA       0       3       5       8      12      20      43      75      90      96
2095          UA     100
              *

2096          KK    C615
2097          KM        Combine routed hydrograph from 614615 w/runoff from S622
2098          HC       2
              *

2099          KK  WEST-4
2100          KM        Dummy combine for all major basins, west of the Agua Fria River
2101          HC       2
              *

2102          KK    S700
2103          KM   Sub-Basin   S700
2104          KM
2105          KM      The Clark Unit Hydrograph is used for this basin.
2106          KM          The Natural time-area relation is used for this basin.
2107          KM
2108          KM      Time of Concentration for this sub-basin is based on the following:
2109          KM          6-Hour Rainfall, Pattern No.  1.11
2110          KM          An rainfall areal reduction factor of 0.992
2111          KM
2112          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1                                          HEC-1 INPUT                                          PAGE 48

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2113          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2114          KM   .42 .41 .41 .13 .10 .09 .04 .04 .03 .00 .00 .00 .00 .00 .00 .00 .00 .00
2115          KM
2116          KM          L=   1.923 miles, S=  185 feet/mile, Kb= .10
2117          KM
2118          BA   0.610
2119          LG    0.17    0.36    5.10    0.27    5.00
2120          UC   0.675   0.535
```

```
2121          UA       0       3       5       8      12      20      43      75      90      96
2122          UA     100
              *

2123          KK    S701
2124          KM   Sub-Basin   S701
2125          KM
2126          KM      The Clark Unit Hydrograph is used for this basin.
2127          KM          The Natural time-area relation is used for this basin.
2128          KM
2129          KM      Time of Concentration for this sub-basin is based on the following:
2130          KM          6-Hour Rainfall, Pattern No.  1.21
2131          KM          An rainfall areal reduction factor of 0.991
2132          KM
2133          KM        EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2134          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2135          KM   .40 .40 .40 .14 .11 .10 .06 .05 .05 .01 .01 .01 .00 .00 .00 .00 .00 .00
2136          KM
2137          KM          L=   2.821 miles, S=  136 feet/mile, Kb= .10
2138          KM
2139          BA   0.720
2140          LG    0.22    0.38    5.60    0.22   14.00
2141          UC   1.029   1.056
2142          UA       0       3       5       8      12      20      43      75      90      96
2143          UA     100
              *

2144          KK    S702
2145          KM   Sub-Basin   S702
2146          KM
2147          KM      The Clark Unit Hydrograph is used for this basin.
2148          KM          The Natural time-area relation is used for this basin.
2149          KM
2150          KM      Time of Concentration for this sub-basin is based on the following:
2151          KM          6-Hour Rainfall, Pattern No.  1.00
2152          KM          An rainfall areal reduction factor of 0.997
2153          KM
2154          KM        EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2155          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2156          KM   .45 .44 .44 .13 .09 .08 .03 .03 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
2157          KM
2158          KM          L=   1.395 miles, S=  215 feet/mile, Kb= .11
2159          KM
2160          BA   0.257
2161          LG    0.17    0.36    5.10    0.27    4.00
2162          UC   0.525   0.512
2163          UA       0       3       5       8      12      20      43      75      90      96
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2164          UA     100
              *

2165          KK    S703
2166          KM   Sub-Basin   S703
2167          KM
2168          KM      The Clark Unit Hydrograph is used for this basin.
2169          KM          The Natural time-area relation is used for this basin.
2170          KM
2171          KM      Time of Concentration for this sub-basin is based on the following:
2172          KM          6-Hour Rainfall, Pattern No.  1.00
2173          KM          An rainfall areal reduction factor of 0.997
2174          KM
2175          KM        EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2176          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2177          KM   .44 .44 .43 .12 .08 .07 .03 .02 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
2178          KM
2179          KM          L=   1.126 miles, S=  204 feet/mile, Kb= .11
2180          KM
2181          BA   0.257
2182          LG    0.15    0.35    4.90    0.30    0.00
2183          UC   0.467   0.379
2184          UA       0       3       5       8      12      20      43      75      90      96
2185          UA     100
              *

2186          KK    S704
2187          KM   Sub-Basin   S704
2188          KM
2189          KM      The Clark Unit Hydrograph is used for this basin.
```

```
2190          KM          The Natural time-area relation is used for this basin.
2191          KM
2192          KM      Time of Concentration for this sub-basin is based on the following:
2193          KM          6-Hour Rainfall, Pattern No.  1.00
2194          KM          An rainfall areal reduction factor of 0.995
2195          KM
2196          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2197          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2198          KM   .45 .44 .44 .12 .08 .07 .03 .03 .02 .01 .01 .01 .00 .00 .00 .00 .00 .00
2199          KM
2200          KM          L=   1.266 miles, S=  300 feet/mile, Kb= .11
2201          KM
2202          BA   0.408
2203          LG    0.26    0.35    4.90    0.30   11.00
2204          UC   0.425   0.288
2205          UA       0       3       5       8      12      20      43      75      90      96
2206          UA     100
              *

2207          KK  704705
2208          KM        Normal depth route from S704 to C705
2209          KM        Source: Field reconnaissance
2210          RS       7    FLOW      -1
2211          RC    .035    .045    .025    7534   .0186
2212          RX     100     123   159.5   162.8   186.8   205.3   206.3   207.3
1                                          HEC-1 INPUT                                          PAGE 50

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2213          RY   108.5   102.7   101.3   100.2     100   108.3   109.3   110.3
              *

2214          KK    S705
2215          KM   Sub-Basin   S705
2216          KM
2217          KM      The Clark Unit Hydrograph is used for this basin.
2218          KM          The Natural time-area relation is used for this basin.
2219          KM
2220          KM      Time of Concentration for this sub-basin is based on the following:
2221          KM          6-Hour Rainfall, Pattern No.  1.24
2222          KM          An rainfall areal reduction factor of 0.990
2223          KM
2224          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2225          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2226          KM   .40 .40 .39 .15 .12 .11 .06 .06 .06 .01 .01 .01 .00 .00 .00 .00 .00 .00
2227          KM
2228          KM          L=   2.145 miles, S=  253 feet/mile, Kb= .10
2229          KM
2230          BA   0.754
2231          LG    0.22    0.38    6.40    0.16    7.00
2232          UC   0.625   0.475
2233          UA       0       3       5       8      12      20      43      75      90      96
2234          UA     100
              *

2235          KK    C705
2236          KM        Combine routed hydrograph 704705 w/runoff from S705
2237          HC       2
              *

2238          KK   C7050
2239          KM        Storage routing at crossing structure no. 63
2240          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2241          KM        Cooper Aerial Photography extended from Agua Fria FDS
2242          RS       1    STOR       0
2243          SQ       0     200     400     600     800    1000    1200    1400    1420    1800
2244          SQ    2000
2245          SE  1338.2 1342.26 1344.68 1347.93 1352.52 1359.03 1367.08 1376.59 1377.62    1400
2246          SE  1413.9
2247          SV       0    0.08    0.46    1.29    2.71    4.72    7.32   10.63   14.77   19.75
2248          SV   25.57   32.07   39.09   46.63   54.70   63.28   72.40   82.03   92.19  102.87
2249          SE  1338.2    1339    1340    1341    1342    1343    1344    1345    1346    1347
2250          SE    1348    1349    1350    1351    1352    1353    1354    1355    1356    1357
              *

2251          KK  7050AF
2252          KM        Normal depth route from C7050 to C705AF
2253          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2254          RS       8    FLOW      -1
2255          RC    .045    .045    .045 2253.82   .0082
2256          RX     100  147.63  203.16  349.46  505.89  666.35  920.07 1239.80
```

```
2257          RY    1324 1324.30    1324 1321.84 1321.64 1322.54    1324    1326
              *
1                                          HEC-1 INPUT                                                    PAGE 51

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2258          KK  S705AF
2259          KM   Sub-Basin S705AF
2260          KM
2261          KM      The Clark Unit Hydrograph is used for this basin.
2262          KM          The Natural time-area relation is used for this basin.
2263          KM
2264          KM      Time of Concentration for this sub-basin is based on the following:
2265          KM          6-Hour Rainfall, Pattern No.  1.00
2266          KM          An rainfall areal reduction factor of 0.998
2267          KM
2268          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2269          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2270          KM   .49 .49 .49 .18 .15 .14 .07 .07 .07 .06 .06 .05 .01 .01 .01 .01 .01 .00
2271          KM
2272          KM          L=   0.933 miles, S=   34 feet/mile, Kb= .05
2273          KM
2274          BA   0.183
2275          LG    0.31    0.22   10.10    0.03    0.00
2276          UC   0.454   0.384
2277          UA       0       3       5       8      12      20      43      75      90      96
2278          UA     100
              *

2279          KK  C705AF
2280          KM        Combine routed hydrograph 705OAF w/runoff from S705
2281          HC       2
              *

2282          KK  WEST-5
2283          KM        Dummy combine for minor basins, west of the Agua Fria River
2284          HC       5
              *

2285          KK    S706
2286          KM   Sub-Basin   S706
2287          KM
2288          KM      The Clark Unit Hydrograph is used for this basin.
2289          KM          The Natural time-area relation is used for this basin.
2290          KM
2291          KM      Time of Concentration for this sub-basin is based on the following:
2292          KM          6-Hour Rainfall, Pattern No.  1.21
2293          KM          An rainfall areal reduction factor of 0.991
2294          KM
2295          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2296          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2297          KM   .40 .40 .39 .14 .10 .09 .05 .05 .05 .01 .01 .01 .00 .00 .00 .00 .00 .00
2298          KM
2299          KM          L=   2.022 miles, S=  185 feet/mile, Kb= .10
2300          KM
2301          BA   0.713
2302          LG    0.29    0.39    5.70    0.20    7.00
2303          UC   0.700   0.530
2304          UA       0       3       5       8      12      20      43      75      90      96
2305          UA     100
              *
1                                          HEC-1 INPUT                                                    PAGE 52

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2306          KK    S707
2307          KM   Sub-Basin   S707
2308          KM
2309          KM      The Clark Unit Hydrograph is used for this basin.
2310          KM          The Natural time-area relation is used for this basin.
2311          KM
2312          KM      Time of Concentration for this sub-basin is based on the following:
2313          KM          6-Hour Rainfall, Pattern No.  1.14
2314          KM          An rainfall areal reduction factor of 0.992
2315          KM
2316          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2317          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2318          KM   .43 .42 .42 .14 .11 .10 .05 .05 .05 .01 .01 .01 .00 .00 .00 .00 .00 .00
2319          KM
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```
2320          KM          L=   2.256 miles, S=  217 feet/mile, Kb= .10
2321          KM
2322          BA   0.638
2323          LG    0.28    0.39    6.20    0.16    8.00
2324          UC   0.683   0.601
2325          UA      0       3       5       8      12      20      43      75      90      96
2326          UA    100
              *

2327          KK    S728
2328          KM   Sub-Basin   S728
2329          KM
2330          KM      The Clark Unit Hydrograph is used for this basin.
2331          KM          The Natural time-area relation is used for this basin.
2332          KM
2333          KM      Time of Concentration for this sub-basin is based on the following:
2334          KM          6-Hour Rainfall, Pattern No.  1.00
2335          KM          An rainfall areal reduction factor of 0.996
2336          KM
2337          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2338          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2339          KM   .45 .44 .44 .12 .08 .06 .03 .03 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
2340          KM
2341          KM          L=   1.550 miles, S=   77 feet/mile, Kb= .07
2342          KM
2343          BA   0.276
2344          LG    0.35    0.37    5.20    0.22    0.00
2345          UC   0.646   0.674
2346          UA      0       3       5       8      12      20      43      75      90      96
2347          UA    100
              *

2348          KK    WEST
2349          KM       Dummy combine for all operations in the stack, west of the Agua Fria R.
2350          HC       5
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2351          KK    S708
2352          KM   Sub-Basin   S708
2353          KM
2354          KM      The Clark Unit Hydrograph is used for this basin.
2355          KM          The Natural time-area relation is used for this basin.
2356          KM
2357          KM      Time of Concentration for this sub-basin is based on the following:
2358          KM          6-Hour Rainfall, Pattern No.  1.20
2359          KM          An rainfall areal reduction factor of 0.991
2360          KM
2361          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2362          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2363          KM   .44 .44 .44 .18 .15 .15 .08 .08 .08 .06 .06 .05 .02 .01 .01 .01 .01 .01
2364          KM
2365          KM          L=   1.594 miles, S=  194 feet/mile, Kb= .10
2366          KM
2367          BA   0.706
2368          LG    0.22    0.25    9.70    0.04    0.00
2369          UC   0.529   0.323
2370          UA      0       3       5       8      12      20      43      75      90      96
2371          UA    100
              *

2372          KK    S709
2373          KM   Sub-Basin   S709
2374          KM
2375          KM      The Clark Unit Hydrograph is used for this basin.
2376          KM          The Natural time-area relation is used for this basin.
2377          KM
2378          KM      Time of Concentration for this sub-basin is based on the following:
2379          KM          6-Hour Rainfall, Pattern No.  1.00
2380          KM          An rainfall areal reduction factor of 0.994
2381          KM
2382          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2383          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2384          KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .06 .01 .01 .01 .01 .01 .01
2385          KM
2386          KM          L=   1.417 miles, S=  155 feet/mile, Kb= .09
2387          KM
2388          BA   0.441
```

```
2389          LG    0.30    0.19   11.20    0.02    0.00
2390          UC   0.479   0.345
2391          UA       0       3       5       8      12      20      43      75      90      96
2392          UA     100
              *

2393          KK   C709O
2394          KM        Storage routing at crossing structure no. (South of 95)
2395          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2396          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2397          KM        Detour, Jan 4, 1985
2398          RS       1    STOR       0
2399          SQ       0     120     240     360     480     600     720     840     903    1080
2400          SQ    1200
1                                          HEC-1 INPUT                                          PAGE 54

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2401          SE    1496 1500.80 1505.20 1512.68 1523.15 1525.11 1525.18 1525.23 1525.26 1525.33
2402          SE   1525.4
2403          SV     0.0    1.59    4.55    8.36   13.04   20.12   29.31   42.75   51.34   63.40
2404          SV   78.92   97.91
2405          SE    1496    1500    1504    1508    1512    1516    1520    1524    1528    1532
2406          SE    1536    1540
              *

2407          KK  709710
2408          KM        Normal depth route from S709 to C710
2409          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2410          RS       2    FLOW      -1
2411          RC     .05    .035     .05    2683   .0261
2412          RX     100     160     200     220     255     265     280     305
2413          RY    1448    1444    1440    1436    1436    1440    1444    1448
              *

2414          KK    S710
2415          KM   Sub-Basin   S710
2416          KM
2417          KM      The Clark Unit Hydrograph is used for this basin.
2418          KM          The Natural time-area relation is used for this basin.
2419          KM
2420          KM      Time of Concentration for this sub-basin is based on the following:
2421          KM          6-Hour Rainfall, Pattern No.  1.00
2422          KM          An rainfall areal reduction factor of 0.999
2423          KM
2424          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2425          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2426          KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2427          KM
2428          KM          L=   0.633 miles, S=  198 feet/mile, Kb= .10
2429          KM
2430          BA   0.112
2431          LG    0.15    0.22   10.10    0.03    0.00
2432          UC   0.275   0.213
2433          UA       0       3       5       8      12      20      43      75      90      96
2434          UA     100
              *

2435          KK   C710I
2436          KM        Combine routed hydrograph 709710 w/runoff from S710
2437          HC       2
              *

2438          KK   C710O
2439          KM        Storage routing at crossing structure no. 58
2440          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2441          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2442          KM        Detour, Jan 4, 1985
2443          RS       1    STOR       0
2444          SQ       0     120     240     360     480     600     720     840     960    1058
2445          SQ    1200
2446          SE  1424.2 1428.52 1431.70 1436.37 1442.23 1442.33 1442.39 1442.45 1442.50 1442.54
2447          SE  1442.6
1                                          HEC-1 INPUT                                          PAGE 55

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2448          SV     0.0    1.08    3.46    7.13   13.17   22.51
2449          SE    1424    1428    1432    1436    1440    1444
              *
```

```
2450          KK    S711
2451          KM   Sub-Basin    S711
2452          KM
2453          KM      The Clark Unit Hydrograph is used for this basin.
2454          KM          The Natural time-area relation is used for this basin.
2455          KM
2456          KM      Time of Concentration for this sub-basin is based on the following:
2457          KM          6-Hour Rainfall, Pattern No.  1.00
2458          KM          An rainfall areal reduction factor of 0.998
2459          KM
2460          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2461          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2462          KM   .50 .49 .49 .19 .15 .15 .08 .07 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2463          KM
2464          KM          L=   0.520 miles, S=  154 feet/mile, Kb= .10
2465          KM
2466          BA   0.159
2467          LG    0.28    0.19   11.20    0.02    0.00
2468          UC   0.267   0.144
2469          UA       0       3       5       8      12      20      43      75      90      96
2470          UA     100
              *

2471          KK   C711O
2472          KM        Storage routing at crossing structure no. 71
2473          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2474          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2475          KM        Detour, Jan 4, 1985
2476          RS       1    STOR       0
2477          SQ       0      60     120     180     240     300     360     420     480     483
2478          SQ     600
2479          SE  1496.1 1499.98 1504.58 1512.31 1524.39 1525.07 1525.12 1525.15 1525.19 1525.19
2480          SE  1525.2
2481          SV     0.0    0.20    0.59    3.79    7.98   16.27   27.64   42.75   63.25
2482          SE  1496.1    1500    1504    1508    1512    1516    1520    1524    1528
              *

2483          KK  711712
2484          KM        Normal depth route from S711 to C712
2485          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2486          RS       1    FLOW      -1
2487          RC     .05    .035     .05    1586   .0441
2488          RX     100     135     190     215     250     285     335     395
2489          RY    1488    1484    1480    1476    1476    1480    1484    1488
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2490          KK    S712
2491          KM   Sub-Basin    S712
2492          KM
2493          KM      The Clark Unit Hydrograph is used for this basin.
2494          KM          The Natural time-area relation is used for this basin.
2495          KM
2496          KM      Time of Concentration for this sub-basin is based on the following:
2497          KM          6-Hour Rainfall, Pattern No.  1.00
2498          KM          An rainfall areal reduction factor of 0.999
2499          KM
2500          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2501          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2502          KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2503          KM
2504          KM          L=   0.312 miles, S=  271 feet/mile, Kb= .08
2505          KM
2506          BA   0.068
2507          LG    0.17    0.22   10.10    0.03    0.00
2508          UC   0.154   0.085
2509          UA       0       3       5       8      12      20      43      75      90      96
2510          UA     100
              *

2511          KK   C712I
2512          KM        Combine routed hydrograph 711712 w/runoff from S712
2513          HC       2
              *

2514          KK   C712O
2515          KM        Storage routing at crossing structure no. 60
2516          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
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2517          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2518          KM        Detour, Jan 4, 1985
2519          RS       1    STOR       0
2520          SQ       0      90     180     270     360     450     540     630     658     810
2521          SQ     900
2522          SE    1432 1435.56 1437.81 1440.49 1444.18 1449.19 1450.09 1450.14 1450.16 1450.24
2523          SE  1450.2
2524          SV     0.0    0.14    0.36    0.65    1.02    1.56    2.43    3.61    5.10
2525          SE    1432    1433    1434    1435    1436    1437    1438    1439    1440
              *

2526          KK  712714
2527          KM        Normal depth route from C712 to C714
2528          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2529          RS       2    FLOW      -1
2530          RC     .05    .035     .05    2032   .0172
2531          RX     100     325     355     370     415     435     450     515
2532          RY    1416    1412    1408    1404    1404    1408    1412    1408
              *
1                                          HEC-1 INPUT                                          PAGE 57

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2533          KK    S713
2534          KM   Sub-Basin   S713
2535          KM
2536          KM      The Clark Unit Hydrograph is used for this basin.
2537          KM          The Natural time-area relation is used for this basin.
2538          KM
2539          KM      Time of Concentration for this sub-basin is based on the following:
2540          KM          6-Hour Rainfall, Pattern No.  1.00
2541          KM          An rainfall areal reduction factor of 0.999
2542          KM
2543          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2544          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2545          KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2546          KM
2547          KM          L=   0.545 miles, S=  220 feet/mile, Kb= .08
2548          KM
2549          BA   0.107
2550          LG    0.15    0.22   10.10    0.03    0.00
2551          UC   0.217   0.149
2552          UA       0       3       5       8      12      20      43      75      90      96
2553          UA     100
              *

2554          KK   C7130
2555          KM        Storage routing at crossing structure no. 59
2556          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2557          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2558          KM        Detour, Jan 4, 1985
2559          RS       1    STOR       0
2560          SQ       0      60     120     180     240     300     326     420     480     540
2561          SQ     600
2562          SE    1420 1423.17 1425.30 1428.15 1432.22 1437.97 1438.04 1438.12 1438.15 1438.18
2563          SE  1438.2
2564          SV     0.0    2.35    5.72   10.11   15.52   26.19
2565          SE    1420    1424    1428    1432    1436    1440
              *

2566          KK  713714
2567          KM        Normal depth route from S713 to C714
2568          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2569          RS       1    FLOW      -1
2570          RC     .05    .035     .05     831   .0421
2571          RX     100     260     270     280     305     315     335     490
2572          RY    1416    1416    1412    1408    1408    1412    1416    1420
              *

2573          KK    S714
2574          KM   Sub-Basin   S714
2575          KM
2576          KM      The Clark Unit Hydrograph is used for this basin.
2577          KM          The Natural time-area relation is used for this basin.
2578          KM
2579          KM      Time of Concentration for this sub-basin is based on the following:
2580          KM          6-Hour Rainfall, Pattern No.  1.00
1                                          HEC-1 INPUT                                          PAGE 58

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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2581          KM          An rainfall areal reduction factor of 0.999
2582          KM
2583          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2584          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2585          KM   .48 .48 .48 .17 .13 .12 .06 .06 .06 .04 .03 .00 .00 .00 .00 .00 .00 .00
2586          KM
2587          KM          L=   0.428 miles, S=  129 feet/mile, Kb= .08
2588          KM
2589          BA   0.060
2590          LG    0.35    0.29    8.40    0.06    0.00
2591          UC   0.229   0.182
2592          UA      0       3       5       8      12      20      43      75      90      96
2593          UA    100
              *

2594          KK    C714
2595          KM        Combine routed hydrographs 712714 and 713714 w/runoff from S714
2596          HC       3
              *

2597          KK    S715
2598          KM   Sub-Basin   S715
2599          KM
2600          KM      The Clark Unit Hydrograph is used for this basin.
2601          KM          The Natural time-area relation is used for this basin.
2602          KM
2603          KM      Time of Concentration for this sub-basin is based on the following:
2604          KM          6-Hour Rainfall, Pattern No.  1.00
2605          KM          An rainfall areal reduction factor of 0.997
2606          KM
2607          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2608          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2609          KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .06 .01 .01 .01 .01 .01 .01
2610          KM
2611          KM          L=   0.959 miles, S=   63 feet/mile, Kb= .07
2612          KM
2613          BA   0.220
2614          LG    0.31    0.19   11.20    0.02    0.00
2615          UC   0.450   0.350
2616          UA      0       3       5       8      12      20      43      75      90      96
2617          UA    100
              *

2618          KK    S716
2619          KM   Sub-Basin   S716
2620          KM
2621          KM      The Clark Unit Hydrograph is used for this basin.
2622          KM          The Natural time-area relation is used for this basin.
2623          KM
2624          KM      Time of Concentration for this sub-basin is based on the following:
2625          KM          6-Hour Rainfall, Pattern No.  1.47
2626          KM          An rainfall areal reduction factor of 0.986
2627          KM
2628          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2629          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2630          KM   .38 .37 .37 .19 .17 .17 .11 .10 .10 .07 .07 .07 .03 .03 .03 .02 .02 .02
2631          KM
2632          KM          L=   2.353 miles, S=   87 feet/mile, Kb= .06
2633          KM
2634          BA   1.128
2635          LG    0.27    0.22   10.10    0.03    1.00
2636          UC   0.692   0.455
2637          UA      0       3       5       8      12      20      43      75      90      96
2638          UA    100
              *

2639          KK   C7160
2640          KM        Storage routing at crossing structure no. 74
2641          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2642          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2643          KM        Detour, Jan 4, 1985
2644          RS       1    STOR       0
2645          SQ       0     230     460     690     920    1150    1380    1610    1625    2070
2646          SQ    2300
2647          SE  1504.9 1509.94 1516.13 1526.53 1544.42 1592.19 1729.99 2074.29 2108.01 4241.67
2648          SE  6746.9
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2649          SV       0    0.40    5.42   17.50   37.71   68.23  111.87
2650          SE  1504.9    1508    1512    1516    1520    1524    1528
              *

2651          KK  716717
2652          KM        Normal depth route from S716 to C717
2653          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2654          RS       4    FLOW      -1
2655          RC     .05    .035     .05    4232   .0177
2656          RX     100     115     150     165     195     285     370     425
2657          RY    1504    1500    1496    1492    1492    1496    1500    1504
              *

2658          KK    S717
2659          KM   Sub-Basin   S717
2660          KM
2661          KM      The Clark Unit Hydrograph is used for this basin.
2662          KM          The Natural time-area relation is used for this basin.
2663          KM
2664          KM      Time of Concentration for this sub-basin is based on the following:
2665          KM          6-Hour Rainfall, Pattern No.  1.00
2666          KM          An rainfall areal reduction factor of 0.996
2667          KM
2668          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2669          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2670          KM   .50 .49 .49 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2671          KM
2672          KM          L=   0.727 miles, S=  131 feet/mile, Kb= .07
2673          KM
2674          BA   0.286
2675          LG    0.25    0.19   11.20    0.02    0.00
2676          UC   0.279   0.142
2677          UA       0       3       5       8      12      20      43      75      90      96
2678          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 60

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2679          KK    C717
2680          KM        Combine routed hydrograph 716717 w/runoff from S717
2681          HC       2
              *

2682          KK  717718
2683          KM        Normal depth route from C717 to C718
2684          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2685          RS      11    FLOW      -1
2686          RC     .05    .045     .05    7146   .0105
2687          RX     100     235     275     325     420     455     465     530
2688          RY    1364    1360    1356    1352    1352    1356    1360    1380
2689          RL                    0.03  1352.0
              *

2690          KK    S718
2691          KM   Sub-Basin   S718
2692          KM
2693          KM      The Clark Unit Hydrograph is used for this basin.
2694          KM          The Natural time-area relation is used for this basin.
2695          KM
2696          KM      Time of Concentration for this sub-basin is based on the following:
2697          KM          6-Hour Rainfall, Pattern No.  1.00
2698          KM          An rainfall areal reduction factor of 0.994
2699          KM
2700          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2701          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2702          KM   .50 .49 .49 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2703          KM
2704          KM          L=   2.103 miles, S=   45 feet/mile, Kb= .07
2705          KM
2706          BA   0.442
2707          LG    0.22    0.18   11.20    0.02    2.00
2708          UC   0.879   0.926
2709          UA       0       3       5       8      12      20      43      75      90      96
2710          UA     100
              *

2711          KK    C718
2712          KM        Combine routed hydrograph 717718 w/runoff from S718
2713          HC       2
```

```
                    *
2714                KK    S719
2715                KM   Sub-Basin   S719
2716                KM
2717                KM      The Clark Unit Hydrograph is used for this basin.
2718                KM          The Natural time-area relation is used for this basin.
2719                KM
2720                KM      Time of Concentration for this sub-basin is based on the following:
2721                KM          6-Hour Rainfall, Pattern No.  1.00
2722                KM          An rainfall areal reduction factor of 0.998
2723                KM
2724                KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1                                              HEC-1 INPUT                                                    PAGE 61

LINE                ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2725                KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2726                KM   .51 .50 .50 .19 .16 .16 .08 .08 .08 .08 .08 .08 .02 .02 .02 .02 .02 .01
2727                KM
2728                KM          L=   1.221 miles, S=   82 feet/mile, Kb= .08
2729                KM
2730                BA   0.154
2731                LG    0.23    0.11   12.40    0.01    4.00
2732                UC   0.508   0.595
2733                UA      0       3       5       8      12      20      43      75      90      96
2734                UA    100
                    *

2735                KK  EAST-1
2736                KM        Dummy combine of minor subbasins east of the Agua Fria River
2737                HC       6
                    *

2738                KK    S720
2739                KM   Sub-Basin   S720
2740                KM
2741                KM      The Clark Unit Hydrograph is used for this basin.
2742                KM          The Natural time-area relation is used for this basin.
2743                KM
2744                KM      Time of Concentration for this sub-basin is based on the following:
2745                KM          6-Hour Rainfall, Pattern No.  1.00
2746                KM          An rainfall areal reduction factor of 0.995
2747                KM
2748                KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2749                KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2750                KM   .50 .49 .49 .19 .15 .15 .08 .07 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2751                KM
2752                KM          L=   1.516 miles, S=   86 feet/mile, Kb= .07
2753                KM
2754                BA   0.370
2755                LG    0.27    0.19   11.20    0.02    1.00
2756                UC   0.533   0.453
2757                UA      0       3       5       8      12      20      43      75      90      96
2758                UA    100
                    *

2759                KK    S721
2760                KM   Sub-Basin   S721
2761                KM
2762                KM      The Clark Unit Hydrograph is used for this basin.
2763                KM          The Natural time-area relation is used for this basin.
2764                KM
2765                KM      Time of Concentration for this sub-basin is based on the following:
2766                KM          6-Hour Rainfall, Pattern No.  1.00
2767                KM          An rainfall areal reduction factor of 0.996
2768                KM
2769                KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2770                KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2771                KM   .47 .47 .47 .16 .12 .11 .05 .05 .05 .03 .01 .00 .00 .00 .00 .00 .00 .00
2772                KM
2773                KM          L=   0.832 miles, S=  114 feet/mile, Kb= .07
1                                              HEC-1 INPUT                                                    PAGE 62

LINE                ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2774                KM
2775                BA   0.335
2776                LG    0.30    0.33    7.30    0.09    0.00
2777                UC   0.333   0.176
2778                UA      0       3       5       8      12      20      43      75      90      96
```

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2779          UA     100
              *

2780          KK   C7210
2781          KM        Storage routing at crossing structure no. 75
2782          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2783          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2784          KM        Detour, Jan 4, 1985
2785          RS       1    STOR       0
2786          SQ       0     120     240     360     480     600     720     840     866    1080
2787          SQ    1200
2788          SE    1490 1494.74 1499.14 1506.62 1517.09 1534.17 1572.06 1662.33 1693.69 2254.60
2789          SE  2968.5
2790          SV       0    1.83    7.58   17.18   30.63   47.92   69.05   94.03  122.85  155.51
2791          SV  192.02
2792          SE    1490    1493    1496    1499    1502    1505    1508    1511    1514    1517
2793          SE    1520
              *

2794          KK  721722
2795          KM        Normal depth route from C7210 to C722
2796          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2797          RS       9    FLOW      -1
2798          RC     .05    .035     .05    8812   .0170
2799          RX     100     125     175     200     235     250     270     595
2800          RY    1420    1416    1412    1408    1408    1412    1420    1424
2801          RL                    0.03  1408.0
              *

2802          KK    S722
2803          KM   Sub-Basin   S722
2804          KM
2805          KM      The Clark Unit Hydrograph is used for this basin.
2806          KM          The Natural time-area relation is used for this basin.
2807          KM
2808          KM      Time of Concentration for this sub-basin is based on the following:
2809          KM          6-Hour Rainfall, Pattern No.  1.38
2810          KM          An rainfall areal reduction factor of 0.988
2811          KM
2812          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2813          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2814          KM   .39 .39 .39 .18 .16 .16 .09 .09 .09 .06 .05 .05 .02 .02 .02 .01 .01 .01
2815          KM
2816          KM          L=   2.334 miles, S=   79 feet/mile, Kb= .06
2817          KM
2818          BA   0.955
2819          LG    0.30    0.25    9.70    0.04    0.00
2820          UC   0.717   0.517
2821          UA       0       3       5       8      12      20      43      75      90      96
2822          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2823          KK    C722
2824          KM       Combine routed hydrograph 721722 w/runoff from S722
2825          HC       2
              *

2826          KK    S723
2827          KM   Sub-Basin   S723
2828          KM
2829          KM      The Clark Unit Hydrograph is used for this basin.
2830          KM          The Natural time-area relation is used for this basin.
2831          KM
2832          KM      Time of Concentration for this sub-basin is based on the following:
2833          KM          6-Hour Rainfall, Pattern No.  1.00
2834          KM          An rainfall areal reduction factor of 0.999
2835          KM
2836          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2837          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2838          KM   .49 .49 .49 .18 .15 .14 .07 .07 .07 .06 .06 .05 .01 .01 .01 .01 .01 .00
2839          KM
2840          KM          L=   0.562 miles, S=  178 feet/mile, Kb= .11
2841          KM
2842          BA   0.085
2843          LG    0.29    0.22   10.10    0.03    0.00
2844          UC   0.283   0.235
2845          UA       0       3       5       8      12      20      43      75      90      96
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2846          UA     100
              *

2847          KK    S724
2848          KM   Sub-Basin   S724
2849          KM
2850          KM      The Clark Unit Hydrograph is used for this basin.
2851          KM          The Natural time-area relation is used for this basin.
2852          KM
2853          KM      Time of Concentration for this sub-basin is based on the following:
2854          KM          6-Hour Rainfall, Pattern No.  1.49
2855          KM          An rainfall areal reduction factor of 0.986
2856          KM
2857          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2858          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2859          KM   .38 .37 .37 .20 .18 .18 .11 .11 .11 .07 .07 .07 .03 .03 .03 .02 .02 .02
2860          KM
2861          KM          L=   2.319 miles, S=   97 feet/mile, Kb= .06
2862          KM
2863          BA   1.156
2864          LG    0.27    0.19   11.20    0.02    0.00
2865          UC   0.650   0.414
2866          UA       0       3       5       8      12      20      43      75      90      96
2867          UA     100
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2868          KK    S725
2869          KM   Sub-Basin   S725
2870          KM
2871          KM      The Clark Unit Hydrograph is used for this basin.
2872          KM          The Natural time-area relation is used for this basin.
2873          KM
2874          KM      Time of Concentration for this sub-basin is based on the following:
2875          KM          6-Hour Rainfall, Pattern No.  1.49
2876          KM          An rainfall areal reduction factor of 0.986
2877          KM
2878          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2879          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2880          KM   .36 .36 .36 .18 .16 .16 .10 .10 .10 .05 .05 .04 .03 .02 .02 .01 .01 .01
2881          KM
2882          KM          L=   3.038 miles, S=   71 feet/mile, Kb= .06
2883          KM
2884          BA   1.158
2885          LG    0.30    0.27    8.80    0.05    0.00
2886          UC   0.917   0.752
2887          UA       0       3       5       8      12      20      43      75      90      96
2888          UA     100
              *

2889          KK  EAST-2
2890          KM       Dummy combine of minor subbasins east of the Agua Fria River
2891          HC       5
              *

2892          KK    S726
2893          KM   Sub-Basin   S726
2894          KM
2895          KM      The Clark Unit Hydrograph is used for this basin.
2896          KM          The Natural time-area relation is used for this basin.
2897          KM
2898          KM      Time of Concentration for this sub-basin is based on the following:
2899          KM          6-Hour Rainfall, Pattern No.  1.00
2900          KM          An rainfall areal reduction factor of 0.996
2901          KM
2902          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2903          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2904          KM   .46 .45 .45 .13 .10 .08 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
2905          KM
2906          KM          L=   1.036 miles, S=  295 feet/mile, Kb= .07
2907          KM
2908          BA   0.334
2909          LG    0.31    0.39    5.70    0.18    7.00
2910          UC   0.267   0.164
2911          UA       0       3       5       8      12      20      43      75      90      96
2912          UA     100
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2913          KK  726727
2914          KM        Normal depth route from C726 to C727
2915          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2916          RS       5    FLOW      -1
2917          RC     .05    .035     .05    6228   .0185
2918          RX     100     120     145     170     225     240     250     265
2919          RY    1308    1304    1300    1296    1296    1300    1304    1308
              *

2920          KK    S727
2921          KM   Sub-Basin   S727
2922          KM
2923          KM      The Clark Unit Hydrograph is used for this basin.
2924          KM          The Natural time-area relation is used for this basin.
2925          KM
2926          KM      Time of Concentration for this sub-basin is based on the following:
2927          KM          6-Hour Rainfall, Pattern No.  1.00
2928          KM          An rainfall areal reduction factor of 0.995
2929          KM
2930          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2931          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2932          KM   .49 .48 .48 .17 .14 .14 .07 .07 .06 .05 .05 .04 .01 .01 .00 .00 .00 .00
2933          KM
2934          KM          L=   1.815 miles, S=   85 feet/mile, Kb= .07
2935          KM
2936          BA   0.375
2937          LG    0.27    0.25    9.70    0.04    0.00
2938          UC   0.621   0.614
2939          UA       0       3       5       8      12      20      43      75      90      96
2940          UA     100
              *

2941          KK    C727
2942          KM        Combine routed hydrograph 726727 w/runoff from S727
2943          HC       2
              *

2944          KK   TOTAL
2945          KM        Dummy combine of all operations
2946          HC       4
              *
2947          ZZ
1
              SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

   NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    40        S100
                 V
                 V
    61      100102
                 .
                 .
    68           .        S101
                 .           .
                 .           .
    89       C102R............
                 .
                 .
    92           .        S102
                 .           V
                 .           V
   113           .      101102
                 .           .
                 .           .
   120           .           .        S103
                 .           .           .
                 .           .           .
   141           .       C102L............
                 .           .
                 .           .
   144        C102............
                 V
                 V
   147      102103
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154             .        S104
                .           .
                .           .
175        C103R............
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178             .        S105
                .           .
                .           .
199         C103............
               V
               V
202       103104
                .
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209             .        S106
                .           .
                .           .
230         C104............
               V
               V
233       104105
                .
                .
240             .        S107
                .           .
                .           .
261        C105L............
                .
                .
264             .        S200
                .           V
                .           V
285             .      200201
                .           .
                .           .
292             .           .        S201
                .           .           .
                .           .           .
313             .        C201............
                .           V
                .           V
316             .      201203
                .           .
                .           .
323             .           .        S202
                .           .           V
                .           .           V
344             .           .      202203
                .           .           .
                .           .           .
351             .           .           .        S203
                .           .           .           .
                .           .           .           .
372             .       C203R......................
                .           .
                .           .
375             .           .        S204
                .           .           .
                .           .           .
396             .        C203............
                .           V
                .           V
399             .      203204
                .           .
                .           .
406             .           .        S205
                .           .           .
                .           .           .
427             .        C204............
                .           V
                .           V
430             .      204205
                .           .
                .           .
437             .           .        S206
                .           .           .
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458             .       C205L............
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461             .           .        S207
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482             .       C205.............
                .           V
                .           V
485             .      205206
                .           .
                .           .
492             .           .        S208
                .           .           .
                .           .           .
513             .       C206.............
                .           V
                .           V
516             .      206207
                .           .
                .           .
523             .           .        S209
                .           .           .
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544             .      C207R............
                .           .
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547             .           .        S210
                .           .           .
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568             .       C207.............
                .           V
                .           V
571             .      207105
                .           .
                .           .
578             .           .        S211
                .           .           .
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599             .      C105R............
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602        C105.............
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605             .       S300
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                .           .
626             .           .        S301
                .           .           .
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647             .       C300.............
                .           V
                .           V
650             .      300301
                .           .
                .           .
657             .           .        S302
                .           .           .
                .           .           .
678             .       C301.............
                .           V
                .           V
681             .      301302
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                .           .
688             .           .        S303
                .           .           .
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709             .       C302.............
                .           V
                .           V
712             .      302303
                .           .
                .           .
719             .           .        S304
                .           .           .
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740             .       C303.............
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743      WEST-1.............
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                .
  746           .        S400
                .           V
                .           V
  767           .       C400O
                .           V
                .           V
  775           .      400401
                .           .
                .           .
  782           .           .        S401
                .           .           .
                .           .           .
  803           .        C401............
                .           V
                .           V
  806           .      401402
                .           .
                .           .
  813           .           .        S402
                .           .           .
                .           .           .
  834           .        C402............
                .           V
                .           V
  837           .      402403
                .           .
                .           .
  845           .           .        S403
                .           .           .
                .           .           .
  866           .        C403............
                .           V
                .           V
  869           .      403404
                .           .
                .           .
  877           .           .        S404
                .           .           .
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  898           .        C404............
                .           .
                .           .
  901      WEST-2............
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                .
  904           .        S500
                .           V
                .           V
  925           .      500501
                .           .
                .           .
  932           .           .        S501
                .           .           .
                .           .           .
  953           .        C501............
                .           V
                .           V
  956           .      501502
                .           .
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  964           .           .        S502
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  985           .       C502L............
                .           .
                .           .
  988           .           .        S503
                .           .           .
                .           .           .
 1009           .       C502I............
                .           V
                .           V
 1012           .       C502O
                .           V
                .           V
 1020           .      502505
                .           .
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 1028           .           .        S504
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1049            .      C505L...........
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1052            .          .       S505
                .          .          V
                .          .          V
1073            .          .      C503O
                .          .          V
                .          .          V
1081            .          .     503505
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1089            .          .          .       S506
                .          .          .          V
                .          .          .          V
1110            .          .          .      C504O
                .          .          .          V
                .          .          .          V
1118            .          .          .     504505
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1125            .          .          .          .        S507
                .          .          .          .           .
                .          .          .          .           .
1146            .          .      C505R......................
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                .          .          .
1149            .      C505...........
                .         V
                .         V
1152            .    505509
                .          .
                .          .
1160            .          .       S508
                .          .          .
                .          .          .
1181            .     C509L...........
                .          .
                .          .
1184            .          .       S509
                .          .          V
                .          .          V
1205            .          .      C506O
                .          .          V
                .          .          V
1213            .          .     506508
                .          .          .
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1220            .          .          .       S510
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1241            .          .      C508R...........
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1244            .          .          .       S511
                .          .          .          V
                .          .          .          V
1265            .          .          .      C507O
                .          .          .          V
                .          .          .          V
1273            .          .          .     507508
                .          .          .          .
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1281            .          .          .          .        S512
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1302            .          .          .      C508L...........
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1305            .          .      C508...........
                .          .         V
                .          .         V
1308            .          .     508509
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1316            .          .          .       S513
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1337            .          .      C509R...........
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1340            .       C509...........
                .          V
                .          V
1343            .     509510
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1351            .          .       S514
                .          .          .
                .          .          .
1372            .       C510...........
                .          V
                .          V
1375            .     510511
                .          .
                .          .
1383            .          .       S515
                .          .          .
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1404            .       C511...........
                .          V
                .          V
1407            .     511512
                .          .
                .          .
1415            .          .       S516
                .          .          .
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1436            .       C512...........
                .          .
                .          .
1439      WEST-3...........
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                .
1442            .       S600
                .          V
                .          V
1463            .     600601
                .          .
                .          .
1470            .          .       S601
                .          .          .
                .          .          .
1491            .       C601...........
                .          V
                .          V
1494            .     601602
                .          .
                .          .
1501            .          .       S603
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                .          .          .
1522            .      C602L...........
                .          .
                .          .
1525            .          .       S602
                .          .          .
                .          .          .
1546            .       C602...........
                .          V
                .          V
1549            .     602603
                .          .
                .          .
1557            .          .       S606
                .          .          .
                .          .          .
1578            .      C603L...........
                .          .
                .          .
1581            .          .       S605
                .          .          .
                .          .          .
1602            .          .          .       S604
                .          .          .          .
                .          .          .          .
1623            .       C603......................
                .          V
                .          V
1626            .     603604
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                .          .
                .          .
1634            .          .        S609
                .          .          .
                .          .          .
1655            .     C604R............
                .          .
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1658            .          .        S607
                .          .          .
                .          .          .
1679            .      C604............
                .         V
                .         V
1682            .    604605
                .          .
                .          .
1689            .          .        S608
                .          .          .
                .          .          .
1710            .      C605............
                .         V
                .         V
1713            .    605606
                .          .
                .          .
1721            .          .        S610
                .          .          .
                .          .          .
1742            .     C606L............
                .          .
                .          .
1745            .          .        S612
                .          .          .
                .          .          .
1766            .      C606............
                .         V
                .         V
1769            .    606608
                .          .
                .          .
1777            .          .        S611
                .          .           V
                .          .           V
1798            .          .      607608
                .          .          .
                .          .          .
1805            .          .          .        S613
                .          .          .          .
                .          .          .          .
1826            .      C608........................
                .         V
                .         V
1829            .    608609
                .          .
                .          .
1837            .          .        S614
                .          .          .
                .          .          .
1858            .      C609............
                .         V
                .         V
1861            .    609611
                .          .
                .          .
1869            .          .        S617
                .          .          .
                .          .          .
1890            .     C611R............
                .          .
                .          .
1893            .          .        S615
                .          .           V
                .          .           V
1914            .          .      610611
                .          .          .
                .          .          .
1921            .          .          .        S616
                .          .          .          .
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1942            .          .     C611L............
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                .          .          .
                .          .          .
1945            .       C611...........
                .          V
                .          V
1948            .     611613
                .          .
                .          .
1956            .          .       S618
                .          .          .
                .          .          .
1977            .      C613R...........
                .          .
                .          .
1980            .          .       S619
                .          .          V
                .          .          V
2001            .          .     612613
                .          .          .
                .          .          .
2008            .          .          .       S620
                .          .          .          .
                .          .          .          .
2029            .          .      C613L...........
                .          .          .
                .          .          .
2032            .       C613...........
                .          V
                .          V
2035            .     613614
                .          .
                .          .
2043            .          .       S621
                .          .          .
                .          .          .
2064            .       C614...........
                .          V
                .          V
2067            .     614615
                .          .
                .          .
2075            .          .       S622
                .          .          .
                .          .          .
2096            .       C615...........
                .          .
                .          .
2099      WEST-4...........
                .
                .
2102            .       S700
                .          .
                .          .
2123            .          .       S701
                .          .          .
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2144            .          .          .       S702
                .          .          .          .
                .          .          .          .
2165            .          .          .          .       S703
                .          .          .          .          .
                .          .          .          .          .
2186            .          .          .          .          .       S704
                .          .          .          .          .          V
                .          .          .          .          .          V
2207            .          .          .          .          .     704705
                .          .          .          .          .          .
                .          .          .          .          .          .
2214            .          .          .          .          .          .       S705
                .          .          .          .          .          .          .
                .          .          .          .          .          .          .
2235            .          .          .          .          .       C705...........
                .          .          .          .          .          V
                .          .          .          .          .          V
2238            .          .          .          .          .      C7050
                .          .          .          .          .          V
                .          .          .          .          .          V
2251            .          .          .          .          .     7050AF
                .          .          .          .          .          .
                .          .          .          .          .          .
2258            .          .          .          .          .          .     S705AF
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2279             .          .          .          .          .     C705AF...........
                 .          .          .          .          .          .
                 .          .          .          .          .          .
2282             .     WEST-5..........................................
                 .          .
                 .          .
2285             .          .       S706
                 .          .          .
                 .          .          .
2306             .          .          .       S707
                 .          .          .          .
                 .          .          .          .
2327             .          .          .          .       S728
                 .          .          .          .          .
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2348        WEST.............................................
                 .
                 .
2351             .       S708
                 .          .
                 .          .
2372             .          .       S709
                 .          .          V
                 .          .          V
2393             .          .      C709O
                 .          .          V
                 .          .          V
2407             .          .     709710
                 .          .          .
                 .          .          .
2414             .          .          .       S710
                 .          .          .          .
                 .          .          .          .
2435             .          .      C710I...........
                 .          .          V
                 .          .          V
2438             .          .      C710O
                 .          .          .
                 .          .          .
2450             .          .          .       S711
                 .          .          .          V
                 .          .          .          V
2471             .          .          .      C711O
                 .          .          .          V
                 .          .          .          V
2483             .          .          .     711712
                 .          .          .          .
                 .          .          .          .
2490             .          .          .          .       S712
                 .          .          .          .          .
                 .          .          .          .          .
2511             .          .          .      C712I...........
                 .          .          .          V
                 .          .          .          V
2514             .          .          .      C712O
                 .          .          .          V
                 .          .          .          V
2526             .          .          .     712714
                 .          .          .          .
                 .          .          .          .
2533             .          .          .          .       S713
                 .          .          .          .          V
                 .          .          .          .          V
2554             .          .          .          .      C713O
                 .          .          .          .          V
                 .          .          .          .          V
2566             .          .          .          .     713714
                 .          .          .          .          .
                 .          .          .          .          .
2573             .          .          .          .          .       S714
                 .          .          .          .          .          .
                 .          .          .          .          .          .
2594             .          .          .       C714.......................
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2597             .          .          .          .       S715
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2618             .          .          .          .          .       S716
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                 .          .          .          .          .          V
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2639             .          .          .          .          .       C716O
                 .          .          .          .          .          V
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2651             .          .          .          .          .      716717
                 .          .          .          .          .          .
                 .          .          .          .          .          .
2658             .          .          .          .          .          .        S717
                 .          .          .          .          .          .          .
                 .          .          .          .          .          .          .
2679             .          .          .          .          .        C717............
                 .          .          .          .          .          V
                 .          .          .          .          .          V
2682             .          .          .          .          .      717718
                 .          .          .          .          .          .
                 .          .          .          .          .          .
2690             .          .          .          .          .          .        S718
                 .          .          .          .          .          .          .
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2711             .          .          .          .          .        C718............
                 .          .          .          .          .          .
                 .          .          .          .          .          .
2714             .          .          .          .          .          .        S719
                 .          .          .          .          .          .          .
                 .          .          .          .          .          .          .
2735             .      EAST-1.......................................................
                 .          .
                 .          .
2738             .          .       S720
                 .          .          .
                 .          .          .
2759             .          .          .       S721
                 .          .          .          V
                 .          .          .          V
2780             .          .          .      C721O
                 .          .          .          V
                 .          .          .          V
2794             .          .          .     721722
                 .          .          .          .
                 .          .          .          .
2802             .          .          .          .       S722
                 .          .          .          .          .
                 .          .          .          .          .
2823             .          .          .       C722............
                 .          .          .          .
                 .          .          .          .
2826             .          .          .          .       S723
                 .          .          .          .          .
                 .          .          .          .          .
2847             .          .          .          .          .       S724
                 .          .          .          .          .          .
                 .          .          .          .          .          .
2868             .          .          .          .          .          .        S725
                 .          .          .          .          .          .          .
                 .          .          .          .          .          .          .
2889             .          .      EAST-2...........................................
                 .          .          .
                 .          .          .
2892             .          .          .       S726
                 .          .          .          V
                 .          .          .          V
2913             .          .          .     726727
                 .          .          .          .
                 .          .          .          .
2920             .          .          .          .       S727
                 .          .          .          .          .
                 .          .          .          .          .
2941             .          .          .       C727............
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                 .          .          .          .
2944         TOTAL.................................
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   09AUG01  TIME  14:57:34  *
*                                      *
****************************************
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```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
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N. Peoria Area Drainage Master Plan                    File: EX100-6.IH1
   For Maricopa County FCD 99-45                   Original:05-04-00     MCG
   By Stantec Consulting, Inc. P82000146            Revised:02-01-01     MMZ

The N. Peoria ADMP study limits consists of several small tributary
watersheds to the Agua Fria River.  This model is for the existing
condition 100-year, 6-hour storm event.  A companion model is also created
for the existing condition 100-year, 24-hour storm event.  Both models
100-year, 6- and 24-hour) should be referenced for the determination of
storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
   100-year, 6-hour rainfall with FCDMC design rainfall distributions
   Green & Ampt Loss Rate Method
   NMIN = 2 minutes
   Clark Unit Hydrograph
   Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

21 IO        OUTPUT CONTROL VARIABLES
                   IPRNT          5  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT        HYDROGRAPH TIME DATA
                    NMIN          2  MINUTES IN COMPUTATION INTERVAL
                   IDATE      1    0  STARTING DATE
                   ITIME       0000  STARTING TIME
                      NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                  NDDATE      2    0  ENDING DATE
                  NDTIME       0918  ENDING TIME
                   ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.03 HOURS
                  TOTAL TIME BASE   33.30 HOURS

      ENGLISH UNITS
           DRAINAGE AREA          SQUARE MILES
           PRECIPITATION DEPTH    INCHES
           LENGTH, ELEVATION      FEET
           FLOW                   CUBIC FEET PER SECOND
           STORAGE VOLUME         ACRE-FEET
           SURFACE AREA           ACRES
           TEMPERATURE            DEGREES FAHRENHEIT

23 JD        INDEX STORM NO. 1
                  STRM        3.35  PRECIPITATION DEPTH
                  TRDA        0.01  TRANSPOSITION DRAINAGE AREA

24 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                 0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                 0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                 0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                  STRM        3.33  PRECIPITATION DEPTH
                  TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD         INDEX STORM NO. 3
                STRM        3.28  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI           PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD         INDEX STORM NO. 4
                STRM        3.09  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI           PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD         INDEX STORM NO. 5
                STRM        2.71  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI           PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
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                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	746.	4.43	122.	31.	22.	0.57		
+	ROUTED TO	100102	702.	4.67	122.	31.	22.	0.57		
+	HYDROGRAPH AT	S101	1034.	4.33	126.	31.	23.	0.63		
+	2 COMBINED AT	C102R	1185.	4.53	233.	59.	42.	1.20		
+	HYDROGRAPH AT	S102	540.	4.50	99.	25.	18.	0.45		
+	ROUTED TO	101102	517.	4.73	98.	25.	18.	0.45		
+	HYDROGRAPH AT	S103	455.	4.57	83.	21.	15.	0.40		
+	2 COMBINED AT	C102L	856.	4.67	174.	44.	32.	0.84		
+	2 COMBINED AT	C102	1769.	4.60	385.	97.	70.	2.05		
+	ROUTED TO	102103	1725.	4.83	385.	97.	70.	2.05		
+	HYDROGRAPH AT	S104	1137.	4.50	175.	44.	32.	0.90		
+	2 COMBINED AT	C103R	2330.	4.77	530.	134.	97.	2.95		
+	HYDROGRAPH AT	S105	547.	4.67	119.	30.	22.	0.59		
+	2 COMBINED AT	C103	2671.	4.77	621.	157.	113.	3.54		
+	ROUTED TO	103104	2630.	4.93	620.	157.	113.	3.54		
+	HYDROGRAPH AT	S106	686.	4.47	107.	27.	19.	0.57		
+	2 COMBINED AT	C104	2892.	4.87	695.	176.	127.	4.11		
+	ROUTED TO	104105	2854.	5.07	695.	176.	127.	4.11		
+	HYDROGRAPH AT	S107	789.	4.60	154.	38.	28.	0.94		

+	2 COMBINED AT	C105L	3193.	5.03	801.	203.	146.	5.05
+	HYDROGRAPH AT	S200	1379.	4.40	204.	51.	37.	0.96
+	ROUTED TO	200201	1344.	4.43	204.	51.	37.	0.96
+	HYDROGRAPH AT	S201	603.	4.30	78.	20.	14.	0.35
+	2 COMBINED AT	C201	1669.	4.43	272.	69.	49.	1.31
+	ROUTED TO	201203	1629.	4.50	272.	69.	49.	1.31
+	HYDROGRAPH AT	S202	274.	4.17	28.	7.	5.	0.13
+	ROUTED TO	202203	263.	4.27	28.	7.	5.	0.13
+	HYDROGRAPH AT	S203	417.	4.50	82.	21.	15.	0.37
+	3 COMBINED AT	C203R	1954.	4.50	366.	93.	67.	1.81
+	HYDROGRAPH AT	S204	1126.	4.50	196.	49.	36.	0.95
+	2 COMBINED AT	C203	2627.	4.53	535.	135.	97.	2.76
+	ROUTED TO	203204	2617.	4.57	535.	135.	97.	2.76
+	HYDROGRAPH AT	S205	561.	4.40	85.	21.	15.	0.41
+	2 COMBINED AT	C204	2913.	4.53	600.	152.	109.	3.17
+	ROUTED TO	204205	2883.	4.67	599.	152.	109.	3.17
+	HYDROGRAPH AT	S206	760.	4.70	175.	45.	32.	0.85
+	2 COMBINED AT	C205L	3345.	4.67	739.	188.	135.	4.03
+	HYDROGRAPH AT	S207	863.	4.70	202.	51.	37.	0.96
+	2 COMBINED AT	C205	3870.	4.70	900.	229.	165.	4.98
+	ROUTED TO	205206	3747.	5.03	898.	229.	165.	4.98
+	HYDROGRAPH AT	S208	1004.	4.73	228.	58.	42.	1.10
+	2 COMBINED AT	C206	4325.	5.00	1075.	274.	198.	6.09
+	ROUTED TO	206207	4291.	5.07	1074.	274.	198.	6.09
+	HYDROGRAPH AT	S209	888.	4.47	127.	32.	23.	0.65
+	2 COMBINED AT	C207R	4471.	5.07	1161.	297.	214.	6.74
+	HYDROGRAPH AT	S210	774.	4.33	86.	22.	16.	0.48

+	2 COMBINED AT	C207	4528.	5.07	1213.	310.	223.	7.22
+	ROUTED TO	207105	4466.	5.13	1212.	310.	223.	7.22
+	HYDROGRAPH AT	S211	650.	4.43	90.	23.	16.	0.49
+	2 COMBINED AT	C105R	4567.	5.13	1267.	324.	233.	7.70
+	2 COMBINED AT	C105	6840.	5.13	1902.	486.	350.	12.75
+	HYDROGRAPH AT	S300	710.	4.50	127.	32.	23.	0.62
+	HYDROGRAPH AT	S301	1216.	4.47	211.	53.	38.	0.99
+	2 COMBINED AT	C300	1665.	4.50	321.	81.	58.	1.61
+	ROUTED TO	300301	1631.	4.60	320.	81.	58.	1.61
+	HYDROGRAPH AT	S302	742.	4.40	97.	24.	18.	0.47
+	2 COMBINED AT	C301	1985.	4.57	400.	101.	73.	2.07
+	ROUTED TO	301302	1915.	4.90	399.	101.	73.	2.07
+	HYDROGRAPH AT	S303	901.	4.43	126.	32.	23.	0.71
+	2 COMBINED AT	C302	2203.	4.83	497.	126.	91.	2.78
+	ROUTED TO	302303	2180.	4.97	496.	126.	91.	2.78
+	HYDROGRAPH AT	S304	791.	4.57	144.	36.	26.	0.82
+	2 COMBINED AT	C303	2567.	4.90	604.	153.	110.	3.60
+	2 COMBINED AT	WEST-1	8330.	5.10	2337.	597.	431.	16.36
+	HYDROGRAPH AT	S400	1212.	4.57	211.	53.	38.	1.05
+	ROUTED TO	C4000	500.	5.20	210.	53.	38.	1.05
+	ROUTED TO	400401	498.	5.50	210.	53.	38.	1.05
+	HYDROGRAPH AT	S401	769.	4.53	118.	30.	21.	0.65
+	2 COMBINED AT	C401	913.	4.70	309.	78.	56.	1.69
+	ROUTED TO	401402	895.	5.00	309.	78.	56.	1.69
+	HYDROGRAPH AT	S402	951.	4.47	132.	33.	24.	0.74
+	2 COMBINED AT	C402	1292.	4.83	416.	105.	76.	2.43
+	ROUTED TO	402403	1256.	5.20	416.	105.	76.	2.43

+	HYDROGRAPH AT	S403	617.	4.63	121.	30.	22.	0.56
+	2 COMBINED AT	C403	1572.	5.17	520.	131.	94.	2.99
+	ROUTED TO	403404	1557.	5.27	519.	131.	94.	2.99
+	HYDROGRAPH AT	S404	651.	4.17	52.	13.	9.	0.26
+	2 COMBINED AT	C404	1556.	5.27	562.	142.	102.	3.26
+	2 COMBINED AT	WEST-2	9010.	5.13	2699.	690.	497.	19.61
+	HYDROGRAPH AT	S500	914.	4.73	220.	56.	40.	1.05
+	ROUTED TO	500501	901.	4.87	220.	56.	40.	1.05
+	HYDROGRAPH AT	S501	844.	4.43	124.	31.	22.	0.61
+	2 COMBINED AT	C501	1250.	4.77	324.	83.	60.	1.67
+	ROUTED TO	501502	1235.	4.83	320.	81.	59.	1.67
+	HYDROGRAPH AT	S502	704.	4.30	77.	19.	14.	0.40
+	2 COMBINED AT	C502L	1392.	4.73	381.	97.	70.	2.07
+	HYDROGRAPH AT	S503	1285.	4.47	201.	50.	36.	0.99
+	2 COMBINED AT	C502I	2246.	4.60	548.	139.	100.	3.07
+	ROUTED TO	C502O	1982.	4.87	548.	139.	100.	3.07
+	ROUTED TO	502505	1953.	5.10	536.	135.	97.	3.07
+	HYDROGRAPH AT	S504	219.	4.70	51.	13.	9.	0.33
+	2 COMBINED AT	C505L	2057.	5.07	568.	143.	103.	3.39
+	HYDROGRAPH AT	S505	382.	4.13	27.	7.	5.	0.14
+	ROUTED TO	C503O	97.	4.37	27.	7.	5.	0.14
+	ROUTED TO	503505	95.	4.87	26.	7.	5.	0.14
+	HYDROGRAPH AT	S506	318.	4.20	30.	7.	5.	0.15
+	ROUTED TO	C504O	93.	4.60	30.	7.	5.	0.15
+	ROUTED TO	504505	93.	4.97	30.	7.	5.	0.15
+	HYDROGRAPH AT	S507	811.	4.50	117.	29.	21.	0.67
+	3 COMBINED AT	C505R	876.	4.53	165.	41.	30.	0.96

+	2 COMBINED AT C505	2513.	4.90	691.	174.	126.	4.35
+	ROUTED TO 505509	2459.	5.17	670.	168.	121.	4.35
+	HYDROGRAPH AT S508	418.	4.37	52.	13.	9.	0.29
+	2 COMBINED AT C509L	2509.	5.17	703.	176.	127.	4.65
+	HYDROGRAPH AT S509	420.	4.13	36.	9.	7.	0.17
+	ROUTED TO C506O	93.	4.50	36.	9.	7.	0.17
+	ROUTED TO 506508	93.	4.70	36.	9.	7.	0.17
+	HYDROGRAPH AT S510	195.	4.33	27.	7.	5.	0.13
+	2 COMBINED AT C508R	279.	4.33	63.	16.	11.	0.30
+	HYDROGRAPH AT S511	777.	4.23	83.	21.	15.	0.38
+	ROUTED TO C507O	98.	4.93	80.	21.	15.	0.38
+	ROUTED TO 507508	98.	5.20	79.	21.	15.	0.38
+	HYDROGRAPH AT S512	306.	4.43	46.	11.	8.	0.21
+	2 COMBINED AT C508L	372.	4.43	123.	32.	23.	0.60
+	2 COMBINED AT C508	601.	4.40	180.	47.	34.	0.90
+	ROUTED TO 508509	557.	4.87	175.	47.	34.	0.90
+	HYDROGRAPH AT S513	487.	4.93	133.	34.	24.	0.78
+	2 COMBINED AT C509R	945.	4.97	290.	76.	55.	1.67
+	2 COMBINED AT C509	3191.	5.13	928.	236.	170.	6.32
+	ROUTED TO 509510	3175.	5.23	927.	236.	170.	6.32
+	HYDROGRAPH AT S514	626.	4.70	138.	34.	25.	0.65
+	2 COMBINED AT C510	3486.	5.20	1033.	262.	189.	6.97
+	ROUTED TO 510511	3413.	5.53	1029.	262.	189.	6.97
+	HYDROGRAPH AT S515	1268.	4.67	243.	61.	44.	1.10
+	2 COMBINED AT C511	3779.	5.50	1222.	312.	225.	8.07
+	ROUTED TO 511512	3711.	5.80	1215.	311.	224.	8.07
+	HYDROGRAPH AT S516	429.	4.70	91.	23.	16.	0.54

+	2 COMBINED AT	C512	3775.	5.80	1262.	324.	234.	8.61
+	2 COMBINED AT	WEST-3	9962.	5.23	3522.	910.	656.	28.22
+	HYDROGRAPH AT	S600	1843.	4.53	339.	85.	61.	2.02
+	ROUTED TO	600601	1823.	4.60	339.	85.	61.	2.02
+	HYDROGRAPH AT	S601	1460.	4.37	226.	57.	41.	0.90
+	2 COMBINED AT	C601	2625.	4.57	538.	136.	98.	2.92
+	ROUTED TO	601602	2597.	4.67	538.	136.	98.	2.92
+	HYDROGRAPH AT	S603	1467.	4.23	166.	42.	30.	0.67
+	2 COMBINED AT	C602L	3040.	4.57	678.	171.	123.	3.58
+	HYDROGRAPH AT	S602	1882.	4.57	386.	97.	70.	1.88
+	2 COMBINED AT	C602	4393.	4.57	1002.	253.	183.	5.47
+	ROUTED TO	602603	4278.	4.80	958.	240.	173.	5.47
+	HYDROGRAPH AT	S606	910.	4.37	148.	37.	27.	0.66
+	2 COMBINED AT	C603L	4628.	4.77	1071.	269.	194.	6.13
+	HYDROGRAPH AT	S605	1250.	4.50	231.	58.	42.	1.09
+	HYDROGRAPH AT	S604	1924.	4.87	523.	134.	97.	2.66
+	3 COMBINED AT	C603	6527.	4.77	1667.	423.	305.	9.87
+	ROUTED TO	603604	6391.	4.90	1618.	407.	293.	9.87
+	HYDROGRAPH AT	S609	564.	4.50	112.	28.	20.	0.56
+	2 COMBINED AT	C604R	6592.	4.90	1691.	426.	307.	10.43
+	HYDROGRAPH AT	S607	947.	4.50	187.	47.	34.	0.82
+	2 COMBINED AT	C604	6994.	4.90	1829.	461.	332.	11.25
+	ROUTED TO	604605	6964.	4.93	1829.	461.	332.	11.25
+	HYDROGRAPH AT	S608	976.	4.30	125.	31.	23.	0.51
+	2 COMBINED AT	C605	7133.	4.93	1919.	484.	349.	11.76
+	ROUTED TO	605606	7049.	5.03	1909.	482.	347.	11.76
+	HYDROGRAPH AT	S610	730.	4.53	145.	37.	26.	0.60

+	2 COMBINED AT	C606L	7321.	5.03	2015.	509.	367.	12.36
+	HYDROGRAPH AT	S612	954.	4.50	189.	48.	34.	0.81
+	2 COMBINED AT	C606	7694.	5.00	2155.	545.	393.	13.17
+	ROUTED TO	606608	7687.	5.03	2152.	544.	392.	13.17
+	HYDROGRAPH AT	S611	1068.	4.30	127.	32.	23.	0.57
+	ROUTED TO	607608	968.	4.47	127.	32.	23.	0.57
+	HYDROGRAPH AT	S613	1579.	4.80	373.	95.	68.	1.80
+	3 COMBINED AT	C608	8797.	5.00	2514.	637.	459.	15.53
+	ROUTED TO	608609	8718.	5.13	2500.	633.	456.	15.53
+	HYDROGRAPH AT	S614	1033.	4.67	228.	58.	42.	1.08
+	2 COMBINED AT	C609	9109.	5.10	2652.	673.	485.	16.61
+	ROUTED TO	609611	8980.	5.30	2621.	663.	478.	16.61
+	HYDROGRAPH AT	S617	896.	4.50	141.	35.	25.	0.68
+	2 COMBINED AT	C611R	9093.	5.27	2702.	685.	493.	17.29
+	HYDROGRAPH AT	S615	1313.	4.60	286.	72.	52.	1.05
+	ROUTED TO	610611	1286.	4.77	285.	72.	52.	1.05
+	HYDROGRAPH AT	S616	360.	4.93	104.	27.	19.	0.50
+	2 COMBINED AT	C611L	1491.	4.83	373.	96.	69.	1.56
+	2 COMBINED AT	C611	9785.	5.27	2969.	756.	545.	18.85
+	ROUTED TO	611613	9764.	5.30	2959.	752.	542.	18.85
+	HYDROGRAPH AT	S618	1048.	4.53	197.	50.	36.	0.96
+	2 COMBINED AT	C613R	9959.	5.27	3075.	782.	564.	19.81
+	HYDROGRAPH AT	S619	1395.	4.43	209.	52.	38.	0.83
+	ROUTED TO	612613	1333.	4.57	209.	52.	38.	0.83
+	HYDROGRAPH AT	S620	613.	4.43	111.	28.	20.	0.44
+	2 COMBINED AT	C613L	1716.	4.57	312.	79.	57.	1.27
+	2 COMBINED AT	C613	10389.	5.23	3289.	839.	605.	21.08

+	ROUTED TO 613614	10352.	5.33	3278.	835.	602.	21.08
+	HYDROGRAPH AT S621	1316.	4.40	155.	39.	28.	0.92
+	2 COMBINED AT C614	10339.	5.30	3350.	853.	615.	22.00
+	ROUTED TO 614615	10264.	5.43	3335.	849.	612.	22.00
+	HYDROGRAPH AT S622	808.	4.67	153.	38.	28.	0.90
+	2 COMBINED AT C615	10371.	5.43	3405.	867.	625.	22.90
+	2 COMBINED AT WEST-4	16726.	5.43	6011.	1550.	1117.	51.12
+	HYDROGRAPH AT S700	716.	4.47	112.	28.	20.	0.61
+	HYDROGRAPH AT S701	518.	4.80	142.	36.	26.	0.72
+	HYDROGRAPH AT S702	335.	4.37	48.	12.	9.	0.26
+	HYDROGRAPH AT S703	400.	4.30	45.	11.	8.	0.26
+	HYDROGRAPH AT S704	757.	4.27	78.	20.	14.	0.41
+	ROUTED TO 704705	668.	4.50	78.	20.	14.	0.41
+	HYDROGRAPH AT S705	980.	4.43	149.	37.	27.	0.75
+	2 COMBINED AT C705	1418.	4.47	217.	54.	39.	1.16
+	ROUTED TO C705O	689.	4.97	217.	54.	39.	1.16
+	ROUTED TO 705OAF	688.	5.13	216.	54.	39.	1.16
+	HYDROGRAPH AT S705AF	351.	4.30	46.	12.	8.	0.18
+	2 COMBINED AT C705AF	772.	4.90	259.	65.	47.	1.34
+	5 COMBINED AT WEST-5	1882.	4.67	534.	135.	97.	3.19
+	HYDROGRAPH AT S706	825.	4.47	134.	34.	24.	0.71
+	HYDROGRAPH AT S707	728.	4.47	127.	32.	23.	0.64
+	HYDROGRAPH AT S728	286.	4.47	49.	12.	9.	0.28
+	5 COMBINED AT WEST	17327.	5.40	6375.	1644.	1185.	55.94
+	HYDROGRAPH AT S708	1336.	4.33	173.	43.	31.	0.71
+	HYDROGRAPH AT S709	903.	4.30	117.	29.	21.	0.44
+	ROUTED TO C709O	411.	4.70	117.	29.	21.	0.44

+	ROUTED TO	709710	410.	4.77	117.	29.	21.	0.44
+	HYDROGRAPH AT	S710	298.	4.17	29.	7.	5.	0.11
+	2 COMBINED AT	C710I	524.	4.20	146.	37.	26.	0.55
+	ROUTED TO	C710O	408.	5.03	146.	37.	26.	0.55
+	HYDROGRAPH AT	S711	483.	4.13	43.	11.	8.	0.16
+	ROUTED TO	C711O	181.	4.40	43.	11.	8.	0.16
+	ROUTED TO	711712	181.	4.43	43.	11.	8.	0.16
+	HYDROGRAPH AT	S712	238.	4.03	18.	4.	3.	0.07
+	2 COMBINED AT	C712I	371.	4.07	60.	15.	11.	0.23
+	ROUTED TO	C712O	245.	4.27	60.	15.	11.	0.23
+	ROUTED TO	712714	244.	4.33	60.	15.	11.	0.23
+	HYDROGRAPH AT	S713	326.	4.10	28.	7.	5.	0.11
+	ROUTED TO	C713O	179.	4.27	28.	7.	5.	0.11
+	ROUTED TO	713714	179.	4.30	28.	7.	5.	0.11
+	HYDROGRAPH AT	S714	163.	4.13	13.	3.	2.	0.06
+	3 COMBINED AT	C714	543.	4.17	102.	25.	18.	0.39
+	HYDROGRAPH AT	S715	450.	4.30	58.	15.	11.	0.22
+	HYDROGRAPH AT	S716	1625.	4.47	284.	71.	51.	1.13
+	ROUTED TO	C716O	618.	5.17	284.	71.	51.	1.13
+	ROUTED TO	716717	617.	5.30	284.	71.	51.	1.13
+	HYDROGRAPH AT	S717	867.	4.13	77.	19.	14.	0.29
+	2 COMBINED AT	C717	881.	4.17	359.	90.	65.	1.41
+	ROUTED TO	717718	785.	4.53	358.	90.	65.	1.41
+	HYDROGRAPH AT	S718	476.	4.67	121.	30.	22.	0.44
+	2 COMBINED AT	C718	1158.	4.60	475.	119.	86.	1.86
+	HYDROGRAPH AT	S719	242.	4.37	46.	11.	8.	0.15
+	6 COMBINED AT	EAST-1	3044.	4.53	963.	241.	174.	3.88

+	HYDROGRAPH AT	S720	652.	4.37	99.	25.	18.	0.37
+	HYDROGRAPH AT	S721	866.	4.20	72.	18.	13.	0.34
+	ROUTED TO	C721O	253.	4.50	72.	18.	13.	0.34
+	ROUTED TO	721722	251.	4.80	71.	18.	13.	0.34
+	HYDROGRAPH AT	S722	1279.	4.50	226.	57.	41.	0.95
+	2 COMBINED AT	C722	1384.	4.57	293.	73.	53.	1.29
+	HYDROGRAPH AT	S723	216.	4.17	22.	5.	4.	0.09
+	HYDROGRAPH AT	S724	1788.	4.43	306.	77.	55.	1.16
+	HYDROGRAPH AT	S725	1153.	4.70	265.	66.	48.	1.16
+	5 COMBINED AT	EAST-2	3954.	4.60	940.	235.	169.	4.06
+	HYDROGRAPH AT	S726	860.	4.13	66.	17.	12.	0.33
+	ROUTED TO	726727	772.	4.30	66.	17.	12.	0.33
+	HYDROGRAPH AT	S727	519.	4.43	91.	23.	16.	0.38
+	2 COMBINED AT	C727	1132.	4.33	154.	39.	28.	0.71
+	4 COMBINED AT	TOTAL	19685.	5.30	7713.	1979.	1426.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 100-Year, 24-Hour HEC-1 Model Output

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   09AUG01  TIME  14:56:42  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX         XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID     N. Peoria Area Drainage Master Plan                File:EX100-24.IH1
  2           ID        For Maricopa County FCD 99-45                Original:05-04-00     MCG
  3           ID        By Stantec Consulting, Inc. P82000146         Revised:02-01-01     MMZ
  4           ID
  5           ID     The N. Peoria ADMP study limits consists of several small tributary
  6           ID     watersheds to the Agua Fria River.  This model is for the existing
  7           ID     condition 100-year, 24-hour storm event.  A companion model is also created
  8           ID     for the existing condition 100-year, 6-hour storm event.  Both models
  9           ID     (100-year, 6- and 24-hour) should be referenced for the determination of
 10           ID     storm event produces the highest peak discharge.
 11           ID
 12           ID     Modeling of the watersheds is performed using the following:
 13           ID        100-year, 24-hour rainfall with FCDMC design rainfall distributions
 14           ID        Green & Ampt Loss Rate Method
 15           ID        NMIN = 2 minutes
 16           ID        Clark Unit Hydrograph
 17           ID        Modified Puls channel storage routing
 18           ID
 19           ID     Watershed delineation performed using USGS 7.5 Minute Series Quadrangles
              *
              *DIAGRAM
              *
 20           IT       2                    1000
 21           IO       5
 22           IN      15
              *
              *       Depth-area reduction factors taken from Table 2.1a of FCDMC Drainage
              *       Design Manual
              *       The following PC records are a 24-hour SCS Type II rainfall distribution
              *
 23           JD    4.20    0.01
 24           PC   0.000   0.002   0.005   0.008   0.011   0.013   0.016   0.019   0.022   0.025
 25           PC   0.028   0.032   0.035   0.038   0.041   0.044   0.048   0.053   0.056   0.060
 26           PC   0.063   0.067   0.071   0.075   0.080   0.084   0.089   0.093   0.098   0.103
 27           PC   0.109   0.114   0.120   0.127   0.133   0.140   0.147   0.155   0.163   0.172
 28           PC   0.181   0.192   0.204   0.220   0.235   0.259   0.283   0.473   0.663   0.699
 29           PC   0.735   0.754   0.772   0.785   0.799   0.810   0.820   0.829   0.838   0.846
 30           PC   0.854   0.861   0.868   0.874   0.880   0.885   0.891   0.900   0.902   0.910
 31           PC   0.912   0.920   0.921   0.926   0.929   0.930   0.937   0.941   0.945   0.950
 32           PC   0.952   0.957   0.959   0.962   0.965   0.970   0.972   0.973   0.978   0.981
 33           PC   0.984   0.987   0.989   0.992   0.995   0.998   1.000
 34           JD    4.18       1
 35           JD    4.07       5
 36           JD    3.95      10
 37           JD    3.80      25
```

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 38          JD    3.59      70
             *
             *  ****************************************************************************
             *                 Begin Major Basin 100 (Unnamed Wash 1)
             *  ****************************************************************************
             *
1                                          HEC-1 INPUT                                                    PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 39          KK    S100
 40          KM   Sub-Basin   S100
 41          KM
 42          KM      The Clark Unit Hydrograph is used for this basin.
 43          KM          The Natural time-area relation is used for this basin.
 44          KM
 45          KM      Time of Concentration for this sub-basin is based on the following:
 46          KM          An rainfall areal reduction factor of 1.000
 47          KM
 48          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 49          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 50          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
 51          KM
 52          KM          L=   1.811 miles, S=  149 feet/mile, Kb= .09
 53          KM
 54          BA   0.574
 55          LG    0.19    0.35    4.65    0.34   25.00
 56          UC   0.692   0.542
 57          UA       0       3       5       8      12      20      43      75      90      96
 58          UA     100
             *

 59          KK  100102
 60          KM        Normal depth route from S100 to C102R
 61          KM        Source: Field Reconnaissance
 62          RS       8    FLOW      -1
 63          RC     .05    .039     .06    6535   .0138
 64          RX    1000  1012.7  1037.5  1047.7    1060  1072.4  1087.8  1098.8
 65          RY   104.8   102.3   102.3   100.1     100   102.7   103.5   106.7
             *

 66          KK    S101
 67          KM   Sub-Basin   S101
 68          KM
 69          KM      The Clark Unit Hydrograph is used for this basin.
 70          KM          The Natural time-area relation is used for this basin.
 71          KM
 72          KM      Time of Concentration for this sub-basin is based on the following:
 73          KM          An rainfall areal reduction factor of 1.000
 74          KM
 75          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 76          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 77          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
 78          KM
 79          KM          L=   1.544 miles, S=  155 feet/mile, Kb= .08
 80          KM
 81          BA   0.631
 82          LG    0.26    0.37    5.30    0.25   15.00
 83          UC   0.542   0.345
 84          UA       0       3       5       8      12      20      43      75      90      96
 85          UA     100
             *
1                                          HEC-1 INPUT                                                    PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 86          KK   C102R
 87          KM        Combine routed hydrograph from S100 w/runoff from S101
 88          HC       2
             *

 89          KK    S102
 90          KM   Sub-Basin   S102
 91          KM
 92          KM      The Clark Unit Hydrograph is used for this basin.
 93          KM          The Natural time-area relation is used for this basin.
 94          KM
 95          KM      Time of Concentration for this sub-basin is based on the following:
 96          KM          An rainfall areal reduction factor of 1.000
```

```
 97          KM
 98          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 99          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
100          KM   .25 .25 .25 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
101          KM
102          KM          L=   1.487 miles, S=  108 feet/mile, Kb= .11
103          KM
104          BA   0.449
105          LG    0.15    0.35    4.45    0.39   30.00
106          UC   0.813   0.637
107          UA       0       3       5       8      12      20      43      75      90      96
108          UA     100
             *

109          KK  101102
110          KM       Normal depth route from S102 to C102
111          KM       Source: Field Reconnaissance
112          RS       6    FLOW      -1
113          RC    .045     .04    .045    7254  0.0138
114          RX     100     106     114     120     134     143     155     164
115          RY     110     107     103     100     100     103     107     110
             *

116          KK    S103
117          KM   Sub-Basin   S103
118          KM
119          KM     The Clark Unit Hydrograph is used for this basin.
120          KM         The Natural time-area relation is used for this basin.
121          KM
122          KM     Time of Concentration for this sub-basin is based on the following:
123          KM         An rainfall areal reduction factor of 1.000
124          KM
125          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
126          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
127          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
128          KM
129          KM          L=   1.321 miles, S=   76 feet/mile, Kb= .11
130          KM
131          BA   0.395
132          LG    0.24    0.38    5.60    0.22   17.00
133          UC   0.871   0.673
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

134          UA       0       3       5       8      12      20      43      75      90      96
135          UA     100
             *

136          KK   C102L
137          KM       Combine routed hydrgraph from S102 with runoff from S103
138          HC       2
             *

139          KK    C102
140          KM       Combine hydrgraphs from C102L and C102R
141          HC       2
             *

142          KK  102103
143          KM       Normal depth route from C102 to C103R
144          KM       Source: Field Reconnaissance
145          RS       7    FLOW      -1
146          RC     .05    .039     .06    8068  0.0124
147          RX    1000    1029  1057.9    1072  1089.6  1099.4  1109.9  1173.1
148          RY     106   103.9   101.8   100.3     100   102.2   103.3   110.0
             *

149          KK    S104
150          KM   Sub-Basin   S104
151          KM
152          KM     The Clark Unit Hydrograph is used for this basin.
153          KM         The Natural time-area relation is used for this basin.
154          KM
155          KM     Time of Concentration for this sub-basin is based on the following:
156          KM         An rainfall areal reduction factor of 1.000
157          KM
158          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
159          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
160          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
161          KM
```

```
162          KM          L=   1.624 miles, S=  111 feet/mile, Kb= .10
163          KM
164          BA   0.900
165          LG    0.22    0.38    5.60    0.22   13.00
166          UC   0.792   0.447
167          UA       0       3       5       8      12      20      43      75      90      96
168          UA     100
             *

169          KK   C103R
170          KM        Combine routed hydrograph from 102103 w/runoff from S104
171          HC       2
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

172          KK    S105
173          KM   Sub-Basin   S105
174          KM
175          KM      The Clark Unit Hydrograph is used for this basin.
176          KM          The Natural time-area relation is used for this basin.
177          KM
178          KM      Time of Concentration for this sub-basin is based on the following:
179          KM          An rainfall areal reduction factor of 1.000
180          KM
181          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
182          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
183          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
184          KM
185          KM          L=   1.976 miles, S=   96 feet/mile, Kb= .10
186          KM
187          BA   0.594
188          LG    0.22    0.38    5.60    0.22   13.00
189          UC   0.988   0.847
190          UA       0       3       5       8      12      20      43      75      90      96
191          UA     100
             *

192          KK    C103
193          KM        Combine hydrograph from C103R w/runoff from S105
194          HC       2
             *

195          KK  103104
196          KM        Normal depth route from C103 to C104
197          KM        Source: Field Reconnaissance
198          RS       6    FLOW      -1
199          RC    .053    .053    .053    8625  0.0162
200          RX    1000  1001.5    1003    1011    1033    1047  1050.6  1067.2
201          RY   107.4   106.4   105.4     100   100.5   104.4   105.4   110.0
             *

202          KK    S106
203          KM   Sub-Basin   S106
204          KM
205          KM      The Clark Unit Hydrograph is used for this basin.
206          KM          The Natural time-area relation is used for this basin.
207          KM
208          KM      Time of Concentration for this sub-basin is based on the following:
209          KM          An rainfall areal reduction factor of 1.000
210          KM
211          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
212          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
213          KM   .25 .24 .24 .24 .24 .24 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
214          KM
215          KM          L=   1.770 miles, S=  158 feet/mile, Kb= .10
216          KM
217          BA   0.567
218          LG    0.19    0.37    5.20    0.26    7.00
219          UC   0.729   0.569
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

220          UA       0       3       5       8      12      20      43      75      90      96
221          UA     100
             *

222          KK    C104
```

```
223          KM        Combine routed hydrograph 103104 w/runoff from S106
224          HC       2
             *

225          KK  104105
226          KM        Normal depth route from C104 to C105
227          KM        Source: Field Reconnaissance
228          RS       7    FLOW      -1
229          RC    .053    .053    .053    6956  0.0115
230          RX    1000  1002.3  1004.6  1019.3  1041.1  1069.4  1111.7  1128.8
231          RY     108   107.5     107   100.2     100   103.4   102.3   107.3
             *

232          KK    S107
233          KM   Sub-Basin   S107
234          KM
235          KM      The Clark Unit Hydrograph is used for this basin.
236          KM          The Natural time-area relation is used for this basin.
237          KM
238          KM      Time of Concentration for this sub-basin is based on the following:
239          KM          An rainfall areal reduction factor of 1.000
240          KM
241          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
242          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
243          KM   .24 .24 .24 .24 .23 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
244          KM
245          KM          L=   2.593 miles, S=  204 feet/mile, Kb= .10
246          KM
247          BA   0.936
248          LG    0.15    0.35    4.90    0.30    0.00
249          UC   0.896   0.729
250          UA       0       3       5       8      12      20      43      75      90      96
251          UA     100
             *

252          KK   C105L
253          KM        Combine routed hydrograph from 104105 w/runoff from S107
254          HC       2
             *
             *  ******************************************************************************
             *                Begin Major Basin 200 (Unnamed Wash 2)
             *  ******************************************************************************
             *

255          KK    S200
256          KM   Sub-Basin   S200
257          KM
258          KM      The Clark Unit Hydrograph is used for this basin.
259          KM          The Natural time-area relation is used for this basin.
260          KM
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

261          KM      Time of Concentration for this sub-basin is based on the following:
262          KM          An rainfall areal reduction factor of 1.000
263          KM
264          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
265          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
266          KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
267          KM
268          KM          L=   1.665 miles, S=  192 feet/mile, Kb= .10
269          KM
270          BA   0.959
271          LG    0.25    0.35    4.25    0.44   35.00
272          UC   0.629   0.341
273          UA       0       3       5       8      12      20      43      75      90      96
274          UA     100
             *

275          KK  200201
276          KM        Normal depth route from hydrograph S200 to C201
277          KM        Source: Field Reconnaissance
278          RS       1    FLOW      -1
279          RC     .05     .03     .05    3952  0.0228
280          RX    1000    1001    1002    1005    1026    1032    1034    1036
281          RY     105     104     103     100     100     103     104     105
             *

282          KK    S201
283          KM   Sub-Basin   S201
```

```
KM
KM      The Clark Unit Hydrograph is used for this basin.
KM          The Natural time-area relation is used for this basin.
KM
KM      Time of Concentration for this sub-basin is based on the following:
KM          An rainfall areal reduction factor of 1.000
KM
KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
KM
KM          L=   1.182 miles, S=  195 feet/mile, Kb= .11
KM
BA   0.350
LG    0.25    0.35    4.25    0.44   35.00
UC   0.517   0.370
UA       0       3       5       8      12      20      43      75      90      96
UA     100
*

KK    C201
KM        Combine routed hydrograph 200201 w/runoff from S201
HC       2
*
```

1 HEC-1 INPUT PAGE 8

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  201203
KM        Normal depth route from C201 to C203R
KM        Source: Field Reconnaissance
RS       3    FLOW      -1
RC    .055    .039    .055    3233  0.0155
RX    1000  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1107.6
RY     105   101.1     102   100.3     100     102     103   104.2
*

KK    S202
KM   Sub-Basin   S202
KM
KM      The Clark Unit Hydrograph is used for this basin.
KM          The Natural time-area relation is used for this basin.
KM
KM      Time of Concentration for this sub-basin is based on the following:
KM          An rainfall areal reduction factor of 1.000
KM
KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
KM
KM          L=   0.689 miles, S=  271 feet/mile, Kb= .12
KM
BA   0.127
LG    0.25    0.35    4.25    0.44   35.00
UC   0.367   0.292
UA       0       3       5       8      12      20      43      75      90      96
UA     100
*

KK  202203
KM        Normal depth route from S202 to C203R
KM         Source: Field Reconnaissance
RS       2    FLOW      -1
RC     .05     .03     .05    2353   .0170
RX    1000  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1107.6
RY   103.6   101.1     102   100.3     100     102    103.   104.2
*

KK    S203
KM   Sub-Basin   S203
KM
KM      The Clark Unit Hydrograph is used for this basin.
KM          The Natural time-area relation is used for this basin.
KM
KM      Time of Concentration for this sub-basin is based on the following:
KM          An rainfall areal reduction factor of 1.000
KM
KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
```

```
 351          KM
 352          KM          L=   1.683 miles, S=  154 feet/mile, Kb= .11
1                                          HEC-1 INPUT                                                          PAGE  9

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 353          KM
 354          BA   0.373
 355          LG    0.25    0.35    4.25    0.44   35.00
 356          UC   0.758   0.724
 357          UA       0       3       5       8      12      20      43      75      90      96
 358          UA     100
              *

 359          KK   C203R
 360          KM        Combine routed hydrographs 201203 and 202203 with runoff from S203
 361          HC       3
              *

 362          KK    S204
 363          KM   Sub-Basin   S204
 364          KM
 365          KM      The Clark Unit Hydrograph is used for this basin.
 366          KM          The Natural time-area relation is used for this basin.
 367          KM
 368          KM      Time of Concentration for this sub-basin is based on the following:
 369          KM          An rainfall areal reduction factor of 1.000
 370          KM
 371          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 372          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 373          KM   .25 .24 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
 374          KM
 375          KM          L=   1.959 miles, S=  174 feet/mile, Kb= .10
 376          KM
 377          BA   0.951
 378          LG    0.25    0.35    4.25    0.44   32.00
 379          UC   0.750   0.474
 380          UA       0       3       5       8      12      20      43      75      90      96
 381          UA     100
              *

 382          KK    C203
 383          KM        Combine hydrograph from C203R with runoff from S204
 384          HC       2
              *

 385          KK  203204
 386          KM        Normal depth route from C203 to C204
 387          KM        Source: Field Reconnaissance
 388          RS       1    FLOW      -1
 389          RC    .055    .039    .055    1325  0.0151
 390          RX   989.2  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1120.2
 391          RY     110   101.1     102   100.3     100     102     103   110.0
              *

 392          KK    S205
 393          KM   Sub-Basin   S205
 394          KM
 395          KM      The Clark Unit Hydrograph is used for this basin.
 396          KM          The Natural time-area relation is used for this basin.
 397          KM
1                                          HEC-1 INPUT                                                          PAGE 10

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          KM      Time of Concentration for this sub-basin is based on the following:
 399          KM          An rainfall areal reduction factor of 1.000
 400          KM
 401          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 402          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 403          KM   .25 .24 .24 .24 .24 .23 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
 404          KM
 405          KM          L=   1.485 miles, S=  175 feet/mile, Kb= .11
 406          KM
 407          BA   0.413
 408          LG    0.21    0.35    4.60    0.35   21.00
 409          UC   0.654   0.525
 410          UA       0       3       5       8      12      20      43      75      90      96
 411          UA     100
              *
```

```
412          KK    C204
413          KM        Combine routed hydrograph 203204 w/runoff from S205
414          HC       2
             *

415          KK  204205
416          KM        Normal depth route from C204 to C205L
417          KM        Source: Field Reconnaissance
418          RS       3    FLOW      -1
419          RC     .05    .039     .05    5007  0.0140
420          RX    1000  1010.6  1053.2  1064.9  1094.7  1103.1  1105.9  1113.8
421          RY   105.6   102.5   103.3   100.4     100     103     104   106.8
             *

422          KK    S206
423          KM   Sub-Basin   S206
424          KM
425          KM      The Clark Unit Hydrograph is used for this basin.
426          KM          The Natural time-area relation is used for this basin.
427          KM
428          KM      Time of Concentration for this sub-basin is based on the following:
429          KM          An rainfall areal reduction factor of 1.000
430          KM
431          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
432          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
433          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
434          KM
435          KM          L=   2.296 miles, S=  118 feet/mile, Kb= .10
436          KM
437          BA   0.853
438          LG    0.25    0.35    4.65    0.34   27.00
439          UC   1.008   0.795
440          UA       0       3       5       8      12      20      43      75      90      96
441          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

442          KK   C205L
443          KM        Combine routed hydrograph 204205 w/runoff from S206
444          HC       2
             *

445          KK    S207
446          KM   Sub-Basin   S207
447          KM
448          KM      The Clark Unit Hydrograph is used for this basin.
449          KM          The Natural time-area relation is used for this basin.
450          KM
451          KM      Time of Concentration for this sub-basin is based on the following:
452          KM          An rainfall areal reduction factor of 1.000
453          KM
454          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
455          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
456          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
457          KM
458          KM          L=   2.315 miles, S=  117 feet/mile, Kb= .10
459          KM
460          BA   0.957
461          LG    0.25    0.35    4.35    0.41   34.00
462          UC   1.017   0.756
463          UA       0       3       5       8      12      20      43      75      90      96
464          UA     100
             *

465          KK    C205
466          KM        Combine hydrograph from C205L w/runoff from S207
467          HC       2
             *

468          KK  205206
469          KM        Normal depth route from C205 to C206
470          KM        Source: Field Reconnaissance
471          RS      10    FLOW      -1
472          RC     .05    .039     .05   11893  0.0063
473          RX    1000  1002.5    1005  1019.1  1052.5  1070.5  1120.8  1146.9
474          RY   110.1   107.6   105.1     100   100.2   104.6   103.7   109.5
             *
```

```
475          KK    S208
476          KM   Sub-Basin   S208
477          KM
478          KM      The Clark Unit Hydrograph is used for this basin.
479          KM          The Natural time-area relation is used for this basin.
480          KM
481          KM      Time of Concentration for this sub-basin is based on the following:
482          KM          An rainfall areal reduction factor of 1.000
483          KM
484          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
485          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
486          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
487          KM
1                                          HEC-1 INPUT                                          PAGE 12

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

488          KM          L=   2.205 miles, S=   93 feet/mile, Kb= .10
489          KM
490          BA   1.103
491          LG    0.23    0.37    5.30    0.25   24.00
492          UC   1.079   0.717
493          UA       0       3       5       8      12      20      43      75      90      96
494          UA     100
             *

495          KK    C206
496          KM        Combine routed hydrograph 205206 w/runoff from S208
497          HC       2
             *

498          KK  206207
499          KM        Normal depth route from C206 to C207R
500          KM        Source: Field Reconnaissance
501          RS       2    FLOW      -1
502          RC    .055    .039    .055    4972  0.0312
503          RX    1000  1007.4  1014.8  1022.2  1057.6  1068.1  1088.2  1094.2
504          RY     106     104     102     100   100.2   102.2   102.9   105.9
             *

505          KK    S209
506          KM   Sub-Basin   S209
507          KM
508          KM      The Clark Unit Hydrograph is used for this basin.
509          KM          The Natural time-area relation is used for this basin.
510          KM
511          KM      Time of Concentration for this sub-basin is based on the following:
512          KM          An rainfall areal reduction factor of 1.000
513          KM
514          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
515          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
516          KM   .25 .25 .24 .24 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
517          KM
518          KM          L=   1.358 miles, S=  133 feet/mile, Kb= .12
519          KM
520          BA   0.650
521          LG    0.22    0.36    5.00    0.29   15.00
522          UC   0.746   0.436
523          UA       0       3       5       8      12      20      43      75      90      96
524          UA     100
             *

525          KK   C207R
526          KM        Combine routed hydrograph 206207 w/runoff from S209
527          HC       2
             *
1                                          HEC-1 INPUT                                          PAGE 13

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

528          KK    S210
529          KM   Sub-Basin   S210
530          KM
531          KM      The Clark Unit Hydrograph is used for this basin.
532          KM          The Natural time-area relation is used for this basin.
533          KM
534          KM      Time of Concentration for this sub-basin is based on the following:
535          KM          An rainfall areal reduction factor of 1.000
536          KM
537          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

```
538          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
539          KM   .24 .24 .24 .24 .23 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
540          KM
541          KM          L=   1.274 miles, S=  181 feet/mile, Kb= .11
542          KM
543          BA   0.481
544          LG    0.16    0.36    5.00    0.29    2.00
545          UC   0.579   0.372
546          UA       0       3       5       8      12      20      43      75      90      96
547          UA     100
             *

548          KK    C207
549          KM        Combine hydrograph from C207R w/runoff from S210
550          HC       2
             *

551          KK  207105
552          KM        Normal depth route from C207 to C105
553          KM        Source: Field Reconnaissance
554          RS       2    FLOW      -1
555          RC    .055    .039    .055    7176  0.0167
556          RX    1000    1003    1006    1009  1038.5  1041.5  1047.5  1053.5
557          RY     109     106     103     100     100     102     106     110
             *

558          KK    S211
559          KM   Sub-Basin   S211
560          KM
561          KM      The Clark Unit Hydrograph is used for this basin.
562          KM          The Natural time-area relation is used for this basin.
563          KM
564          KM      Time of Concentration for this sub-basin is based on the following:
565          KM          An rainfall areal reduction factor of 1.000
566          KM
567          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
568          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
569          KM   .25 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
570          KM
571          KM          L=   1.359 miles, S=  162 feet/mile, Kb= .13
572          KM
573          BA   0.488
574          LG    0.19    0.37    5.20    0.26    4.00
575          UC   0.729   0.501
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

576          UA       0       3       5       8      12      20      43      75      90      96
577          UA     100
             *

578          KK   C105R
579          KM        Combine routed hydrograph 207105 w/runoff from S211
580          HC       2
             *

581          KK    C105
582          KM        Combine hydrographs from C105L and C105R
583          HC       2
             *
             *  ******************************************************************************
             *                Begin Major Basin 300 (Unnamed Wash 3)
             *  ******************************************************************************
             *

584          KK    S300
585          KM   Sub-Basin   S300
586          KM
587          KM      The Clark Unit Hydrograph is used for this basin.
588          KM          The Natural time-area relation is used for this basin.
589          KM
590          KM      Time of Concentration for this sub-basin is based on the following:
591          KM          An rainfall areal reduction factor of 1.000
592          KM
593          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
594          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
595          KM   .25 .25 .24 .24 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
596          KM
597          KM          L=   1.776 miles, S=  129 feet/mile, Kb= .10
598          KM
```

```
599          BA   0.615
600          LG    0.25    0.35    4.55    0.36   25.00
601          UC   0.800   0.603
602          UA       0       3       5       8      12      20      43      75      90      96
603          UA     100
             *

604          KK    S301
605          KM   Sub-Basin   S301
606          KM
607          KM      The Clark Unit Hydrograph is used for this basin.
608          KM          The Natural time-area relation is used for this basin.
609          KM
610          KM      Time of Concentration for this sub-basin is based on the following:
611          KM          An rainfall areal reduction factor of 1.000
612          KM
613          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
614          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
615          KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
616          KM
617          KM          L=   2.001 miles, S=  190 feet/mile, Kb= .10
618          KM
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

619          BA   0.994
620          LG    0.25    0.35    4.25    0.44   35.00
621          UC   0.725   0.453
622          UA       0       3       5       8      12      20      43      75      90      96
623          UA     100
             *

624          KK    C300
625          KM        Combine runoff from S300 and S301
626          HC       2
             *

627          KK  300301
628          KM        Normal depth route from C300 to C301
629          KM        Source: Field Reconnaissance
630          RS       3    FLOW      -1
631          RC    .051    .044    .051    5117  0.0137
632          RX    1000    1001    1002    1010    1047    1059  1060.5    1062
633          RY     110     109     108     100     100     108     109     110
             *

634          KK    S302
635          KM   Sub-Basin   S302
636          KM
637          KM      The Clark Unit Hydrograph is used for this basin.
638          KM          The Natural time-area relation is used for this basin.
639          KM
640          KM      Time of Concentration for this sub-basin is based on the following:
641          KM          An rainfall areal reduction factor of 1.000
642          KM
643          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
644          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
645          KM   .25 .24 .24 .24 .24 .23 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
646          KM
647          KM          L=   1.095 miles, S=  137 feet/mile, Kb= .13
648          KM
649          BA   0.465
650          LG    0.24    0.35    4.55    0.36   24.00
651          UC   0.663   0.390
652          UA       0       3       5       8      12      20      43      75      90      96
653          UA     100
             *

654          KK    C301
655          KM        Combine routed hydrograph 300301 w/runoff from S302
656          HC       2
             *

657          KK  301302
658          KM        Normal depth route from C301 to C302
659          KM        Source: Field Reconnaissance
660          RS       9    FLOW      -1
661          RC    .051    .039    .051    8124  0.0086
662          RX    1000    1004  1200.3  1213.6  1240.6  1249.9  1344.4  1369.6
663          RY   110.6   108.6   103.5   100.2     100   104.2   107.4   110.4
```

```
                  *
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 664              KK    S303
 665              KM   Sub-Basin   S303
 666              KM
 667              KM      The Clark Unit Hydrograph is used for this basin.
 668              KM          The Natural time-area relation is used for this basin.
 669              KM
 670              KM      Time of Concentration for this sub-basin is based on the following:
 671              KM          An rainfall areal reduction factor of 1.000
 672              KM
 673              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 674              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 675              KM   .24 .24 .23 .23 .23 .23 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
 676              KM
 677              KM          L=   1.539 miles, S=  188 feet/mile, Kb= .12
 678              KM
 679              BA   0.708
 680              LG    0.22    0.35    4.60    0.35   10.00
 681              UC   0.713   0.437
 682              UA       0       3       5       8      12      20      43      75      90      96
 683              UA     100
                  *

 684              KK    C302
 685              KM        Combine routed hydrograph 301302 w/runoff from S303
 686              HC       2
                  *

 687              KK  302303
 688              KM        Normal depth route from C302 to C303
 689              KM        Source: Field Reconniassance
 690              RS       4    FLOW      -1
 691              RC    .055    .048    .055    7304  0.0192
 692              RX    1000  1009.4  1017.8  1026.5  1067.3  1068.7  1071.5  1075.5
 693              RY   106.1     104     102     100     101     102     104   105.9
                  *

 694              KK    S304
 695              KM   Sub-Basin   S304
 696              KM
 697              KM      The Clark Unit Hydrograph is used for this basin.
 698              KM          The Natural time-area relation is used for this basin.
 699              KM
 700              KM      Time of Concentration for this sub-basin is based on the following:
 701              KM          An rainfall areal reduction factor of 1.000
 702              KM
 703              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 704              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 705              KM   .25 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
 706              KM
 707              KM          L=   2.314 miles, S=  186 feet/mile, Kb= .10
 708              KM
 709              BA   0.823
 710              LG    0.18    0.36    5.10    0.27    3.00
 711              UC   0.842   0.668
```



```
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 712              UA       0       3       5       8      12      20      43      75      90      96
 713              UA     100
                  *

 714              KK    C303
 715              KM        Combine routed hydrograph 302303 w/runoff from S304
 716              HC       2
                  *

 717              KK  WEST-1
 718              KM        Dummy combine of major basins 100, 200 and 300
 719              HC       2
                  *
                  *  ******************************************************************************
                  *                 Begin Major Basin 400 (Caterpillar Tanks Wash)
                  *  ******************************************************************************
                  *
```

```
720          KK    S400
721          KM   Sub-Basin   S400
722          KM
723          KM      The Clark Unit Hydrograph is used for this basin.
724          KM          The Natural time-area relation is used for this basin.
725          KM
726          KM      Time of Concentration for this sub-basin is based on the following:
727          KM          An rainfall areal reduction factor of 1.000
728          KM
729          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
730          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
731          KM   .26 .26 .26 .25 .25 .25 .02 .02 .02 .01 .01 .01 .00 .00 .00 .00 .00 .00
732          KM
733          KM          L=   1.864 miles, S=  110 feet/mile, Kb= .10
734          KM
735          BA   1.048
736          LG    0.23    0.34    5.40    0.21   14.00
737          UC   0.867   0.506
738          UA       0       3       5       8      12      20      43      75      90      96
739          UA     100
             *

740          KK   C4000
741          KM        Storage routing at crossing structure no. 78 (see Plate 5)
742          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
743          RS       1    STOR       0
744          SQ       0      62     200     400     540     625     750
745          SE    1508    1511    1514    1520    1526    1532    1540
746          SV       0     5.2    18.6    40.7    71.7   115.5   178.1   266.3
747          SE    1508    1516    1520    1524    1528    1532    1536    1540
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

748          KK  400401
749          KM        Normal depth route from S400 to C401
750          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
751          RS       9    FLOW      -1
752          RC    .045    .040    .045    7424  0.0101
753          RX  9729.2  9772.7  9849.9   10000 10007.8 10090.6 10147.3 10185.4
754          RY  1509.6  1508.8  1500.2  1475.5  1475.3  1495.3    1496  1497.5
             *

755          KK    S401
756          KM   Sub-Basin   S401
757          KM
758          KM      The Clark Unit Hydrograph is used for this basin.
759          KM          The Natural time-area relation is used for this basin.
760          KM
761          KM      Time of Concentration for this sub-basin is based on the following:
762          KM          An rainfall areal reduction factor of 1.000
763          KM
764          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
765          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
766          KM   .25 .24 .24 .24 .24 .23 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
767          KM
768          KM          L=   1.349 miles, S=   74 feet/mile, Kb= .10
769          KM
770          BA   0.646
771          LG    0.30    0.36    5.10    0.26    7.00
772          UC   0.858   0.509
773          UA       0       3       5       8      12      20      43      75      90      96
774          UA     100
             *

775          KK    C401
776          KM        Combine routed hydrograph 400401 w/runoff from S401
777          HC       2
             *

778          KK  401402
779          KM        Normal depth route from C401 to C402
780          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
781          RS      11    FLOW      -1
782          RC    .045    .043    .045    8029  0.0112
783          RX  9581.3  9756.6  9997.5   10000 10022.2 10086.4 10119.5 10362.5
784          RY  1455.4  1419.3  1413.3  1410.9  1409.8  1414.4    1419  1428.6
             *
```

```
 785          KK    S402
 786          KM   Sub-Basin   S402
 787          KM
 788          KM      The Clark Unit Hydrograph is used for this basin.
 789          KM          The Natural time-area relation is used for this basin.
 790          KM
 791          KM      Time of Concentration for this sub-basin is based on the following:
 792          KM          An rainfall areal reduction factor of 1.000
 793          KM
1                                          HEC-1 INPUT                                                    PAGE 19

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 794          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 795          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 796          KM   .25 .25 .24 .24 .24 .24 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00
 797          KM
 798          KM          L=   1.468 miles, S=   75 feet/mile, Kb= .08
 799          KM
 800          BA   0.740
 801          LG    0.31    0.38    5.60    0.21    3.00
 802          UC   0.750   0.434
 803          UA       0       3       5       8      12      20      43      75      90      96
 804          UA     100
              *

 805          KK    C402
 806          KM      Combine routed hydrograph 401402 w/runoff from S402
 807          HC       2
              *

 808          KK  402403
 809          KM        Normal depth route from C402 to C403
 810          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 811          RS      10    FLOW      -1
 812          RC    .045    .043    .045    6138  0.0049
 813          RX   9267.  9571.2  9916.2  9988.7  9997.4 10095.3 10157.8   10641
 814          RY  1395.9  1388.7  1383.7    1355    1355  1361.4  1359.6    1378
 815          RL                    0.03  1355.0
              *

 816          KK    S403
 817          KM   Sub-Basin   S403
 818          KM
 819          KM      The Clark Unit Hydrograph is used for this basin.
 820          KM          The Natural time-area relation is used for this basin.
 821          KM
 822          KM      Time of Concentration for this sub-basin is based on the following:
 823          KM          An rainfall areal reduction factor of 1.000
 824          KM
 825          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 826          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 827          KM   .28 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
 828          KM
 829          KM          L=   1.638 miles, S=   52 feet/mile, Kb= .09
 830          KM
 831          BA   0.559
 832          LG    0.30    0.30    8.00    0.08    0.00
 833          UC   0.971   0.740
 834          UA       0       3       5       8      12      20      43      75      90      96
 835          UA     100
              *
1                                          HEC-1 INPUT                                                    PAGE 20

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 836          KK    C403
 837          KM        Combine routed hydrograph 402403 w/runoff from S403
 838          HC       2
              *

 839          KK  403404
 840          KM        Normal depth route from C403 to C404
 841          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 842          RS       3    FLOW      -1
 843          RC    .045    .045    .045    4256   .0164
 844          RX  9506.5  9551.7  9955.5    9995 10007.4 10060.9 10227.2 10315.3
 845          RY  1300.9  1282.3  1282.7  1276.7  1276.5  1283.5  1283.3  1302.1
 846          RL                    0.03  1276.5
```

```
                 *
847              KK    S404
848              KM   Sub-Basin   S404
849              KM
850              KM      The Clark Unit Hydrograph is used for this basin.
851              KM          The Natural time-area relation is used for this basin.
852              KM
853              KM      Time of Concentration for this sub-basin is based on the following:
854              KM          An rainfall areal reduction factor of 1.000
855              KM
856              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
857              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
858              KM   .26 .26 .26 .26 .25 .25 .02 .02 .02 .02 .02 .01 .00 .00 .00 .00 .00 .00
859              KM
860              KM          L=   0.773 miles, S=  181 feet/mile, Kb= .09
861              KM
862              BA   0.263
863              LG    0.27    0.37    6.60    0.14    0.00
864              UC   0.371   0.214
865              UA       0       3       5       8      12      20      43      75      90      96
866              UA     100
                 *

867              KK    C404
868              KM        Combine routed hydrograph C403 w/runoff S404
869              HC       2
                 *

870              KK  WEST-2
871              KM        Dummy combine of major basins 100, 200, 300 and 400
872              HC       2
                 *
                 *  ****************************************************************************
                 *                Begin Major Basin 500 (Twin Buttes Wash)
                 *  ****************************************************************************
                 *
1                                                HEC-1 INPUT                                                PAGE 21

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

873              KK    S500
874              KM   Sub-Basin   S500
875              KM
876              KM      The Clark Unit Hydrograph is used for this basin.
877              KM          The Natural time-area relation is used for this basin.
878              KM
879              KM      Time of Concentration for this sub-basin is based on the following:
880              KM          An rainfall areal reduction factor of 1.000
881              KM
882              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
883              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
884              KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
885              KM
886              KM          L=   2.399 miles, S=  117 feet/mile, Kb= .10
887              KM
888              BA   1.054
889              LG    0.25    0.35    4.25    0.44   35.00
890              UC   1.046   0.760
891              UA       0       3       5       8      12      20      43      75      90      96
892              UA     100
                 *

893              KK  500501
894              KM        Normal depth route from S500 to C501
895              KM        Source: Field Reconnaissance
896              RS       4    FLOW      -1
897              RC    0.05   0.035    0.05    5972  0.0134
898              RX    1000    1004    1032    1047    1069 1072.75  1075.9  1081.9
899              RY   105.7   101.7    99.6    96.8    97.1    99.6   101.7   105.7
                 *

900              KK    S501
901              KM   Sub-Basin   S501
902              KM
903              KM      The Clark Unit Hydrograph is used for this basin.
904              KM          The Natural time-area relation is used for this basin.
905              KM
906              KM      Time of Concentration for this sub-basin is based on the following:
907              KM          An rainfall areal reduction factor of 1.000
```

```
908          KM
909          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
910          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
911          KM   .24 .24 .24 .24 .24 .23 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
912          KM
913          KM          L=   1.486 miles, S=  135 feet/mile, Kb= .10
914          KM
915          BA   0.614
916          LG    0.22    0.35    4.45    0.39   23.00
917          UC   0.692   0.445
918          UA       0       3       5       8      12      20      43      75      90      96
919          UA     100
             *
1                                          HEC-1 INPUT                                          PAGE 22

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

920          KK    C501
921          KM        Combine routed hydrograph 500501 w/runoff from S501
922          HC       2
             *

923          KK  501502
924          KM        Normal depth route from C501 to C502L
925          KM        Source: Field Reconniassance
926          RS       2    FLOW      -1
927          RC    0.05   0.035    0.05    5021  0.0159
928          RX    1000    1001    1002    1006    1035    1039    1040    1041
929          RY     106     105     104     100     100     104     105     106
930          RL                    0.94   100.0
             *

931          KK    S502
932          KM   Sub-Basin   S502
933          KM
934          KM      The Clark Unit Hydrograph is used for this basin.
935          KM          The Natural time-area relation is used for this basin.
936          KM
937          KM      Time of Concentration for this sub-basin is based on the following:
938          KM          An rainfall areal reduction factor of 1.000
939          KM
940          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
941          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
942          KM   .24 .24 .24 .24 .23 .23 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
943          KM
944          KM          L=   1.053 miles, S=  209 feet/mile, Kb= .13
945          KM
946          BA   0.403
947          LG    0.27    0.35    4.50    0.35   14.00
948          UC   0.533   0.322
949          UA       0       3       5       8      12      20      43      75      90      96
950          UA     100
             *

951          KK   C502L
952          KM        Combine routed hydrograph 501502 w/runoff from S502
953          HC       2
             *

954          KK    S503
955          KM   Sub-Basin   S503
956          KM
957          KM      The Clark Unit Hydrograph is used for this basin.
958          KM          The Natural time-area relation is used for this basin.
959          KM
960          KM      Time of Concentration for this sub-basin is based on the following:
961          KM          An rainfall areal reduction factor of 1.000
962          KM
963          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
964          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
965          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1                                          HEC-1 INPUT                                          PAGE 23

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

966          KM
967          KM          L=   1.891 miles, S=  116 feet/mile, Kb= .08
968          KM
969          BA   0.994
970          LG    0.21    0.31    4.65    0.28   17.00
```

```
 971          UC   0.721   0.430
 972          UA       0       3       5       8      12      20      43      75      90      96
 973          UA     100
              *

 974          KK   C502I
 975          KM        Combine hydrograph from C502L w/runoff from S503
 976          HC       2
              *

 977          KK   C502O
 978          KM        Storage routing at crossing structure no. 81
 979          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 980          RS       1    STOR       0
 981          SQ       0     248     800    1600    2160    2500    2900    3200
 982          SE    1500    1503    1506    1512    1518    1524    1530    1536
 983          SV       0    2.37    9.23   20.95   37.67  122.58   212.7  516.24
 984          SE    1500    1508    1512    1516    1520    1528    1532    1540
              *

 985          KK  502505
 986          KM        Normal depth route from C502 to C505L
 987          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 988          RS       7    FLOW      -1
 989          RC    .046     .04    .046    8775  0.0091
 990          RX  9875.7  9921.8  9941.2  9962.7 10048.7 10088.3 10258.2 10339.9
 991          RY  1488.4  1476.5  1472.2    1469  1470.4  1480.9  1485.4  1497.1
 992          RL                    0.94    1469
              *

 993          KK    S504
 994          KM   Sub-Basin   S504
 995          KM
 996          KM      The Clark Unit Hydrograph is used for this basin.
 997          KM          The Natural time-area relation is used for this basin.
 998          KM
 999          KM      Time of Concentration for this sub-basin is based on the following:
1000          KM          An rainfall areal reduction factor of 1.000
1001          KM
1002          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1003          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1004          KM   .23 .22 .22 .22 .22 .21 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
1005          KM
1006          KM          L=   1.571 miles, S=   64 feet/mile, Kb= .09
1007          KM
1008          BA   0.326
1009          LG    0.35    0.35    4.40    0.38    0.00
1010          UC   1.025   1.034
1011          UA       0       3       5       8      12      20      43      75      90      96
1012          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1013          KK   C505L
1014          KM        Combine routed hydrograph 502505 w/runoff from S504
1015          HC       2
              *

1016          KK    S505
1017          KM   Sub-Basin   S505
1018          KM
1019          KM      The Clark Unit Hydrograph is used for this basin.
1020          KM          The Natural time-area relation is used for this basin.
1021          KM
1022          KM      Time of Concentration for this sub-basin is based on the following:
1023          KM          An rainfall areal reduction factor of 1.000
1024          KM
1025          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1026          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1027          KM   .24 .24 .23 .23 .23 .22 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
1028          KM
1029          KM          L=   0.472 miles, S=  365 feet/mile, Kb= .14
1030          KM
1031          BA   0.143
1032          LG    0.25    0.35    4.40    0.38   14.00
1033          UC   0.304   0.164
1034          UA       0       3       5       8      12      20      43      75      90      96
1035          UA     100
```

```
                *
1036            KK   C5030
1037            KM        Storage routing at crossing structure no. 94
1038            KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1039            RS       1    STOR       0
1040            SQ       0     7.5      22      45      71      93     110
1041            SE    1519  1520.25 1521.5    1524    1529    1534    1540
1042            SV       0    0.61    2.78    8.03   18.24
1043            SE    1519    1528    1532    1536    1540
                *

1044            KK  503505
1045            KM        Normal depth route from S505 to C505
1046            KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1047            RS      15    FLOW      -1
1048            RC    .045    .047    .043    9136   .0115
1049            RX    9715  9892.4    9965  9996.6   10000 10044.9 10077.4 10088.5
1050            RY  1504.8  1497.4  1487.9  1471.1  1471.6  1487.4  1484.4  1483.1
1051            RL                    0.63  1471.1
                *

1052            KK    S506
1053            KM   Sub-Basin   S506
1054            KM
1055            KM      The Clark Unit Hydrograph is used for this basin.
1056            KM          The Natural time-area relation is used for this basin.
1057            KM
1058            KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1059            KM          An rainfall areal reduction factor of 1.000
1060            KM
1061            KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1062            KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1063            KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
1064            KM
1065            KM          L=   0.726 miles, S=  307 feet/mile, Kb= .14
1066            KM
1067            BA   0.151
1068            LG    0.29    0.39    5.70    0.20    9.00
1069            UC   0.392   0.297
1070            UA       0       3       5       8      12      20      43      75      90      96
1071            UA     100
                *

1072            KK   C5040
1073            KM        Storage routing at crossing structure no. 93
1074            KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1075            RS       1    STOR       0
1076            SQ       0     7.5      22      52      72      90     103     115
1077            SE  1513.9  1515.2  1516.4  1520.2  1524.2  1528.2  1532.2    1540
1078            SV       0     0.1    0.18    1.89    5.34   11.99   24.05    43.4
1079            SE  1513.9  1517.8    1520    1524    1528    1532    1536    1540
                *

1080            KK  504505
1081            KM        Normal depth route from S506 to C505
1082            KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1083            RS      13    FLOW      -1
1084            RC    .045    .043    .044    7754  0.0129
1085            RX  9785.2  9855.2  9914.4  9959.2 10013.6 10041.2 10119.8 10183.2
1086            RY    1501  1493.8  1487.5    1473  1468.9  1480.7  1487.9  1494.5
                *

1087            KK    S507
1088            KM   Sub-Basin   S507
1089            KM
1090            KM      The Clark Unit Hydrograph is used for this basin.
1091            KM          The Natural time-area relation is used for this basin.
1092            KM
1093            KM      Time of Concentration for this sub-basin is based on the following:
1094            KM          An rainfall areal reduction factor of 1.000
1095            KM
1096            KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1097            KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1098            KM   .25 .25 .24 .24 .24 .24 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00
1099            KM
1100            KM          L=   1.467 miles, S=   68 feet/mile, Kb= .08
```

```
1101          KM
1102          BA   0.666
1103          LG    0.34    0.39    5.70    0.20    1.00
1104          UC   0.788   0.486
1105          UA       0       3       5       8      12      20      43      75      90      96
1106          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1107          KK   C505R
1108          KM        Combine routed hydrographs 503505 and 504505 w/runoff from S507
1109          HC       3
              *

1110          KK    C505
1111          KM        Combine hydrographs from C505L and C505R
1112          HC       2
              *

1113          KK  505509
1114          KM        Normal depth route from C505 to C509L
1115          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1116          RS      10    FLOW      -1
1117          RC    .046    .047    .036    6213  0.0064
1118          RX  9136.7  9456.9  9928.8   10000 10150.9 10209.7   10414 10505.9
1119          RY  1419.5  1401.9    1395    1390  1390.3  1398.3  1395.1  1398.3
1120          RL                    0.94  1390.0
              *

1121          KK    S508
1122          KM   Sub-Basin   S508
1123          KM
1124          KM      The Clark Unit Hydrograph is used for this basin.
1125          KM          The Natural time-area relation is used for this basin.
1126          KM
1127          KM      Time of Concentration for this sub-basin is based on the following:
1128          KM          An rainfall areal reduction factor of 1.000
1129          KM
1130          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1131          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1132          KM   .24 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
1133          KM
1134          KM          L=   1.082 miles, S=   92 feet/mile, Kb= .09
1135          KM
1136          BA   0.295
1137          LG    0.33    0.37    5.30    0.24    0.00
1138          UC   0.596   0.445
1139          UA       0       3       5       8      12      20      43      75      90      96
1140          UA     100
              *

1141          KK   C509L
1142          KM        Combine routed hydrograph 505509 w/runoff from S508
1143          HC       2
              *

1144          KK    S509
1145          KM   Sub-Basin   S509
1146          KM
1147          KM      The Clark Unit Hydrograph is used for this basin.
1148          KM          The Natural time-area relation is used for this basin.
1149          KM
1150          KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1151          KM          An rainfall areal reduction factor of 1.000
1152          KM
1153          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1154          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1155          KM   .25 .25 .25 .24 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1156          KM
1157          KM          L=   0.721 miles, S=  304 feet/mile, Kb= .10
1158          KM
1159          BA   0.170
1160          LG    0.28    0.35    4.65    0.32   23.00
1161          UC   0.329   0.228
```

```
1162        UA       0       3       5       8      12      20      43      75      90      96
1163        UA     100
            *

1164        KK   C506O
1165        KM        Storage routing at crossing structure no. 84
1166        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1167        RS       1    STOR       0
1168        SQ       0     7.5      22      45      71      93     110
1169        SE    1519 1520.25  1521.5    1524    1529    1534    1540
1170        SV       0     .77    4.36   15.19   35.89
1171        SE    1519    1528    1532    1536    1540
            *

1172        KK  506508
1173        KM        Normal depth route from S506 to C508
1174        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1175        RS       6    FLOW      -1
1176        RC    .045    .045    .035    4023   .0149
1177        RX  9717.6  9800.2  9981.4   10000 10010.3 10036.3 10068.8 10227.2
1178        RY  1512.9  1510.9  1508.9    1502    1499  1505.7  1511.5  1512.3
            *

1179        KK    S510
1180        KM   Sub-Basin   S510
1181        KM
1182        KM      The Clark Unit Hydrograph is used for this basin.
1183        KM          The Natural time-area relation is used for this basin.
1184        KM
1185        KM      Time of Concentration for this sub-basin is based on the following:
1186        KM          An rainfall areal reduction factor of 1.000
1187        KM
1188        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1189        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1190        KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .00 .00 .00 .00 .00 .00
1191        KM
1192        KM          L=   0.803 miles, S=   75 feet/mile, Kb= .10
1193        KM
1194        BA   0.127
1195        LG    0.32    0.33    7.30    0.11    6.00
1196        UC   0.529   0.497
1197        UA       0       3       5       8      12      20      43      75      90      96
1198        UA     100
            *
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1199        KK   C508R
1200        KM        Combine routed hydrograph 506508 w/runoff from S510
1201        HC       2
            *

1202        KK    S511
1203        KM   Sub-Basin   S511
1204        KM
1205        KM      The Clark Unit Hydrograph is used for this basin.
1206        KM          The Natural time-area relation is used for this basin.
1207        KM
1208        KM      Time of Concentration for this sub-basin is based on the following:
1209        KM          An rainfall areal reduction factor of 1.000
1210        KM
1211        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1212        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1213        KM   .26 .26 .25 .25 .25 .25 .02 .02 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1214        KM
1215        KM          L=   1.319 miles, S=  270 feet/mile, Kb= .09
1216        KM
1217        BA   0.385
1218        LG    0.29    0.39    5.70    0.20   19.00
1219        UC   0.433   0.314
1220        UA       0       3       5       8      12      20      43      75      90      96
1221        UA     100
            *

1222        KK   C507O
1223        KM        Storage routing at crossing structure no. 82
1224        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1225        RS       1    STOR       0
1226        SQ       0     7.5      22      45      71      93     108     115
```

```
1227          SE    1516 1517.25  1518.5    1521    1526    1531    1536    1540
1228          SV       0     .75    4.47   19.99   60.85  133.63
1229          SE    1520    1524    1528    1532    1536    1540
              *

1230          KK  507508
1231          KM        Normal depth route from S511 to C508
1232          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1233          RS       9    FLOW      -1
1234          RC    .045    .045    .035    5400   .0111
1235          RX  9723.2  9781.7   9912.  9989.1   10000 10022.9 10089.7 10209.7
1236          RY  1491.1  1490.1  1489.9  1476.5  1477.1  1483.3  1486.2  1492.1
1237          RL                    0.39  1476.5
              *

1238          KK    S512
1239          KM   Sub-Basin   S512
1240          KM
1241          KM      The Clark Unit Hydrograph is used for this basin.
1242          KM          The Natural time-area relation is used for this basin.
1243          KM
1244          KM      Time of Concentration for this sub-basin is based on the following:
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1245          KM          An rainfall areal reduction factor of 1.000
1246          KM
1247          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1248          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1249          KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
1250          KM
1251          KM          L=   0.974 miles, S=   62 feet/mile, Kb= .10
1252          KM
1253          BA   0.214
1254          LG    0.35    0.30    8.00    0.08    0.00
1255          UC   0.667   0.556
1256          UA       0       3       5       8      12      20      43      75      90      96
1257          UA     100
              *

1258          KK   C508L
1259          KM        Combine routed hydrograph 507508 w/runoff from S512
1260          HC       2
              *

1261          KK    C508
1262          KM        Combine hydrographs from C508L and C508R
1263          HC       2
              *

1264          KK  508509
1265          KM        Normal depth route from C508 to C509
1266          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1267          RS      16    FLOW      -1
1268          RC    .045    .041    .045   10349  0.0077
1269          RX  9573.3  9869.3    9973  9985.2   10000   10053 10231.6 10511.6
1270          RY  1439.9  1425.1  1424.7  1422.1  1419.1  1425.1  1437.1  1444.5
1271          RL                    0.94  1419.1
              *

1272          KK    S513
1273          KM   Sub-Basin   S513
1274          KM
1275          KM      The Clark Unit Hydrograph is used for this basin.
1276          KM          The Natural time-area relation is used for this basin.
1277          KM
1278          KM      Time of Concentration for this sub-basin is based on the following:
1279          KM          An rainfall areal reduction factor of 1.000
1280          KM
1281          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1282          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1283          KM   .25 .24 .24 .24 .24 .23 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
1284          KM
1285          KM          L=   2.301 miles, S=   52 feet/mile, Kb= .08
1286          KM
1287          BA   0.778
1288          LG    0.32    0.38    5.40    0.22    1.00
1289          UC   1.300   1.113
1290          UA       0       3       5       8      12      20      43      75      90      96
1291          UA     100
```

```
                  *
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1292              KK   C509R
1293              KM        Combine routed hydrograph 508509 w/runoff from S513
1294              HC       2
                  *

1295              KK    C509
1296              KM        Combine hydrographs from C509L and C509R
1297              HC       2
                  *

1298              KK  509510
1299              KM        Normal depth route from C509 to C510
1300              KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1301              RS       3    FLOW      -1
1302              RC    .046    .043    .045    1958   .0102
1303              RX  9605.5  9805.1  9911.8   10000 10026.3 10119.6 10293.4 10613.5
1304              RY  1374.6  1369.2  1370.3  1365.5  1365.6  1379.6  1383.9  1390.1
1305              RL                    0.38  1365.5
                  *

1306              KK    S514
1307              KM   Sub-Basin   S514
1308              KM
1309              KM      The Clark Unit Hydrograph is used for this basin.
1310              KM          The Natural time-area relation is used for this basin.
1311              KM
1312              KM      Time of Concentration for this sub-basin is based on the following:
1313              KM          An rainfall areal reduction factor of 1.000
1314              KM
1315              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1316              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1317              KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .00 .00 .00 .00
1318              KM
1319              KM          L=   2.147 miles, S=   65 feet/mile, Kb= .08
1320              KM
1321              BA   0.650
1322              LG    0.28    0.32    7.60    0.09    0.00
1323              UC   0.983   0.855
1324              UA       0       3       5       8      12      20      43      75      90      96
1325              UA     100
                  *

1326              KK    C510
1327              KM        Combine routed hydrograph 509510 w/runoff from S514
1328              HC       2
                  *

1329              KK  510511
1330              KM        Normal depth route from C510 to C511
1331              KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1332              RS      11    FLOW      -1
1333              RC    .046    .044    .046    6722  0.0067
1334              RX  9361.9  9781.7  9944.4  9985.6   10000 10040.8   10420 11470.9
1335              RY  1382.6  1375.5  1364.2  1355.1  1355.4  1360.8  1363.1  1381.1
```



```
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1336              RL                    0.38  1355.1
                  *

1337              KK    S515
1338              KM   Sub-Basin   S515
1339              KM
1340              KM      The Clark Unit Hydrograph is used for this basin.
1341              KM          The Natural time-area relation is used for this basin.
1342              KM
1343              KM      Time of Concentration for this sub-basin is based on the following:
1344              KM          An rainfall areal reduction factor of 1.000
1345              KM
1346              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1347              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1348              KM   .28 .28 .28 .28 .28 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
1349              KM
1350              KM          L=   1.948 miles, S=   54 feet/mile, Kb= .08
```

```
1351          KM
1352          BA   1.102
1353          LG    0.32    0.27    8.80    0.06    0.00
1354          UC   0.975   0.580
1355          UA       0       3       5       8      12      20      43      75      90      96
1356          UA     100
              *

1357          KK    C511
1358          KM        Combine routed hydrograph 510511 w/runoff from S515
1359          HC       2
              *

1360          KK  S11512
1361          KM        Normal depth route from C511 to C512
1362          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1363          RS      10    FLOW      -1
1364          RC    .046    .044    .046    9226  0.0081
1365          RX  9565.4  9665.5  9852.4   10000 10019.5 10074.2 10242.6   10760
1366          RY  1305.6  1305.6  1303.1  1297.8  1296.9  1336.3  1339.9  1336.5
1367          RL                    0.40  1296.9
              *

1368          KK    S516
1369          KM   Sub-Basin   S516
1370          KM
1371          KM      The Clark Unit Hydrograph is used for this basin.
1372          KM          The Natural time-area relation is used for this basin.
1373          KM
1374          KM      Time of Concentration for this sub-basin is based on the following:
1375          KM          An rainfall areal reduction factor of 1.000
1376          KM
1377          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1378          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1379          KM   .24 .24 .23 .23 .23 .22 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
1380          KM
1381          KM          L=   1.747 miles, S=   66 feet/mile, Kb= .09
1382          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1383          BA   0.540
1384          LG    0.35    0.35    4.80    0.29    0.00
1385          UC   1.058   0.875
1386          UA       0       3       5       8      12      20      43      75      90      96
1387          UA     100
              *

1388          KK    C512
1389          KM        Combine routed hydrograph 511512 w/runoff from S516
1390          HC       2
              *

1391          KK  WEST-3
1392          KM        Dummy combine of major basins S100, S200, S300, S400 and S500
1393          HC       2
              *
              *  ******************************************************************************
              *                 Begin Major Basin 600 (Morgan City Wash)
              *  ******************************************************************************
              *

1394          KK    S600
1395          KM   Sub-Basin   S600
1396          KM
1397          KM      The Clark Unit Hydrograph is used for this basin.
1398          KM          The Natural time-area relation is used for this basin.
1399          KM
1400          KM      Time of Concentration for this sub-basin is based on the following:
1401          KM          An rainfall areal reduction factor of 1.000
1402          KM
1403          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1404          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1405          KM   .23 .23 .23 .23 .22 .22 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1406          KM
1407          KM          L=   2.796 miles, S=  271 feet/mile, Kb= .09
1408          KM
1409          BA   2.018
1410          LG    0.25    0.35    4.00    0.49   22.00
1411          UC   0.763   0.418
```

```
1412          UA       0       3       5       8      12      20      43      75      90      96
1413          UA     100
              *

1414          KK  600601
1415          KM        Normal depth route from S600 to C601
1416          KM        Source: Morgan City Wash FDS, FCD 89-15
1417          RS       2    FLOW      -1
1418          RC    0.05   0.035    0.05    3463   .0332
1419          RX     100     110     135     200     220     260     275     290
1420          RY    2516    2512    2504    2500    2510    2520    2530    2540
              *
1                                          HEC-1 INPUT                                          PAGE 33

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1421          KK    S601
1422          KM   Sub-Basin   S601
1423          KM
1424          KM      The Clark Unit Hydrograph is used for this basin.
1425          KM          The Natural time-area relation is used for this basin.
1426          KM
1427          KM      Time of Concentration for this sub-basin is based on the following:
1428          KM          An rainfall areal reduction factor of 1.000
1429          KM
1430          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1431          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1432          KM   .27 .27 .27 .27 .26 .26 .03 .03 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
1433          KM
1434          KM          L=   1.840 miles, S=  232 feet/mile, Kb= .10
1435          KM
1436          BA   0.901
1437          LG    0.25    0.39    5.70    0.21   44.00
1438          UC   0.588   0.354
1439          UA       0       3       5       8      12      20      43      75      90      96
1440          UA     100
              *

1441          KK    C601
1442          KM        Combine routed hydrograph from S600 w/runoff from S601
1443          HC       2
              *

1444          KK  601602
1445          KM        Normal depth route from S601 to C602
1446          KM        Source: Morgan City Wash FDS, FCD 89-15
1447          RS       3    FLOW      -1
1448          RC    0.05   0.035    0.05    6017   .0266
1449          RX     100     130     140     155     245     255     270     340
1450          RY    2380    2360    2356    2352    2352    2356    2360    2380
              *

1451          KK    S603
1452          KM   Sub-Basin   S603
1453          KM
1454          KM      The Clark Unit Hydrograph is used for this basin.
1455          KM          The Natural time-area relation is used for this basin.
1456          KM
1457          KM      Time of Concentration for this sub-basin is based on the following:
1458          KM          An rainfall areal reduction factor of 1.000
1459          KM
1460          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1461          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1462          KM   .27 .27 .27 .26 .26 .26 .03 .03 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1463          KM
1464          KM          L=   1.377 miles, S=  326 feet/mile, Kb= .10
1465          KM
1466          BA   0.665
1467          LG    0.25    0.39    5.80    0.20   41.00
1468          UC   0.433   0.238
1                                          HEC-1 INPUT                                          PAGE 34

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1469          UA       0       3       5       8      12      20      43      75      90      96
1470          UA     100
              *

1471          KK   C602L
1472          KM        Combine routed hydrogaph 601602 w/runoff from S603
```

```
1473          HC       2
              *

1474          KK    S602
1475          KM   Sub-Basin   S602
1476          KM
1477          KM      The Clark Unit Hydrograph is used for this basin.
1478          KM          The Natural time-area relation is used for this basin.
1479          KM
1480          KM      Time of Concentration for this sub-basin is based on the following:
1481          KM          An rainfall areal reduction factor of 1.000
1482          KM
1483          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1484          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1485          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1486          KM
1487          KM          L=   3.035 miles, S=  258 feet/mile, Kb= .09
1488          KM
1489          BA   1.883
1490          LG    0.25    0.35    4.35    0.41   35.00
1491          UC   0.788   0.481
1492          UA       0       3       5       8      12      20      43      75      90      96
1493          UA     100
              *

1494          KK    C602
1495          KM       Combine hydrograph at C602L w/runoff from S602
1496          HC       2
              *

1497          KK  602603
1498          KM       Normal depth route from C602 to C603L
1499          KM       Source: Morgan City Wash FDS, FCD 89-15
1500          RS       7    FLOW      -1
1501          RC    0.05   0.035    0.05    7614   .0171
1502          RX    1000    1020    1045    1065    1322    1340    1372    1405
1503          RY    2228    2224    2220    2212    2212    2220    2240    2260
1504          RL                    0.96  2212.0
              *

1505          KK    S606
1506          KM   Sub-Basin   S606
1507          KM
1508          KM      The Clark Unit Hydrograph is used for this basin.
1509          KM          The Natural time-area relation is used for this basin.
1510          KM
1511          KM      Time of Concentration for this sub-basin is based on the following:
1512          KM          An rainfall areal reduction factor of 1.000
1513          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1514          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1515          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1516          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1517          KM
1518          KM          L=   2.111 miles, S=  300 feet/mile, Kb= .10
1519          KM
1520          BA   0.660
1521          LG    0.26    0.35    4.50    0.37   35.00
1522          UC   0.600   0.484
1523          UA       0       3       5       8      12      20      43      75      90      96
1524          UA     100
              *

1525          KK   C603L
1526          KM       Combine routed hydrograph 602603 w/runoff from S606
1527          HC       2
              *

1528          KK    S605
1529          KM   Sub-Basin   S605
1530          KM
1531          KM      The Clark Unit Hydrograph is used for this basin.
1532          KM          The Natural time-area relation is used for this basin.
1533          KM
1534          KM      Time of Concentration for this sub-basin is based on the following:
1535          KM          An rainfall areal reduction factor of 1.000
1536          KM
1537          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

```
1538          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1539          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1540          KM
1541          KM          L=   2.322 miles, S=  229 feet/mile, Kb= .10
1542          KM
1543          BA   1.085
1544          LG    0.25    0.35    4.35    0.41   35.00
1545          UC   0.742   0.497
1546          UA       0       3       5       8      12      20      43      75      90      96
1547          UA     100
              *

1548          KK    S604
1549          KM   Sub-Basin   S604
1550          KM
1551          KM      The Clark Unit Hydrograph is used for this basin.
1552          KM          The Natural time-area relation is used for this basin.
1553          KM
1554          KM      Time of Concentration for this sub-basin is based on the following:
1555          KM          An rainfall areal reduction factor of 1.000
1556          KM
1557          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1558          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1559          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1560          KM
1561          KM          L=   4.105 miles, S=  207 feet/mile, Kb= .09
1562          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1563          BA   2.656
1564          LG    0.25    0.35    4.35    0.41   35.00
1565          UC   1.100   0.729
1566          UA       0       3       5       8      12      20      43      75      90      96
1567          UA     100
              *

1568          KK    C603
1569          KM        Combine hydrograph from C603L w/runoff from  S605, and S604
1570          HC       3
              *

1571          KK  603604
1572          KM        Normal depth route from C603 to C604R
1573          KM        Source: Morgan City Wash FDS, FCD 89-15
1574          RS       4    FLOW      -1
1575          RC    0.05   0.035    0.05    7830   .0192
1576          RX    1000    1022    1038    1053    1328    1375    1410    1430
1577          RY    2108    2104    2100    2088    2088    2100    2108    2112
1578          RL                    0.96  2088.0
              *

1579          KK    S609
1580          KM   Sub-Basin   S609
1581          KM
1582          KM      The Clark Unit Hydrograph is used for this basin.
1583          KM          The Natural time-area relation is used for this basin.
1584          KM
1585          KM      Time of Concentration for this sub-basin is based on the following:
1586          KM          An rainfall areal reduction factor of 1.000
1587          KM
1588          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1589          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1590          KM   .24 .24 .23 .23 .23 .22 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1591          KM
1592          KM          L=   2.239 miles, S=  214 feet/mile, Kb= .10
1593          KM
1594          BA   0.560
1595          LG    0.27    0.35    4.10    0.47   27.00
1596          UC   0.767   0.731
1597          UA       0       3       5       8      12      20      43      75      90      96
1598          UA     100
              *

1599          KK   C604R
1600          KM        Combine routed hydrograph 603604 w/runoff from S609
1601          HC       2
              *

1602          KK    S607
```

```
1603          KM   Sub-Basin   S607
1604          KM
1605          KM      The Clark Unit Hydrograph is used for this basin.
1606          KM          The Natural time-area relation is used for this basin.
1607          KM
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1608          KM      Time of Concentration for this sub-basin is based on the following:
1609          KM          An rainfall areal reduction factor of 1.000
1610          KM
1611          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1612          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1613          KM   .26 .26 .26 .26 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1614          KM
1615          KM          L=   2.567 miles, S=  257 feet/mile, Kb= .10
1616          KM
1617          BA  0.822
1618          LG   0.25    0.36    5.10    0.27   34.00
1619          UC  0.738   0.627
1620          UA      0       3       5       8      12      20      43      75      90      96
1621          UA    100
              *

1622          KK   C604
1623          KM       Combine hydrograph from C604R w/runoff from S607
1624          HC      2
              *

1625          KK  604605
1626          KM       Normal depth route from C604 to C605
1627          KM       Source: Morgan City Wash FDS, FCD 89-15
1628          RS      1    FLOW      -1
1629          RC   0.05   0.035    0.05    1543   .0065
1630          RX   1000    1080    1110    1125    1210    1292    1340    1375
1631          RY   2016    2112    2000    1984    1984    1992    2000    2008
              *

1632          KK   S608
1633          KM  Sub-Basin   S608
1634          KM
1635          KM      The Clark Unit Hydrograph is used for this basin.
1636          KM          The Natural time-area relation is used for this basin.
1637          KM
1638          KM      Time of Concentration for this sub-basin is based on the following:
1639          KM          An rainfall areal reduction factor of 1.000
1640          KM
1641          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1642          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1643          KM   .27 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1644          KM
1645          KM          L=   1.398 miles, S=  230 feet/mile, Kb= .11
1646          KM
1647          BA  0.508
1648          LG   0.25    0.39    5.80    0.20   37.00
1649          UC  0.517   0.342
1650          UA      0       3       5       8      12      20      43      75      90      96
1651          UA    100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1652          KK   C605
1653          KM       Combine routed hydrograph from 604605 w/runoff from S608
1654          HC      2
              *

1655          KK  605606
1656          KM       Normal depth route from C605 to C606L
1657          KM       Source: Morgan City Wash FDS, FCD 89-15
1658          RS      3    FLOW      -1
1659          RC   0.05   0.035    0.05    5520   .0199
1660          RX   1000    1052    1190    1248    1281    1340    1368    1395
1661          RY   1940    1928    1928    1924    1924    1928    1936    1940
1662          RL                    0.96  1924.0
              *

1663          KK   S610
```

```
1664          KM   Sub-Basin   S610
1665          KM
1666          KM      The Clark Unit Hydrograph is used for this basin.
1667          KM          The Natural time-area relation is used for this basin.
1668          KM
1669          KM      Time of Concentration for this sub-basin is based on the following:
1670          KM          An rainfall areal reduction factor of 1.000
1671          KM
1672          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1673          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1674          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1675          KM
1676          KM          L=   1.869 miles, S=  118 feet/mile, Kb= .10
1677          KM
1678          BA   0.603
1679          LG    0.26    0.36    5.10    0.27   39.00
1680          UC   0.829   0.661
1681          UA       0       3       5       8      12      20      43      75      90      96
1682          UA     100
              *

1683          KK   C606L
1684          KM       Combine routed hydrograph 605606 w/runoff from S610
1685          HC       2
              *

1686          KK    S612
1687          KM   Sub-Basin   S612
1688          KM
1689          KM      The Clark Unit Hydrograph is used for this basin.
1690          KM          The Natural time-area relation is used for this basin.
1691          KM
1692          KM      Time of Concentration for this sub-basin is based on the following:
1693          KM          An rainfall areal reduction factor of 1.000
1694          KM
1695          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1696          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1697          KM   .27 .27 .27 .26 .26 .26 .03 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1698          KM
1699          KM          L=   2.531 miles, S=  230 feet/mile, Kb= .10
1700          KM
1701          BA   0.808
1702          LG    0.25    0.38    6.40    0.16   31.00
1703          UC   0.750   0.638
1704          UA       0       3       5       8      12      20      43      75      90      96
1705          UA     100
              *

1706          KK    C606
1707          KM       Combine hydrograph from C606L w/runoff from S612
1708          HC       2
              *

1709          KK  606608
1710          KM       Normal depth route from C606 to C608
1711          KM       Source: Morgan City Wash FDS, FCD 89-15
1712          RS       1    FLOW      -1
1713          RC    0.05   0.035    0.05    1141   .0175
1714          RX    1000    1034    1070    1150    1237    1280    1378    1420
1715          RY    1888    1880    1876    1868    1868    1876    1900    1920
1716          RL                    0.96  1868.0
              *

1717          KK    S611
1718          KM   Sub-Basin   S611
1719          KM
1720          KM      The Clark Unit Hydrograph is used for this basin.
1721          KM          The Natural time-area relation is used for this basin.
1722          KM
1723          KM      Time of Concentration for this sub-basin is based on the following:
1724          KM          An rainfall areal reduction factor of 1.000
1725          KM
1726          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1727          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1728          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1729          KM
1730          KM          L=   1.286 miles, S=  270 feet/mile, Kb= .12
```

```
1731          KM
1732          BA   0.569
1733          LG    0.25    0.35    4.35    0.41   35.00
1734          UC   0.504   0.292
1735          UA       0       3       5       8      12      20      43      75      90      96
1736          UA     100
              *

1737          KK  607608
1738          KM        Normal depth route from S611 to S613
1739          KM        Source: Field Reconnaissance
1740          RS       6    FLOW      -1
1741          RC    .075     .03    .075   11167  0.0242
1742          RX     100     106     114     120     168     172     232     292
1743          RY     110     107     103     100     100     104     107     110
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1744          KK    S613
1745          KM   Sub-Basin   S613
1746          KM
1747          KM      The Clark Unit Hydrograph is used for this basin.
1748          KM          The Natural time-area relation is used for this basin.
1749          KM
1750          KM      Time of Concentration for this sub-basin is based on the following:
1751          KM          An rainfall areal reduction factor of 1.000
1752          KM
1753          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1754          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1755          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1756          KM
1757          KM          L=   2.525 miles, S=  131 feet/mile, Kb= .11
1758          KM
1759          BA   1.797
1760          LG    0.25    0.35    4.55    0.36   34.00
1761          UC   1.096   0.615
1762          UA       0       3       5       8      12      20      43      75      90      96
1763          UA     100
              *

1764          KK    C608
1765          KM        Combine routed hydrograph 606608 and 607608 w/runoff from S613
1766          HC       3
              *

1767          KK  608609
1768          KM        Normal depth route from C608 to C609
1769          KM        Source: Morgan City Wash FDS, FCD 89-15
1770          RS       4    FLOW      -1
1771          RC    0.05   0.035    0.05    6518   .0123
1772          RX    1000    1031    1052    1090    1132    1290    1320    1360
1773          RY    1860    1848    1844    1836    1836    1844    1848    1860
1774          RL                    0.94  1836.0
              *

1775          KK    S614
1776          KM   Sub-Basin   S614
1777          KM
1778          KM      The Clark Unit Hydrograph is used for this basin.
1779          KM          The Natural time-area relation is used for this basin.
1780          KM
1781          KM      Time of Concentration for this sub-basin is based on the following:
1782          KM          An rainfall areal reduction factor of 1.000
1783          KM
1784          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1785          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1786          KM   .25 .25 .25 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1787          KM
1788          KM          L=   2.285 miles, S=  149 feet/mile, Kb= .11
1789          KM
1790          BA   1.079
1791          LG    0.24    0.35    4.40    0.40   34.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1792          UC   0.963   0.658
1793          UA       0       3       5       8      12      20      43      75      90      96
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1794          UA     100
              *

1795          KK    C609
1796          KM        Combine routed hydrograph 608609 w/runoff from S614
1797          HC       2
              *

1798          KK  609611
1799          KM        Normal depth route from C609 to C611R
1800          KM        Source: Morgan City Wash FDS, FCD 89-15
1801          RS       5    FLOW      -1
1802          RC    0.05   0.035    0.05    6519   .0031
1803          RX    1000    1070    1145    1230    1410    1430    1550    1642
1804          RY    1732    1720    1716    1708    1708    1716    1720    1740
1805          RL                    0.94  1708.0
              *

1806          KK    S617
1807          KM   Sub-Basin   S617
1808          KM
1809          KM      The Clark Unit Hydrograph is used for this basin.
1810          KM          The Natural time-area relation is used for this basin.
1811          KM
1812          KM      Time of Concentration for this sub-basin is based on the following:
1813          KM          An rainfall areal reduction factor of 1.000
1814          KM
1815          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1816          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1817          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1818          KM
1819          KM          L=   1.362 miles, S=   81 feet/mile, Kb= .10
1820          KM
1821          BA   0.675
1822          LG    0.23    0.35    4.80    0.31   23.00
1823          UC   0.808   0.468
1824          UA       0       3       5       8      12      20      43      75      90      96
1825          UA     100
              *

1826          KK   C611R
1827          KM        Combine routed hydrograph 609611 w/runoff from S617
1828          HC       2
              *

1829          KK    S615
1830          KM   Sub-Basin   S615
1831          KM
1832          KM      The Clark Unit Hydrograph is used for this basin.
1833          KM          The Natural time-area relation is used for this basin.
1834          KM
1835          KM      Time of Concentration for this sub-basin is based on the following:
1836          KM          An rainfall areal reduction factor of 1.000
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1837          KM
1838          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1839          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1840          KM   .28 .28 .28 .27 .27 .27 .03 .03 .03 .03 .03 .03 .02 .02 .02 .02 .02 .02
1841          KM
1842          KM          L=   2.059 miles, S=  136 feet/mile, Kb= .12
1843          KM
1844          BA   1.055
1845          LG    0.25    0.39    6.20    0.17   55.00
1846          UC   0.913   0.578
1847          UA       0       3       5       8      12      20      43      75      90      96
1848          UA     100
              *

1849          KK  610611
1850          KM        Normal depth route from S615 to C611
1851          KM        Source: Morgan City Wash FDS, FCD 89-15
1852          RS       5    FLOW      -1
1853          RC    0.05   0.035    0.05    7981   .0100
1854          RX    1000    1028    1041    1078    1087    1092    1100    1108
1855          RY    1860    1840    1820    1800    1800    1820    1840    1860
              *

1856          KK    S616
```

```
1857          KM   Sub-Basin   S616
1858          KM
1859          KM      The Clark Unit Hydrograph is used for this basin.
1860          KM          The Natural time-area relation is used for this basin.
1861          KM
1862          KM      Time of Concentration for this sub-basin is based on the following:
1863          KM          An rainfall areal reduction factor of 1.000
1864          KM
1865          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1866          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1867          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1868          KM
1869          KM          L=   1.738 miles, S=   46 feet/mile, Kb= .11
1870          KM
1871          BA   0.505
1872          LG    0.22    0.37    5.20    0.26   19.00
1873          UC   1.375   1.210
1874          UA       0       3       5       8      12      20      43      75      90      96
1875          UA     100
              *

1876          KK   C611L
1877          KM        Combine routed hydrograph 6110611 w/runoff frm S616
1878          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1879          KK    C611
1880          KM        Combine hydrographs C611L and C611R
1881          HC       2
              *

1882          KK  611613
1883          KM        Normal depth route from C611 to C613
1884          KM        Source: Morgan City Wash FDS, FCD 89-15
1885          RS       1    FLOW      -1
1886          RC    0.05   0.035    0.05    4445   .0382
1887          RX    1000    1050    1080    1122    1210    1250    1305    1338
1888          RY    1644    1644    1628    1620    1620    1628    1660    1680
1889          RL                    0.94  1620.0
              *

1890          KK    S618
1891          KM   Sub-Basin   S618
1892          KM
1893          KM      The Clark Unit Hydrograph is used for this basin.
1894          KM          The Natural time-area relation is used for this basin.
1895          KM
1896          KM      Time of Concentration for this sub-basin is based on the following:
1897          KM          An rainfall areal reduction factor of 1.000
1898          KM
1899          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1900          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1901          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1902          KM
1903          KM          L=   2.364 miles, S=  199 feet/mile, Kb= .10
1904          KM
1905          BA   0.958
1906          LG    0.20    0.37    5.20    0.26   22.00
1907          UC   0.796   0.586
1908          UA       0       3       5       8      12      20      43      75      90      96
1909          UA     100
              *

1910          KK   C613R
1911          KM        Combine routed hydrograph 611613 w/runoff from S618
1912          HC       2
              *

1913          KK    S619
1914          KM   Sub-Basin   S619
1915          KM
1916          KM      The Clark Unit Hydrograph is used for this basin.
1917          KM          The Natural time-area relation is used for this basin.
1918          KM
1919          KM      Time of Concentration for this sub-basin is based on the following:
1920          KM          An rainfall areal reduction factor of 1.000
1921          KM
```

```
1922          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1923          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1924          KM   .28 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1925          KM
1926          KM          L=   1.212 miles, S=   99 feet/mile, Kb= .12
1927          KM
1928          BA   0.827
1929          LG    0.27    0.36    6.80    0.14   39.00
1930          UC   0.721   0.334
1931          UA       0       3       5       8      12      20      43      75      90      96
1932          UA     100
              *

1933          KK  612613
1934          KM        Normal depth route from S619 to S620
1935          KM        Source: Morgan City Wash FDS, FCD 89-15
1936          RS       5    FLOW      -1
1937          RC    0.05   0.035    0.05    8752   .0331
1938          RX     100     103     106     110     180     184     187     190
1939          RY     110     107     104     100     100     104     107     110
              *

1940          KK    S620
1941          KM   Sub-Basin   S620
1942          KM
1943          KM      The Clark Unit Hydrograph is used for this basin.
1944          KM          The Natural time-area relation is used for this basin.
1945          KM
1946          KM      Time of Concentration for this sub-basin is based on the following:
1947          KM          An rainfall areal reduction factor of 1.000
1948          KM
1949          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1950          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1951          KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
1952          KM
1953          KM          L=   1.763 miles, S=  228 feet/mile, Kb= .13
1954          KM
1955          BA   0.444
1956          LG    0.23    0.38    6.40    0.16   37.00
1957          UC   0.696   0.619
1958          UA       0       3       5       8      12      20      43      75      90      96
1959          UA     100
              *

1960          KK   C613L
1961          KM        Combine routed hydrograph 612613 w/runoff from S620
1962          HC       2
              *

1963          KK    C613
1964          KM        Combine hydrographs C613R and C613L
1965          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1966          KK  613614
1967          KM        Normal depth route from C613 to C614
1968          KM        Source: Morgan City Wash FDS, FCD 89-15
1969          RS       2    FLOW      -1
1970          RC    0.05   0.035    0.05    5557   .0108
1971          RX    1000    1022    1050    1100    1180    1225    1260    1360
1972          RY    1640    1620    1580    1552    1552    1564    1576    1580
1973          RL                    0.94  1552.0
              *

1974          KK    S621
1975          KM   Sub-Basin   S621
1976          KM
1977          KM      The Clark Unit Hydrograph is used for this basin.
1978          KM          The Natural time-area relation is used for this basin.
1979          KM
1980          KM      Time of Concentration for this sub-basin is based on the following:
1981          KM          An rainfall areal reduction factor of 1.000
1982          KM
```

```
1983          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1984          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1985          KM   .24 .24 .24 .24 .23 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
1986          KM
1987          KM          L=   1.470 miles, S=  170 feet/mile, Kb= .10
1988          KM
1989          BA   0.923
1990          LG    0.17    0.35    4.80    0.31    3.00
1991          UC   0.621   0.311
1992          UA       0       3       5       8      12      20      43      75      90      96
1993          UA     100
              *

1994          KK    C614
1995          KM        Combine routed hydrograph 613614 w/runoff from S621
1996          HC       2
              *

1997          KK  614615
1998          KM        Normal depth route from C614 to C615
1999          KM        Source: Morgan City Wash FDS, FCD 89-15
2000          RS       4    FLOW      -1
2001          RC    0.05   0.035    0.05    7995   .0144
2002          RX    1000    1050    1088    1150    1195    1290    1340    1405
2003          RY    1496    1484    1476    1460    1460    1476    1484    1516
2004          RL                    0.94  1460.0
              *

2005          KK    S622
2006          KM   Sub-Basin   S622
2007          KM
2008          KM      The Clark Unit Hydrograph is used for this basin.
2009          KM          The Natural time-area relation is used for this basin.
2010          KM
2011          KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2012          KM          An rainfall areal reduction factor of 1.000
2013          KM
2014          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2015          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2016          KM   .24 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2017          KM
2018          KM          L=   2.004 miles, S=  152 feet/mile, Kb= .12
2019          KM
2020          BA   0.897
2021          LG    0.18    0.35    4.90    0.30    4.00
2022          UC   0.971   0.664
2023          UA       0       3       5       8      12      20      43      75      90      96
2024          UA     100
              *

2025          KK    C615
2026          KM        Combine routed hydrograph from 614615 w/runoff from S622
2027          HC       2
              *

2028          KK  WEST-4
2029          KM        Dummy combine for all major basins, west of the Agua Fria River
2030          HC       2
              *

2031          KK    S700
2032          KM   Sub-Basin   S700
2033          KM
2034          KM      The Clark Unit Hydrograph is used for this basin.
2035          KM          The Natural time-area relation is used for this basin.
2036          KM
2037          KM      Time of Concentration for this sub-basin is based on the following:
2038          KM          An rainfall areal reduction factor of 1.000
2039          KM
2040          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2041          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2042          KM   .25 .24 .24 .24 .24 .24 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2043          KM
2044          KM          L=   1.923 miles, S=  185 feet/mile, Kb= .10
2045          KM
2046          BA   0.610
2047          LG    0.17    0.36    5.10    0.27    5.00
```

```
2048          UC   0.725   0.579
2049          UA       0       3       5       8      12      20      43      75      90      96
2050          UA     100
              *

2051          KK    S701
2052          KM   Sub-Basin   S701
2053          KM
2054          KM      The Clark Unit Hydrograph is used for this basin.
2055          KM          The Natural time-area relation is used for this basin.
2056          KM
2057          KM      Time of Concentration for this sub-basin is based on the following:
2058          KM          An rainfall areal reduction factor of 1.000
1                                        HEC-1 INPUT                                          PAGE 47

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2059          KM
2060          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2061          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2062          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
2063          KM
2064          KM          L=   2.821 miles, S=  136 feet/mile, Kb= .10
2065          KM
2066          BA   0.720
2067          LG    0.22    0.38    5.60    0.22   14.00
2068          UC   1.100   1.137
2069          UA       0       3       5       8      12      20      43      75      90      96
2070          UA     100
              *

2071          KK    S702
2072          KM   Sub-Basin   S702
2073          KM
2074          KM      The Clark Unit Hydrograph is used for this basin.
2075          KM          The Natural time-area relation is used for this basin.
2076          KM
2077          KM      Time of Concentration for this sub-basin is based on the following:
2078          KM          An rainfall areal reduction factor of 1.000
2079          KM
2080          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2081          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2082          KM   .25 .24 .24 .24 .24 .24 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2083          KM
2084          KM          L=   1.395 miles, S=  215 feet/mile, Kb= .11
2085          KM
2086          BA   0.257
2087          LG    0.17    0.36    5.10    0.27    4.00
2088          UC   0.563   0.553
2089          UA       0       3       5       8      12      20      43      75      90      96
2090          UA     100
              *

2091          KK    S703
2092          KM   Sub-Basin   S703
2093          KM
2094          KM      The Clark Unit Hydrograph is used for this basin.
2095          KM          The Natural time-area relation is used for this basin.
2096          KM
2097          KM      Time of Concentration for this sub-basin is based on the following:
2098          KM          An rainfall areal reduction factor of 1.000
2099          KM
2100          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2101          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2102          KM   .24 .24 .24 .24 .23 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2103          KM
2104          KM          L=   1.126 miles, S=  204 feet/mile, Kb= .11
2105          KM
2106          BA   0.257
2107          LG    0.15    0.35    4.90    0.30    0.00
2108          UC   0.496   0.405
2109          UA       0       3       5       8      12      20      43      75      90      96
1                                        HEC-1 INPUT                                          PAGE 48

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2110          UA     100
              *

2111          KK    S704
2112          KM   Sub-Basin   S704
```

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2113          KM
2114          KM      The Clark Unit Hydrograph is used for this basin.
2115          KM          The Natural time-area relation is used for this basin.
2116          KM
2117          KM      Time of Concentration for this sub-basin is based on the following:
2118          KM          An rainfall areal reduction factor of 1.000
2119          KM
2120          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2121          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2122          KM   .25 .24 .24 .24 .24 .23 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
2123          KM
2124          KM          L=   1.266 miles, S=  300 feet/mile, Kb= .11
2125          KM
2126          BA   0.408
2127          LG    0.26    0.35    4.90    0.30   11.00
2128          UC   0.463   0.316
2129          UA       0       3       5       8      12      20      43      75      90      96
2130          UA     100
              *

2131          KK  704705
2132          KM        Normal depth route from S704 to C705
2133          KM        Source: Field reconnaissance
2134          RS       7    FLOW      -1
2135          RC    .035    .045    .025    7534   .0186
2136          RX     100     123   159.5   162.8   186.8   205.3   206.3   207.3
2137          RY   108.5   102.7   101.3   100.2     100   108.3   109.3   110.3
              *

2138          KK    S705
2139          KM   Sub-Basin   S705
2140          KM
2141          KM      The Clark Unit Hydrograph is used for this basin.
2142          KM          The Natural time-area relation is used for this basin.
2143          KM
2144          KM      Time of Concentration for this sub-basin is based on the following:
2145          KM          An rainfall areal reduction factor of 1.000
2146          KM
2147          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2148          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2149          KM   .26 .26 .26 .26 .25 .25 .02 .02 .02 .02 .01 .01 .00 .00 .00 .00 .00 .00
2150          KM
2151          KM          L=   2.145 miles, S=  253 feet/mile, Kb= .10
2152          KM
2153          BA   0.754
2154          LG    0.22    0.38    6.40    0.16    7.00
2155          UC   0.650   0.496
2156          UA       0       3       5       8      12      20      43      75      90      96
2157          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2158          KK    C705
2159          KM        Combine routed hydrograph 704705 w/runoff from S705
2160          HC       2
              *

2161          KK   C7050
2162          KM        Storage routing at crossing structure no. 63
2163          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2164          KM        Cooper Aerial Photography extended from Agua Fria FDS
2165          RS       1    STOR       0
2166          SQ       0     200     400     600     800    1000    1200    1400    1420    1800
2167          SQ    2000
2168          SE  1338.2 1342.26 1344.68 1347.93 1352.52 1359.03 1367.08 1376.59 1377.62    1400
2169          SE  1413.9
2170          SV       0    0.08    0.46    1.29    2.71    4.72    7.32   10.63   14.77   19.75
2171          SV   25.57   32.07   39.09   46.63   54.70   63.28   72.40   82.03   92.19  102.87
2172          SE  1338.2    1339    1340    1341    1342    1343    1344    1345    1346    1347
2173          SE    1348    1349    1350    1351    1352    1353    1354    1355    1356    1357
              *

2174          KK  7050AF
2175          KM        Normal depth route from C7050 to C705AF
2176          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2177          RS       8    FLOW      -1
2178          RC    .045    .045    .045 2253.82   .0082
2179          RX     100  147.63  203.16  349.46  505.89  666.35  920.07 1239.80
```

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2180          RY    1324 1324.30    1324 1321.84 1321.64 1322.54    1324    1326
              *

2181          KK  S705AF
2182          KM   Sub-Basin S705AF
2183          KM
2184          KM      The Clark Unit Hydrograph is used for this basin.
2185          KM          The Natural time-area relation is used for this basin.
2186          KM
2187          KM      Time of Concentration for this sub-basin is based on the following:
2188          KM          An rainfall areal reduction factor of 1.000
2189          KM
2190          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2191          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2192          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2193          KM
2194          KM          L=   0.933 miles, S=   34 feet/mile, Kb= .05
2195          KM
2196          BA   0.183
2197          LG    0.31    0.22   10.10    0.03    0.00
2198          UC   0.488   0.415
2199          UA       0       3       5       8      12      20      43      75      90      96
2200          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 50

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2201          KK  C705AF
2202          KM        Combine routed hydrograph 705OAF w/runoff from S705
2203          HC       2
              *

2204          KK  WEST-5
2205          KM        Dummy combine for minor basins, west of the Agua Fria River
2206          HC       5
              *

2207          KK    S706
2208          KM   Sub-Basin   S706
2209          KM
2210          KM      The Clark Unit Hydrograph is used for this basin.
2211          KM          The Natural time-area relation is used for this basin.
2212          KM
2213          KM      Time of Concentration for this sub-basin is based on the following:
2214          KM          An rainfall areal reduction factor of 1.000
2215          KM
2216          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2217          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2218          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
2219          KM
2220          KM          L=   2.022 miles, S=  185 feet/mile, Kb= .10
2221          KM
2222          BA   0.713
2223          LG    0.29    0.39    5.70    0.20    7.00
2224          UC   0.738   0.562
2225          UA       0       3       5       8      12      20      43      75      90      96
2226          UA     100
              *

2227          KK    S707
2228          KM   Sub-Basin   S707
2229          KM
2230          KM      The Clark Unit Hydrograph is used for this basin.
2231          KM          The Natural time-area relation is used for this basin.
2232          KM
2233          KM      Time of Concentration for this sub-basin is based on the following:
2234          KM          An rainfall areal reduction factor of 1.000
2235          KM
2236          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2237          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2238          KM   .26 .26 .26 .25 .25 .25 .02 .02 .02 .01 .01 .01 .00 .00 .00 .00 .00 .00
2239          KM
2240          KM          L=   2.256 miles, S=  217 feet/mile, Kb= .10
2241          KM
2242          BA   0.638
2243          LG    0.28    0.39    6.20    0.16    8.00
2244          UC   0.725   0.641
2245          UA       0       3       5       8      12      20      43      75      90      96
2246          UA     100
```

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                  *
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2247              KK   S728
2248              KM  Sub-Basin   S728
2249              KM
2250              KM     The Clark Unit Hydrograph is used for this basin.
2251              KM         The Natural time-area relation is used for this basin.
2252              KM
2253              KM     Time of Concentration for this sub-basin is based on the following:
2254              KM         An rainfall areal reduction factor of 1.000
2255              KM
2256              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2257              KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2258              KM  .25 .25 .24 .24 .24 .24 .01 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00
2259              KM
2260              KM         L=   1.550 miles, S=   77 feet/mile, Kb= .07
2261              KM
2262              BA  0.276
2263              LG   0.35    0.37    5.20    0.22    0.00
2264              UC  0.696   0.732
2265              UA      0       3       5       8      12      20      43      75      90      96
2266              UA    100
                  *

2267              KK   WEST
2268              KM       Dummy combine for all operations in the stack, west of the Agua Fria R.
2269              HC      5
                  *

2270              KK   S708
2271              KM  Sub-Basin   S708
2272              KM
2273              KM     The Clark Unit Hydrograph is used for this basin.
2274              KM         The Natural time-area relation is used for this basin.
2275              KM
2276              KM     Time of Concentration for this sub-basin is based on the following:
2277              KM         An rainfall areal reduction factor of 1.000
2278              KM
2279              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2280              KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2281              KM  .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2282              KM
2283              KM         L=   1.594 miles, S=  194 feet/mile, Kb= .10
2284              KM
2285              BA  0.706
2286              LG   0.22    0.25    9.70    0.04    0.00
2287              UC  0.550   0.337
2288              UA      0       3       5       8      12      20      43      75      90      96
2289              UA    100
                  *
```



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LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2290              KK   S709
2291              KM  Sub-Basin   S709
2292              KM
2293              KM     The Clark Unit Hydrograph is used for this basin.
2294              KM         The Natural time-area relation is used for this basin.
2295              KM
2296              KM     Time of Concentration for this sub-basin is based on the following:
2297              KM         An rainfall areal reduction factor of 1.000
2298              KM
2299              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2300              KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2301              KM  .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2302              KM
2303              KM         L=   1.417 miles, S=  155 feet/mile, Kb= .09
2304              KM
2305              BA  0.441
2306              LG   0.30    0.19   11.20    0.02    0.00
2307              UC  0.508   0.368
2308              UA      0       3       5       8      12      20      43      75      90      96
2309              UA    100
                  *
```

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2310          KK   C709O
2311          KM        Storage routing at crossing structure no. (South of 95)
2312          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2313          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2314          KM        Detour, Jan 4, 1985
2315          RS       1    STOR       0
2316          SQ       0     120     240     360     480     600     720     840     903    1080
2317          SQ    1200
2318          SE    1496 1500.80 1505.20 1512.68 1523.15 1525.11 1525.18 1525.23 1525.26 1525.33
2319          SE   1525.4
2320          SV     0.0    1.59    4.55    8.36   13.04   20.12   29.31   42.75   51.34   63.40
2321          SV   78.92   97.91
2322          SE    1496    1500    1504    1508    1512    1516    1520    1524    1528    1532
2323          SE    1536    1540
              *

2324          KK   709710
2325          KM        Normal depth route from S709 to C710
2326          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2327          RS       3    FLOW      -1
2328          RC     .05    .035     .05    2683   .0261
2329          RX     100     160     200     220     255     265     280     305
2330          RY    1448    1444    1440    1436    1436    1440    1444    1448
              *

2331          KK    S710
2332          KM   Sub-Basin   S710
2333          KM
2334          KM      The Clark Unit Hydrograph is used for this basin.
2335          KM          The Natural time-area relation is used for this basin.
2336          KM
2337          KM      Time of Concentration for this sub-basin is based on the following:
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2338          KM          An rainfall areal reduction factor of 1.000
2339          KM
2340          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2341          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2342          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2343          KM
2344          KM          L=   0.633 miles, S=  198 feet/mile, Kb= .10
2345          KM
2346          BA   0.112
2347          LG    0.15    0.22   10.10    0.03    0.00
2348          UC   0.333   0.264
2349          UA       0       3       5       8      12      20      43      75      90      96
2350          UA     100
              *

2351          KK   C710I
2352          KM        Combine routed hydrograph 709710 w/runoff from S710
2353          HC       2
              *

2354          KK   C710O
2355          KM        Storage routing at crossing structure no. 58
2356          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2357          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2358          KM        Detour, Jan 4, 1985
2359          RS       1    STOR       0
2360          SQ       0     120     240     360     480     600     720     840     960    1058
2361          SQ    1200
2362          SE  1424.2 1428.52 1431.70 1436.37 1442.23 1442.33 1442.39 1442.45 1442.50 1442.54
2363          SE  1442.6
2364          SV     0.0    1.08    3.46    7.13   13.17   22.51
2365          SE    1424    1428    1432    1436    1440    1444
              *

2366          KK    S711
2367          KM   Sub-Basin   S711
2368          KM
2369          KM      The Clark Unit Hydrograph is used for this basin.
2370          KM          The Natural time-area relation is used for this basin.
2371          KM
2372          KM      Time of Concentration for this sub-basin is based on the following:
2373          KM          An rainfall areal reduction factor of 1.000
2374          KM
2375          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2376          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```

```
2377          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2378          KM
2379          KM          L=   0.520 miles, S=  154 feet/mile, Kb= .10
2380          KM
2381          BA   0.159
2382          LG    0.28    0.19   11.20    0.02    0.00
2383          UC   0.325   0.180
2384          UA       0       .3       5       8      12      20      43      75      90      96
2385          UA     100
              *
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2386          KK   C711O
2387          KM        Storage routing at crossing structure no. 71
2388          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2389          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2390          KM        Detour, Jan 4, 1985
2391          RS       1    STOR       0
2392          SQ       0      60     120     180     240     300     360     420     480     483
2393          SQ     600
2394          SE  1496.1 1499.98 1504.58 1512.31 1524.39 1525.07 1525.12 1525.15 1525.19 1525.19
2395          SE  1525.2
2396          SV     0.0     0.20    0.59    3.79    7.98   16.27   27.64   42.75   63.25
2397          SE  1496.1    1500    1504    1508    1512    1516    1520    1524    1528
              *

2398          KK  711712
2399          KM        Normal depth route from S711 to C712
2400          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2401          RS       1    FLOW      -1
2402          RC     .05    .035     .05    1586   .0441
2403          RX     100     135     190     215     250     285     335     395
2404          RY    1488    1484    1480    1476    1476    1480    1484    1488
              *

2405          KK    S712
2406          KM   Sub-Basin   S712
2407          KM
2408          KM      The Clark Unit Hydrograph is used for this basin.
2409          KM          The Natural time-area relation is used for this basin.
2410          KM
2411          KM      Time of Concentration for this sub-basin is based on the following:
2412          KM          An rainfall areal reduction factor of 1.000
2413          KM
2414          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2415          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2416          KM   .29 .29 .29 .29 .29 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2417          KM
2418          KM          L=   0.312 miles, S=  271 feet/mile, Kb= .08
2419          KM
2420          BA   0.068
2421          LG    0.17    0.22   10.10    0.03    0.00
2422          UC   0.188   0.105
2423          UA       0       3       5       8      12      20      43      75      90      96
2424          UA     100
              *

2425          KK   C712I
2426          KM        Combine routed hydrograph 711712 w/runoff from S712
2427          HC       2
              *
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2428          KK   C712O
2429          KM        Storage routing at crossing structure no. 60
2430          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2431          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2432          KM        Detour, Jan 4, 1985
2433          RS       1    STOR       0
2434          SQ       0      90     180     270     360     450     540     630     658     810
2435          SQ     900
2436          SE    1432 1435.56 1437.81 1440.49 1444.18 1449.19 1450.09 1450.14 1450.16 1450.24
2437          SE  1450.2
2438          SV     0.0     0.14    0.36    0.65    1.02    1.56    2.43    3.61    5.10
2439          SE    1432    1433    1434    1435    1436    1437    1438    1439    1440
```

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                *
2440            KK  712714
2441            KM        Normal depth route from C712 to C714
2442            KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2443            RS       3    FLOW      -1
2444            RC     .05    .035     .05    2032   .0172
2445            RX     100     325     355     370     415     435     450     515
2446            RY    1416    1412    1408    1404    1404    1408    1412    1408
                *

2447            KK    S713
2448            KM   Sub-Basin   S713
2449            KM
2450            KM      The Clark Unit Hydrograph is used for this basin.
2451            KM          The Natural time-area relation is used for this basin.
2452            KM
2453            KM      Time of Concentration for this sub-basin is based on the following:
2454            KM          An rainfall areal reduction factor of 1.000
2455            KM
2456            KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2457            KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2458            KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2459            KM
2460            KM          L=   0.545 miles, S=  220 feet/mile, Kb= .08
2461            KM
2462            BA   0.107
2463            LG    0.15    0.22   10.10    0.03    0.00
2464            UC   0.267   0.188
2465            UA       0       3       5       8      12      20      43      75      90      96
2466            UA     100
                *

2467            KK   C7130
2468            KM        Storage routing at crossing structure no. 59
2469            KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2470            KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2471            KM        Detour, Jan 4, 1985
2472            RS       1    STOR       0
2473            SQ       0      60     120     180     240     300     326     420     480     540
2474            SQ     600
2475            SE    1420 1423.17 1425.30 1428.15 1432.22 1437.97 1438.04 1438.12 1438.15 1438.18
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2476            SE  1438.2
2477            SV     0.0    2.35    5.72   10.11   15.52   26.19
2478            SE    1420    1424    1428    1432    1436    1440
                *

2479            KK  713714
2480            KM        Normal depth route from S713 to C714
2481            KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2482            RS       1    FLOW      -1
2483            RC     .05    .035     .05     831   .0421
2484            RX     100     260     270     280     305     315     335     490
2485            RY    1416    1416    1412    1408    1408    1412    1416    1420
                *

2486            KK    S714
2487            KM   Sub-Basin   S714
2488            KM
2489            KM      The Clark Unit Hydrograph is used for this basin.
2490            KM          The Natural time-area relation is used for this basin.
2491            KM
2492            KM      Time of Concentration for this sub-basin is based on the following:
2493            KM          An rainfall areal reduction factor of 1.000
2494            KM
2495            KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2496            KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2497            KM   .28 .28 .28 .28 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2498            KM
2499            KM          L=   0.428 miles, S=  129 feet/mile, Kb= .08
2500            KM
2501            BA   0.060
2502            LG    0.35    0.29    8.40    0.06    0.00
2503            UC   0.283   0.230
2504            UA       0       3       5       8      12      20      43      75      90      96
2505            UA     100
                *
```

```
2506          KK    C714
2507          KM        Combine routed hydrographs 712714 and 713714 w/runoff from S714
2508          HC       3
              *

2509          KK    S715
2510          KM   Sub-Basin   S715
2511          KM
2512          KM      The Clark Unit Hydrograph is used for this basin.
2513          KM          The Natural time-area relation is used for this basin.
2514          KM
2515          KM      Time of Concentration for this sub-basin is based on the following:
2516          KM          An rainfall areal reduction factor of 1.000
2517          KM
2518          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2519          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2520          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2521          KM
2522          KM          L=   0.959 miles, S=   63 feet/mile, Kb= .07
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2523          KM
2524          BA   0.220
2525          LG    0.31    0.19   11.20    0.02    0.00
2526          UC   0.483   0.378
2527          UA       0       3       5       8      12      20      43      75      90      96
2528          UA     100
              *

2529          KK    S716
2530          KM   Sub-Basin   S716
2531          KM
2532          KM      The Clark Unit Hydrograph is used for this basin.
2533          KM          The Natural time-area relation is used for this basin.
2534          KM
2535          KM      Time of Concentration for this sub-basin is based on the following:
2536          KM          An rainfall areal reduction factor of 1.000
2537          KM
2538          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2539          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2540          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2541          KM
2542          KM          L=   2.353 miles, S=   87 feet/mile, Kb= .06
2543          KM
2544          BA   1.128
2545          LG    0.27    0.22   10.10    0.03    1.00
2546          UC   0.708   0.467
2547          UA       0       3       5       8      12      20      43      75      90      96
2548          UA     100
              *

2549          KK   C7160
2550          KM        Storage routing at crossing structure no. 74
2551          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2552          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2553          KM        Detour, Jan 4, 1985
2554          RS       1    STOR       0
2555          SQ       0     230     460     690     920    1150    1380    1610    1625    2070
2556          SQ    2300
2557          SE  1504.9 1509.94 1516.13 1526.53 1544.42 1592.19 1729.99 2074.29 2108.01 4241.67
2558          SE  6746.9
2559          SV       0    0.40    5.42   17.50   37.71   68.23  111.87
2560          SE  1504.9    1508    1512    1516    1520    1524    1528
              *

2561          KK  716717
2562          KM        Normal depth route from C7160 to C717
2563          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2564          RS       4    FLOW      -1
2565          RC     .05    .035     .05    4232   .0177
2566          RX     100     115     150     165     195     285     370     425
2567          RY    1504    1500    1496    1492    1492    1496    1500    1504
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
2568          KK    S717
2569          KM   Sub-Basin    S717
2570          KM
2571          KM      The Clark Unit Hydrograph is used for this basin.
2572          KM          The Natural time-area relation is used for this basin.
2573          KM
2574          KM      Time of Concentration for this sub-basin is based on the following:
2575          KM          An rainfall areal reduction factor of 1.000
2576          KM
2577          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2578          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2579          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2580          KM
2581          KM          L=    0.727 miles, S=  131 feet/mile, Kb= .07
2582          KM
2583          BA   0.286
2584          LG    0.25     0.19    11.20     0.02     0.00
2585          UC   0.333    0.173
2586          UA       0        3        5        8       12       20       43       75       90       96
2587          UA     100
              *

2588          KK    C717
2589          KM        Combine routed hydrograph 716717 w/runoff from S717
2590          HC       2
              *

2591          KK  717718
2592          KM        Normal depth route from C717 to C718
2593          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2594          RS      11    FLOW      -1
2595          RC     .05     .045     .05     7146    .0105
2596          RX     100      235     275      325      420      455      465      530
2597          RY    1364     1360    1356     1352     1352     1356     1360     1380
2598          RL                     0.03   1352.0
              *

2599          KK    S718
2600          KM   Sub-Basin    S718
2601          KM
2602          KM      The Clark Unit Hydrograph is used for this basin.
2603          KM          The Natural time-area relation is used for this basin.
2604          KM
2605          KM      Time of Concentration for this sub-basin is based on the following:
2606          KM          An rainfall areal reduction factor of 1.000
2607          KM
2608          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2609          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2610          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2611          KM
2612          KM          L=    2.103 miles, S=   45 feet/mile, Kb= .07
2613          KM
2614          BA   0.442
2615          LG    0.22     0.18    11.20     0.02     2.00
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2616          UC   0.971    1.034
2617          UA       0        3        5        8       12       20       43       75       90       96
2618          UA     100
              *

2619          KK    C718
2620          KM        Combine routed hydrograph 717718 w/runoff from S718
2621          HC       2
              *

2622          KK    S719
2623          KM   Sub-Basin    S719
2624          KM
2625          KM      The Clark Unit Hydrograph is used for this basin.
2626          KM          The Natural time-area relation is used for this basin.
2627          KM
2628          KM      Time of Concentration for this sub-basin is based on the following:
2629          KM          An rainfall areal reduction factor of 1.000
2630          KM
2631          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2632          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2633          KM   .30 .30 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
2634          KM
```

```
2635          KM          L=   1.221 miles, S=   82 feet/mile, Kb= .08
2636          KM
2637          BA   0.154
2638          LG    0.23    0.11   12.40    0.01    4.00
2639          UC   0.554   0.655
2640          UA       0       3       5       8      12      20      43      75      90      96
2641          UA     100
              *

2642          KK  EAST-1
2643          KM        Dummy combine of minor subbasins east of the Agua Fria River
2644          HC       6
              *

2645          KK    S720
2646          KM   Sub-Basin   S720
2647          KM
2648          KM      The Clark Unit Hydrograph is used for this basin.
2649          KM          The Natural time-area relation is used for this basin.
2650          KM
2651          KM      Time of Concentration for this sub-basin is based on the following:
2652          KM          An rainfall areal reduction factor of 1.000
2653          KM
2654          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2655          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2656          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2657          KM
2658          KM          L=   1.516 miles, S=   86 feet/mile, Kb= .07
2659          KM
2660          BA   0.370
2661          LG    0.27    0.19   11.20    0.02    1.00
2662          UC   0.579   0.496
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2663          UA       0       3       5       8      12      20      43      75      90      96
2664          UA     100
              *

2665          KK    S721
2666          KM   Sub-Basin   S721
2667          KM
2668          KM      The Clark Unit Hydrograph is used for this basin.
2669          KM          The Natural time-area relation is used for this basin.
2670          KM
2671          KM      Time of Concentration for this sub-basin is based on the following:
2672          KM          An rainfall areal reduction factor of 1.000
2673          KM
2674          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2675          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2676          KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .00 .00 .00 .00 .00
2677          KM
2678          KM          L=   0.832 miles, S=  114 feet/mile, Kb= .07
2679          KM
2680          BA   0.335
2681          LG    0.30    0.33    7.30    0.09    0.00
2682          UC   0.383   0.205
2683          UA       0       3       5       8      12      20      43      75      90      96
2684          UA     100
              *

2685          KK   C7210
2686          KM        Storage routing at crossing structure no. 75
2687          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2688          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2689          KM        Detour, Jan 4, 1985
2690          RS       1    STOR       0
2691          SQ       0     120     240     360     480     600     720     840     866    1080
2692          SQ    1200
2693          SE    1490 1494.74 1499.14 1506.62 1517.09 1534.17 1572.06 1662.33 1693.69 2254.60
2694          SE  2968.5
2695          SV       0    1.83    7.58   17.18   30.63   47.92   69.05   94.03  122.85  155.51
2696          SV  192.02
2697          SE    1490    1493    1496    1499    1502    1505    1508    1511    1514    1517
2698          SE    1520
              *

2699          KK  721722
2700          KM        Normal depth route from C7210 to C722
2701          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
```

```
2702          RS       9    FLOW      -1
2703          RC     .05     .035     .05    8812    .0170
2704          RX     100      125     175     200     235     250     270     595
2705          RY    1420     1416    1412    1408    1408    1412    1420    1424
2706          RL                     0.03  1408.0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2707          KK    S722
2708          KM   Sub-Basin   S722
2709          KM
2710          KM      The Clark Unit Hydrograph is used for this basin.
2711          KM          The Natural time-area relation is used for this basin.
2712          KM
2713          KM      Time of Concentration for this sub-basin is based on the following:
2714          KM          An rainfall areal reduction factor of 1.000
2715          KM
2716          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2717          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2718          KM   .29 .28 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2719          KM
2720          KM          L=   2.334 miles, S=   79 feet/mile, Kb= .06
2721          KM
2722          BA   0.955
2723          LG    0.30    0.25    9.70    0.04    0.00
2724          UC   0.742   0.537
2725          UA       0       3       5       8      12      20      43      75      90      96
2726          UA     100
              *

2727          KK    C722
2728          KM        Combine routed hydrograph 721722 w/runoff from S722
2729          HC       2
              *

2730          KK    S723
2731          KM   Sub-Basin   S723
2732          KM
2733          KM      The Clark Unit Hydrograph is used for this basin.
2734          KM          The Natural time-area relation is used for this basin.
2735          KM
2736          KM      Time of Concentration for this sub-basin is based on the following:
2737          KM          An rainfall areal reduction factor of 1.000
2738          KM
2739          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2740          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2741          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2742          KM
2743          KM          L=   0.562 miles, S=  178 feet/mile, Kb= .11
2744          KM
2745          BA   0.085
2746          LG    0.29    0.22   10.10    0.03    0.00
2747          UC   0.342   0.289
2748          UA       0       3       5       8      12      20      43      75      90      96
2749          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2750          KK    S724
2751          KM   Sub-Basin   S724
2752          KM
2753          KM      The Clark Unit Hydrograph is used for this basin.
2754          KM          The Natural time-area relation is used for this basin.
2755          KM
2756          KM      Time of Concentration for this sub-basin is based on the following:
2757          KM          An rainfall areal reduction factor of 1.000
2758          KM
2759          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2760          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2761          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2762          KM
2763          KM          L=   2.319 miles, S=   97 feet/mile, Kb= .06
2764          KM
2765          BA   1.156
2766          LG    0.27    0.19   11.20    0.02    0.00
```

```
2767          UC   0.663   0.423
2768          UA       0       3       5       8      12      20      43      75      90      96
2769          UA     100
              *

2770          KK    S725
2771          KM   Sub-Basin   S725
2772          KM
2773          KM      The Clark Unit Hydrograph is used for this basin.
2774          KM          The Natural time-area relation is used for this basin.
2775          KM
2776          KM      Time of Concentration for this sub-basin is based on the following:
2777          KM          An rainfall areal reduction factor of 1.000
2778          KM
2779          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2780          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2781          KM   .28 .28 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2782          KM
2783          KM          L=   3.038 miles, S=   71 feet/mile, Kb= .06
2784          KM
2785          BA   1.158
2786          LG    0.30    0.27    8.80    0.05    0.00
2787          UC   0.950   0.782
2788          UA       0       3       5       8      12      20      43      75      90      96
2789          UA     100
              *

2790          KK  EAST-2
2791          KM        Dummy combine of minor subbasins east of the Agua Fria River
2792          HC       5
              *
```

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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2793          KK    S726
2794          KM   Sub-Basin   S726
2795          KM
2796          KM      The Clark Unit Hydrograph is used for this basin.
2797          KM          The Natural time-area relation is used for this basin.
2798          KM
2799          KM      Time of Concentration for this sub-basin is based on the following:
2800          KM          An rainfall areal reduction factor of 1.000
2801          KM
2802          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2803          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2804          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
2805          KM
2806          KM          L=   1.036 miles, S=  295 feet/mile, Kb= .07
2807          KM
2808          BA   0.334
2809          LG    0.31    0.39    5.70    0.18    7.00
2810          UC   0.329   0.207
2811          UA       0       3       5       8      12      20      43      75      90      96
2812          UA     100
              *

2813          KK  726727
2814          KM        Normal depth route from C726 to C727
2815          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2816          RS       5    FLOW      -1
2817          RC     .05    .035     .05    6228   .0185
2818          RX     100     120     145     170     225     240     250     265
2819          RY    1308    1304    1300    1296    1296    1300    1304    1308
              *

2820          KK    S727
2821          KM   Sub-Basin   S727
2822          KM
2823          KM      The Clark Unit Hydrograph is used for this basin.
2824          KM          The Natural time-area relation is used for this basin.
2825          KM
2826          KM      Time of Concentration for this sub-basin is based on the following:
2827          KM          An rainfall areal reduction factor of 1.000
2828          KM
2829          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2830          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2831          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2832          KM
2833          KM          L=   1.815 miles, S=   85 feet/mile, Kb= .07
```

```
2834          KM
2835          BA   0.375
2836          LG    0.27    0.25    9.70    0.04    0.00
2837          UC   0.671   0.669
2838          UA       0       3       5       8      12      20      43      75      90      96      .
2839          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2840          KK    C727
2841          KM        Combine routed hydrograph 726727 w/runoff from S727
2842          HC       2
              *

2843          KK   TOTAL
2844          KM        Dummy combine of all operations
2845          HC       4
              *
2846          ZZ
```

1

```
            SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   39        S100
                V
                V
   59      100102
                .
                .
   66           .        S101
                .           .
                .           .
   86       C102R............
                .
                .
   89           .        S102
                .           V
                .           V
  109           .      101102
                .           .
                .           .
  116           .           .        S103
                .           .           .
                .           .           .
  136           .       C102L............
                .           .
                .           .
  139        C102............
                V
                V
  142      102103
                .
                .
  149           .        S104
                .           .
                .           .
  169       C103R............
                .
                .
  172           .        S105
                .           .
                .           .
  192        C103............
                V
                V
  195      103104
                .
                .
  202           .        S106
                .           .
                .           .
  222        C104............
                V
                V
  225      104105
```

```
                .
                .
232             .        S107
                .          .
                .          .
252       C105L.............
                .
                .
255             .        S200
                .          V
                .          V
275             .      200201
                .          .
                .          .
282             .          .        S201
                .          .          .
                .          .          .
302             .        C201.............
                .          V
                .          V
305             .      201203
                .          .
                .          .
312             .          .        S202
                .          .          V
                .          .          V
332             .          .      202203
                .          .          .
                .          .          .
339             .          .          .        S203
                .          .          .          .
                .          .          .          .
359             .       C203R........................
                .          .
                .          .
362             .          .        S204
                .          .          .
                .          .          .
382             .        C203.............
                .          V
                .          V
385             .      203204
                .          .
                .          .
392             .          .        S205
                .          .          .
                .          .          .
412             .        C204.............
                .          V
                .          V
415             .      204205
                .          .
                .          .
422             .          .        S206
                .          .          .
                .          .          .
442             .       C205L............
                .          .
                .          .
445             .          .        S207
                .          .          .
                .          .          .
465             .        C205.............
                .          V
                .          V
468             .      205206
                .          .
                .          .
475             .          .        S208
                .          .          .
                .          .          .
495             .        C206.............
                .          V
                .          V
498             .      206207
                .          .
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505             .          .        S209
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525             .       C207R............
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528             .           .        S210
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                .           .           .
548             .       C207............
                .          V
                .          V
551             .     207105
                .           .
                .           .
558             .           .        S211
                .           .           .
                .           .           .
578             .      C105R............
                .           .
                .           .
581         C105............
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584             .       S300
                .           .
                .           .
604             .           .        S301
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                .           .           .
624             .       C300............
                .          V
                .          V
627             .     300301
                .           .
                .           .
634             .           .        S302
                .           .           .
                .           .           .
654             .       C301............
                .          V
                .          V
657             .     301302
                .           .
                .           .
664             .           .        S303
                .           .           .
                .           .           .
684             .       C302............
                .          V
                .          V
687             .     302303
                .           .
                .           .
694             .           .        S304
                .           .           .
                .           .           .
714             .       C303............
                .           .
                .           .
717       WEST-1............
                .
                .
720             .       S400
                .          V
                .          V
740             .      C4000
                .          V
                .          V
748             .     400401
                .           .
                .           .
755             .           .        S401
                .           .           .
                .           .           .
775             .       C401............
                .          V
                .          V
778             .     401402
                .           .
                .           .
785             .           .        S402
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805             .       C402............
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                 .          V
                 .          V
808              .     402403
                 .          .
                 .          .
816              .          .        S403
                 .          .           .
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836              .       C403............
                 .          V
                 .          V
839              .     403404
                 .          .
                 .          .
847              .          .        S404
                 .          .           .
                 .          .           .
867              .       C404............
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                 .          .
870         WEST-2............
                 .
                 .
873              .       S500
                 .          V
                 .          V
893              .     500501
                 .          .
                 .          .
900              .          .        S501
                 .          .           .
                 .          .           .
920              .       C501............
                 .          V
                 .          V
923              .     501502
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                 .          .
931              .          .        S502
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                 .          .           .
951              .      C502L............
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                 .          .
954              .          .        S503
                 .          .           .
                 .          .           .
974              .      C502I............
                 .          V
                 .          V
977              .      C502O
                 .          V
                 .          V
985              .     502505
                 .          .
                 .          .
993              .          .        S504
                 .          .           .
                 .          .           .
1013             .      C505L............
                 .          .
                 .          .
1016             .          .        S505
                 .          .           V
                 .          .           V
1036             .          .      C503O
                 .          .           V
                 .          .           V
1044             .          .     503505
                 .          .           .
                 .          .           .
1052             .          .           .       S506
                 .          .           .          V
                 .          .           .          V
1072             .          .           .      C504O
                 .          .           .          V
                 .          .           .          V
1080             .          .           .     504505
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1087             .          .           .          .       S507
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1107            .          .      C505R.......................
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1110            .      C505............
                .          V
                .          V
1113            .    505509
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                .          .
1121            .          .       S508
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1141            .     C509L............
                .          .
                .          .
1144            .          .       S509
                .          .          V
                .          .          V
1164            .          .      C506O
                .          .          V
                .          .          V
1172            .          .    506508
                .          .          .
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1179            .          .          .       S510
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1199            .          .      C508R............
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1202            .          .          .       S511
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                .          .          .          V
1222            .          .          .      C507O
                .          .          .          V
                .          .          .          V
1230            .          .          .    507508
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1238            .          .          .          .       S512
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1258            .          .          .      C508L............
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1261            .          .       C508............
                .          .          V
                .          .          V
1264            .          .    508509
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1272            .          .          .       S513
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1292            .          .      C509R............
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1295            .      C509............
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                .          V
1298            .    509510
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1306            .          .       S514
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                .          .          .
1326            .      C510............
                .          V
                .          V
1329            .    510511
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1337            .          .       S515
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1357            .      C511............
                .          V
                .          V
1360            .    511512
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1368            .           .        S516
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1388            .        C512...........
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1391      WEST-3...........
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                .
1394            .        S600
                .           V
                .           V
1414            .      600601
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                .           .
1421            .           .        S601
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                .           .           .
1441            .        C601...........
                .           V
                .           V
1444            .      601602
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                .           .
1451            .           .        S603
                .           .           .
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1471            .       C602L...........
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1474            .           .        S602
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1494            .        C602...........
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                .           V
1497            .      602603
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1505            .           .        S606
                .           .           .
                .           .           .
1525            .       C603L...........
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                .           .
1528            .           .        S605
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1548            .           .           .        S604
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1568            .        C603........................
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                .           V
1571            .      603604
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1579            .           .        S609
                .           .           .
                .           .           .
1599            .       C604R...........
                .           .
                .           .
1602            .           .        S607
                .           .           .
                .           .           .
1622            .        C604...........
                .           V
                .           V
1625            .      604605
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                .           .
1632            .           .        S608
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1652            .        C605...........
                .           V
                .           V
1655            .      605606
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1663            .           .        S610
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1683            .      C606L............
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1686            .           .        S612
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1706            .       C606............
                .          V
                .          V
1709            .     606608
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1717            .           .        S611
                .           .           V
                .           .           V
1737            .           .      607608
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1744            .           .           .        S613
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1764            .       C608........................
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                .          V
1767            .     608609
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1775            .           .        S614
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1795            .       C609............
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1798            .     609611
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1806            .           .        S617
                .           .           .
                .           .           .
1826            .      C611R............
                .           .
                .           .
1829            .           .        S615
                .           .           V
                .           .           V
1849            .           .      610611
                .           .           .
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1856            .           .           .        S616
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1876            .           .      C611L............
                .           .           .
                .           .           .
1879            .       C611............
                .          V
                .          V
1882            .     611613
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1890            .           .        S618
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1910            .      C613R............
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                .           .
1913            .           .        S619
                .           .           V
                .           .           V
1933            .           .      612613
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1940            .           .           .        S620
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1960            .           .      C613L............
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1963            .       C613............
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1966            .     613614
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1974            .           .       S621
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                .           .           .
1994            .       C614............
                .          V
                .          V
1997            .     614615
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                .           .
2005            .           .       S622
                .           .           .
                .           .           .
2025            .       C615............
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                .           .
2028      WEST-4............
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2031            .       S700
                .           .
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2051            .           .       S701
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2071            .           .           .       S702
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2091            .           .           .           .       S703
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2111            .           .           .           .           .       S704
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                .           .           .           .           .          V
2131            .           .           .           .           .     704705
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2138            .           .           .           .           .           .       S705
                .           .           .           .           .           .           .
                .           .           .           .           .           .           .
2158            .           .           .           .           .       C705............
                .           .           .           .           .          V
                .           .           .           .           .          V
2161            .           .           .           .           .      C705O
                .           .           .           .           .          V
                .           .           .           .           .          V
2174            .           .           .           .           .     705OAF
                .           .           .           .           .           .
                .           .           .           .           .           .
2181            .           .           .           .           .           .     S705AF
                .           .           .           .           .           .           .
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2201            .           .           .           .           .     C705AF............
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2204            .     WEST-5.............................................
                .           .
                .           .
2207            .           .       S706
                .           .           .
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2227            .           .           .       S707
                .           .           .           .
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2247            .           .           .           .       S728
                .           .           .           .           .
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2267      WEST.............................................
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2270            .       S708
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2290            .           .       S709
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                 .          .          V
                 .          .          V
2310             .          .     C709O
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                 .          .          V
2324             .          .    709710
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2331             .          .          .        S710
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2351             .          .     C710I............
                 .          .          V
                 .          .          V
2354             .          .     C710O
                 .          .          .
                 .          .          .
2366             .          .          .        S711
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                 .          .          .          V
2386             .          .          .       C711O
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                 .          .          .          V
2398             .          .          .      711712
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2405             .          .          .          .        S712
                 .          .          .          .          .
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2425             .          .          .       C712I............
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                 .          .          .          V
2428             .          .          .       C712O
                 .          .          .          V
                 .          .          .          V
2440             .          .          .      712714
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                 .          .          .          .
2447             .          .          .          .        S713
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                 .          .          .          .          V
2467             .          .          .          .       C713O
                 .          .          .          .          V
                 .          .          .          .          V
2479             .          .          .          .      713714
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                 .          .          .          .          .
2486             .          .          .          .          .        S714
                 .          .          .          .          .          .
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2506             .          .          .        C714........................
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2509             .          .          .          .        S715
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2529             .          .          .          .          .        S716
                 .          .          .          .          .          V
                 .          .          .          .          .          V
2549             .          .          .          .          .       C716O
                 .          .          .          .          .          V
                 .          .          .          .          .          V
2561             .          .          .          .          .      716717
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                 .          .          .          .          .          .
2568             .          .          .          .          .          .        S717
                 .          .          .          .          .          .          .
                 .          .          .          .          .          .          .
2588             .          .          .          .          .        C717............
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                 .          .          .          .          .          V
2591             .          .          .          .          .      717718
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2599             .          .          .          .          .          .        S718
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2619             .          .          .          .          .        C718............
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2622             .          .          .          .          .          .        S719
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 2642           .      EAST-1.......................................................
                .         .
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 2645           .         .      S720
                .         .         .
                .         .         .
 2665           .         .         .      S721
                .         .         .         V
                .         .         .         V
 2685           .         .         .     C7210
                .         .         .         V
                .         .         .         V
 2699           .         .         .    721722
                .         .         .         .
                .         .         .         .
 2707           .         .         .         .      S722
                .         .         .         .         .
                .         .         .         .         .
 2727           .         .         .      C722............
                .         .         .         .
                .         .         .         .
 2730           .         .         .         .      S723
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                .         .         .         .         .
 2750           .         .         .         .         .      S724
                .         .         .         .         .         .
                .         .         .         .         .         .
 2770           .         .         .         .         .         .      S725
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                .         .         .         .         .         .         .
 2790           .         .     EAST-2...............................................
                .         .         .
                .         .         .
 2793           .         .         .      S726
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                .         .         .         V
 2813           .         .         .    726727
                .         .         .         .
                .         .         .         .
 2820           .         .         .         .      S727
                .         .         .         .         .
                .         .         .         .         .
 2840           .         .         .      C727............
                .         .         .         .
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 2843        TOTAL.................................
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   09AUG01  TIME  14:56:42  *
*                                      *
****************************************
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```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
****************************************
```

N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File:EX100-24.IH1
Original:05-04-00 MCG
Revised:02-01-01 MMZ

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 100-year, 24-hour storm event. A companion model is also created for the existing condition 100-year, 6-hour storm event. Both models (100-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 100-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

```
21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME        0918  ENDING TIME
                     ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL    0.03 HOURS
                      TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM        4.20  PRECIPITATION DEPTH
                      TRDA        0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.03      0.03      0.03      0.03      0.03
                 0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 4.18 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 4.07 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4
STRM 3.95 PRECIPITATION DEPTH
TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 3.80 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 3.59 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	512.	12.43	100.	30.	21.	0.57		
+	ROUTED TO	100102	488.	12.70	100.	30.	21.	0.57		
+	HYDROGRAPH AT	S101	717.	12.30	101.	28.	21.	0.63		
+	2 COMBINED AT	C102R	967.	12.37	200.	58.	42.	1.20		
+	HYDROGRAPH AT	S102	360.	12.53	81.	25.	18.	0.45		
+	ROUTED TO	101102	345.	12.73	81.	25.	18.	0.45		
+	HYDROGRAPH AT	S103	307.	12.57	66.	19.	14.	0.40		
+	2 COMBINED AT	C102L	627.	12.67	147.	43.	31.	0.84		
+	2 COMBINED AT	C102	1464.	12.57	343.	100.	72.	2.05		
+	ROUTED TO	102103	1435.	12.80	343.	100.	72.	2.05		
+	HYDROGRAPH AT	S104	870.	12.47	145.	40.	29.	0.90		
+	2 COMBINED AT	C103R	2058.	12.63	481.	138.	100.	2.95		
+	HYDROGRAPH AT	S105	387.	12.67	96.	27.	19.	0.59		
+	2 COMBINED AT	C103	2424.	12.63	572.	163.	118.	3.54		
+	ROUTED TO	103104	2394.	12.83	571.	163.	118.	3.54		
+	HYDROGRAPH AT	S106	470.	12.47	83.	22.	16.	0.57		
+	2 COMBINED AT	C104	2682.	12.77	649.	184.	133.	4.11		
+	ROUTED TO	104105	2643.	13.00	649.	184.	133.	4.11		
+	HYDROGRAPH AT	S107	618.	12.57	123.	31.	22.	0.94		

+	2 COMBINED AT	C105L	3031.	12.93	763.	212.	154.	5.05
+	HYDROGRAPH AT	S200	1067.	12.37	179.	56.	40.	0.96
+	ROUTED TO	200201	1048.	12.40	179.	56.	40.	0.96
+	HYDROGRAPH AT	S201	387.	12.30	65.	20.	15.	0.35
+	2 COMBINED AT	C201	1396.	12.37	243.	75.	55.	1.31
+	ROUTED TO	201203	1373.	12.47	243.	75.	55.	1.31
+	HYDROGRAPH AT	S202	159.	12.20	24.	7.	5.	0.13
+	ROUTED TO	202203	156.	12.27	24.	7.	5.	0.13
+	HYDROGRAPH AT	S203	280.	12.50	69.	22.	16.	0.37
+	3 COMBINED AT	C203R	1746.	12.47	333.	104.	75.	1.81
+	HYDROGRAPH AT	S204	880.	12.47	171.	53.	38.	0.95
+	2 COMBINED AT	C203	2589.	12.47	497.	154.	112.	2.76
+	ROUTED TO	203204	2574.	12.47	497.	154.	112.	2.76
+	HYDROGRAPH AT	S205	369.	12.40	68.	20.	14.	0.41
+	2 COMBINED AT	C204	2913.	12.47	562.	173.	125.	3.17
+	ROUTED TO	204205	2844.	12.57	562.	173.	125.	3.17
+	HYDROGRAPH AT	S206	581.	12.67	151.	45.	33.	0.85
+	2 COMBINED AT	C205L	3378.	12.60	705.	216.	156.	4.03
+	HYDROGRAPH AT	S207	674.	12.67	178.	55.	40.	0.96
+	2 COMBINED AT	C205	3995.	12.60	874.	268.	194.	4.98
+	ROUTED TO	205206	3802.	12.93	873.	268.	194.	4.98
+	HYDROGRAPH AT	S208	804.	12.70	195.	57.	42.	1.10
+	2 COMBINED AT	C206	4421.	12.93	1050.	320.	232.	6.09
+	ROUTED TO	206207	4372.	13.00	1050.	320.	232.	6.09
+	HYDROGRAPH AT	S209	624.	12.43	103.	29.	21.	0.65
+	2 COMBINED AT	C207R	4573.	13.00	1140.	345.	250.	6.74
+	HYDROGRAPH AT	S210	496.	12.33	65.	17.	12.	0.48

+	2 COMBINED AT	C207	4651.	13.00	1197.	359.	261.	7.22
+	ROUTED TO	207105	4562.	13.07	1197.	359.	261.	7.22
+	HYDROGRAPH AT	S211	428.	12.43	69.	18.	13.	0.49
+	2 COMBINED AT	C105R	4684.	13.07	1256.	375.	272.	7.70
+	2 COMBINED AT	C105	7297.	13.07	1942.	565.	410.	12.75
+	HYDROGRAPH AT	S300	499.	12.50	106.	31.	23.	0.62
+	HYDROGRAPH AT	S301	959.	12.43	185.	58.	42.	0.99
+	2 COMBINED AT	C300	1433.	12.47	288.	88.	64.	1.61
+	ROUTED TO	300301	1401.	12.57	288.	88.	64.	1.61
+	HYDROGRAPH AT	S302	481.	12.40	79.	23.	17.	0.47
+	2 COMBINED AT	C301	1787.	12.53	364.	111.	80.	2.07
+	ROUTED TO	301302	1708.	12.83	364.	111.	80.	2.07
+	HYDROGRAPH AT	S303	651.	12.43	102.	28.	20.	0.71
+	2 COMBINED AT	C302	2042.	12.77	461.	137.	99.	2.78
+	ROUTED TO	302303	2017.	12.90	461.	137.	99.	2.78
+	HYDROGRAPH AT	S304	596.	12.53	114.	29.	21.	0.82
+	2 COMBINED AT	C303	2414.	12.83	568.	165.	119.	3.60
+	2 COMBINED AT	WEST-1	9221.	13.03	2440.	710.	515.	16.36
+	HYDROGRAPH AT	S400	967.	12.53	177.	49.	35.	1.05
+	ROUTED TO	C400O	453.	13.10	177.	49.	35.	1.05
+	ROUTED TO	400401	452.	13.40	177.	49.	35.	1.05
+	HYDROGRAPH AT	S401	549.	12.53	94.	25.	18.	0.65
+	2 COMBINED AT	C401	808.	12.60	268.	73.	53.	1.69
+	ROUTED TO	401402	789.	12.97	268.	73.	53.	1.69
+	HYDROGRAPH AT	S402	705.	12.43	107.	27.	20.	0.74
+	2 COMBINED AT	C402	1115.	12.83	369.	99.	72.	2.43
+	ROUTED TO	402403	1077.	13.17	369.	99.	71.	2.43

+	HYDROGRAPH AT	S403	444.	12.63	101.	25.	18.	0.56
+	2 COMBINED AT	C403	1362.	13.13	465.	123.	89.	2.99
+	ROUTED TO	403404	1351.	13.23	464.	123.	89.	2.99
+	HYDROGRAPH AT	S404	383.	12.17	41.	10.	7.	0.26
+	2 COMBINED AT	C404	1352.	13.23	503.	133.	96.	3.26
+	2 COMBINED AT	WEST-2	10222.	13.03	2868.	823.	596.	19.61
+	HYDROGRAPH AT	S500	731.	12.70	196.	61.	44.	1.05
+	ROUTED TO	500501	718.	12.83	195.	61.	44.	1.05
+	HYDROGRAPH AT	S501	582.	12.40	102.	30.	22.	0.61
+	2 COMBINED AT	C501	1041.	12.73	294.	90.	65.	1.67
+	ROUTED TO	501502	1028.	12.80	291.	87.	63.	1.67
+	HYDROGRAPH AT	S502	449.	12.30	61.	17.	12.	0.40
+	2 COMBINED AT	C502L	1174.	12.67	349.	103.	74.	2.07
+	HYDROGRAPH AT	S503	1009.	12.43	167.	47.	34.	0.99
+	2 COMBINED AT	C502I	2088.	12.47	508.	148.	107.	3.07
+	ROUTED TO	C502O	1829.	12.70	508.	148.	107.	3.07
+	ROUTED TO	502505	1800.	12.93	497.	138.	100.	3.07
+	HYDROGRAPH AT	S504	154.	12.70	39.	10.	7.	0.33
+	2 COMBINED AT	C505L	1927.	12.90	533.	147.	106.	3.39
+	HYDROGRAPH AT	S505	202.	12.10	21.	6.	4.	0.14
+	ROUTED TO	C503O	89.	12.33	21.	6.	4.	0.14
+	ROUTED TO	503505	87.	12.83	21.	5.	4.	0.14
+	HYDROGRAPH AT	S506	190.	12.20	24.	6.	5.	0.15
+	ROUTED TO	C504O	84.	12.53	24.	6.	5.	0.15
+	ROUTED TO	504505	83.	12.97	24.	6.	5.	0.15
+	HYDROGRAPH AT	S507	590.	12.50	94.	24.	17.	0.67
+	3 COMBINED AT	C505R	712.	12.50	138.	35.	25.	0.96

+	2 COMBINED AT	C505	2420.	12.77	662.	180.	130.	4.35
+	ROUTED TO	505509	2368.	13.10	641.	164.	118.	4.35
+	HYDROGRAPH AT	S508	279.	12.37	39.	10.	7.	0.29
+	2 COMBINED AT	C509L	2425.	13.07	677.	173.	125.	4.65
+	HYDROGRAPH AT	S509	235.	12.17	29.	9.	6.	0.17
+	ROUTED TO	C506O	87.	12.47	29.	9.	6.	0.17
+	ROUTED TO	506508	87.	12.67	29.	9.	6.	0.17
+	HYDROGRAPH AT	S510	133.	12.33	22.	6.	4.	0.13
+	2 COMBINED AT	C508R	214.	12.33	51.	14.	10.	0.30
+	HYDROGRAPH AT	S511	484.	12.23	67.	19.	14.	0.38
+	ROUTED TO	C507O	95.	12.90	67.	19.	14.	0.38
+	ROUTED TO	507508	95.	13.20	66.	19.	14.	0.38
+	HYDROGRAPH AT	S512	211.	12.43	38.	10.	7.	0.21
+	2 COMBINED AT	C508L	286.	12.43	104.	29.	21.	0.60
+	2 COMBINED AT	C508	493.	12.40	155.	43.	31.	0.90
+	ROUTED TO	508509	463.	12.93	151.	42.	30.	0.90
+	HYDROGRAPH AT	S513	376.	12.90	107.	27.	20.	0.78
+	2 COMBINED AT	C509R	830.	12.90	254.	68.	49.	1.67
+	2 COMBINED AT	C509	3160.	13.03	909.	236.	170.	6.32
+	ROUTED TO	509510	3145.	13.13	907.	235.	169.	6.32
+	HYDROGRAPH AT	S514	462.	12.67	113.	28.	20.	0.65
+	2 COMBINED AT	C510	3455.	13.10	1007.	260.	187.	6.97
+	ROUTED TO	510511	3379.	13.47	1003.	260.	187.	6.97
+	HYDROGRAPH AT	S515	1040.	12.63	215.	54.	39.	1.10
+	2 COMBINED AT	C511	3737.	13.43	1187.	307.	221.	8.07
+	ROUTED TO	511512	3662.	13.77	1180.	306.	221.	8.07
+	HYDROGRAPH AT	S516	303.	12.70	70.	17.	13.	0.54

+	2 COMBINED AT C512	3744.	13.73	1232.	321.	231.	8.61
+	2 COMBINED AT WEST-3	11731.	13.10	3927.	1096.	796.	28.22
+	HYDROGRAPH AT S600	1804.	12.47	313.	92.	67.	2.02
+	ROUTED TO 600601	1778.	12.53	313.	92.	67.	2.02
+	HYDROGRAPH AT S601	1116.	12.33	195.	62.	45.	0.90
+	2 COMBINED AT C601	2687.	12.43	501.	152.	110.	2.92
+	ROUTED TO 601602	2651.	12.53	501.	152.	110.	2.92
+	HYDROGRAPH AT S603	972.	12.20	141.	44.	32.	0.67
+	2 COMBINED AT C602L	3097.	12.47	636.	195.	140.	3.58
+	HYDROGRAPH AT S602	1738.	12.50	349.	109.	78.	1.88
+	2 COMBINED AT C602	4746.	12.47	968.	298.	215.	5.47
+	ROUTED TO 602603	4583.	12.70	924.	254.	183.	5.47
+	HYDROGRAPH AT S606	651.	12.37	126.	39.	28.	0.66
+	2 COMBINED AT C603L	4966.	12.67	1038.	290.	209.	6.13
+	HYDROGRAPH AT S605	1008.	12.47	204.	63.	46.	1.09
+	HYDROGRAPH AT S604	1851.	12.73	488.	152.	110.	2.66
+	3 COMBINED AT C603	7308.	12.67	1662.	485.	350.	9.87
+	ROUTED TO 603604	7114.	12.83	1613.	438.	316.	9.87
+	HYDROGRAPH AT S609	393.	12.50	94.	28.	21.	0.56
+	2 COMBINED AT C604R	7372.	12.80	1695.	463.	334.	10.43
+	HYDROGRAPH AT S607	713.	12.47	160.	49.	35.	0.82
+	2 COMBINED AT C604	7817.	12.80	1835.	506.	365.	11.25
+	ROUTED TO 604605	7773.	12.83	1835.	506.	365.	11.25
+	HYDROGRAPH AT S608	638.	12.30	105.	32.	23.	0.51
+	2 COMBINED AT C605	7954.	12.83	1926.	535.	386.	11.76
+	ROUTED TO 605606	7845.	12.93	1917.	528.	381.	11.76
+	HYDROGRAPH AT S610	510.	12.53	122.	38.	28.	0.60

+	2 COMBINED AT	C606L	8146.	12.93	2024.	562.	405.	12.36
+	HYDROGRAPH AT	S612	719.	12.47	162.	49.	35.	0.81
+	2 COMBINED AT	C606	8535.	12.93	2165.	605.	436.	13.17
+	ROUTED TO	606608	8520.	12.93	2162.	602.	434.	13.17
+	HYDROGRAPH AT	S611	699.	12.27	107.	33.	24.	0.57
+	ROUTED TO	607608	662.	12.47	107.	33.	24.	0.57
+	HYDROGRAPH AT	S613	1406.	12.70	335.	104.	75.	1.80
+	3 COMBINED AT	C608	9840.	12.90	2547.	722.	521.	15.53
+	ROUTED TO	608609	9748.	13.03	2535.	713.	514.	15.53
+	HYDROGRAPH AT	S614	831.	12.63	201.	62.	45.	1.08
+	2 COMBINED AT	C609	10248.	13.00	2706.	767.	553.	16.61
+	ROUTED TO	609611	10067.	13.17	2677.	740.	533.	16.61
+	HYDROGRAPH AT	S617	635.	12.50	116.	34.	25.	0.68
+	2 COMBINED AT	C611R	10241.	13.17	2774.	769.	554.	17.29
+	HYDROGRAPH AT	S615	1027.	12.60	252.	82.	59.	1.05
+	ROUTED TO	610611	1001.	12.77	252.	82.	59.	1.05
+	HYDROGRAPH AT	S616	248.	12.97	83.	24.	18.	0.50
+	2 COMBINED AT	C611L	1210.	12.80	332.	105.	76.	1.56
+	2 COMBINED AT	C611	11048.	13.17	3061.	861.	621.	18.85
+	ROUTED TO	611613	11000.	13.20	3051.	851.	613.	18.85
+	HYDROGRAPH AT	S618	818.	12.50	166.	48.	35.	0.96
+	2 COMBINED AT	C613R	11263.	13.20	3189.	892.	643.	19.81
+	HYDROGRAPH AT	S619	1040.	12.40	180.	56.	40.	0.83
+	ROUTED TO	612613	1007.	12.57	180.	56.	40.	0.83
+	HYDROGRAPH AT	S620	414.	12.43	94.	29.	21.	0.44
+	2 COMBINED AT	C613L	1389.	12.53	272.	84.	61.	1.27
+	2 COMBINED AT	C613	11746.	13.17	3420.	964.	695.	21.08

+	ROUTED TO 613614	11667.	13.23	3408.	953.	687.	21.08
+	HYDROGRAPH AT S621	1009.	12.33	125.	32.	23.	0.92
+	2 COMBINED AT C614	11709.	13.23	3509.	978.	705.	22.00
+	ROUTED TO 614615	11625.	13.33	3497.	968.	698.	22.00
+	HYDROGRAPH AT S622	628.	12.63	124.	32.	23.	0.90
+	2 COMBINED AT C615	11824.	13.33	3596.	994.	716.	22.90
+	2 COMBINED AT WEST-4	21626.	13.27	7131.	1978.	1432.	51.12
+	HYDROGRAPH AT S700	497.	12.47	87.	23.	16.	0.61
+	HYDROGRAPH AT S701	382.	12.77	116.	33.	24.	0.72
+	HYDROGRAPH AT S702	222.	12.33	36.	9.	7.	0.26
+	HYDROGRAPH AT S703	257.	12.30	34.	8.	6.	0.26
+	HYDROGRAPH AT S704	472.	12.27	61.	17.	12.	0.41
+	ROUTED TO 704705	438.	12.50	61.	17.	12.	0.41
+	HYDROGRAPH AT S705	733.	12.40	122.	32.	23.	0.75
+	2 COMBINED AT C705	1146.	12.43	182.	49.	35.	1.16
+	ROUTED TO C705O	622.	12.83	182.	49.	35.	1.16
+	ROUTED TO 705OAF	621.	13.03	182.	49.	35.	1.16
+	HYDROGRAPH AT S705AF	237.	12.30	44.	11.	8.	0.18
+	2 COMBINED AT C705AF	712.	12.83	225.	60.	43.	1.34
+	5 COMBINED AT WEST-5	1681.	12.63	485.	130.	94.	3.19
+	HYDROGRAPH AT S706	610.	12.47	109.	29.	21.	0.71
+	HYDROGRAPH AT S707	528.	12.47	104.	28.	20.	0.64
+	HYDROGRAPH AT S728	196.	12.47	38.	10.	7.	0.28
+	5 COMBINED AT WEST	22813.	13.23	7683.	2125.	1539.	55.94
+	HYDROGRAPH AT S708	969.	12.30	157.	40.	29.	0.71
+	HYDROGRAPH AT S709	609.	12.30	114.	30.	22.	0.44
+	ROUTED TO C709O	362.	12.63	114.	30.	22.	0.44

+	ROUTED TO 709710	361.	12.73	114.	30.	22.	0.44
+	HYDROGRAPH AT S710	179.	12.17	28.	7.	5.	0.11
+	2 COMBINED AT C710I	433.	12.50	142.	37.	27.	0.55
+	ROUTED TO C710O	376.	13.00	142.	37.	27.	0.55
+	HYDROGRAPH AT S711	282.	12.13	42.	11.	8.	0.16
+	ROUTED TO C711O	156.	12.37	42.	11.	8.	0.16
+	ROUTED TO 711712	156.	12.43	42.	11.	8.	0.16
+	HYDROGRAPH AT S712	132.	12.03	17.	4.	3.	0.07
+	2 COMBINED AT C712I	259.	12.07	58.	15.	11.	0.23
+	ROUTED TO C712O	206.	12.23	58.	15.	11.	0.23
+	ROUTED TO 712714	206.	12.30	58.	15.	11.	0.23
+	HYDROGRAPH AT S713	189.	12.10	26.	7.	5.	0.11
+	ROUTED TO C713O	131.	12.27	26.	7.	5.	0.11
+	ROUTED TO 713714	131.	12.30	26.	7.	5.	0.11
+	HYDROGRAPH AT S714	96.	12.13	12.	3.	2.	0.06
+	3 COMBINED AT C714	416.	12.20	96.	25.	18.	0.39
+	HYDROGRAPH AT S715	302.	12.27	57.	15.	11.	0.22
+	HYDROGRAPH AT S716	1328.	12.43	271.	70.	50.	1.13
+	ROUTED TO C716O	572.	13.10	271.	70.	50.	1.13
+	ROUTED TO 716717	572.	13.23	271.	70.	50.	1.13
+	HYDROGRAPH AT S717	511.	12.13	75.	20.	14.	0.29
+	2 COMBINED AT C717	739.	12.20	343.	89.	64.	1.41
+	ROUTED TO 717718	670.	12.57	342.	89.	64.	1.41
+	HYDROGRAPH AT S718	333.	12.70	115.	31.	23.	0.44
+	2 COMBINED AT C718	989.	12.63	454.	119.	86.	1.86
+	HYDROGRAPH AT S719	165.	12.37	45.	13.	9.	0.15
+	6 COMBINED AT EAST-1	2732.	12.40	925.	243.	175.	3.88

+	HYDROGRAPH AT	S720	443.	12.37	97.	26.	19.	0.37
+	HYDROGRAPH AT	S721	521.	12.17	58.	15.	11.	0.34
+	ROUTED TO	C721O	214.	12.50	58.	15.	11.	0.34
+	ROUTED TO	721722	212.	12.80	58.	15.	10.	0.34
+	HYDROGRAPH AT	S722	1019.	12.47	209.	53.	38.	0.95
+	2 COMBINED AT	C722	1123.	12.50	265.	67.	48.	1.29
+	HYDROGRAPH AT	S723	131.	12.17	20.	5.	4.	0.09
+	HYDROGRAPH AT	S724	1462.	12.40	300.	79.	57.	1.16
+	HYDROGRAPH AT	S725	946.	12.63	237.	60.	43.	1.16
+	5 COMBINED AT	EAST-2	3751.	12.47	892.	229.	165.	4.06
+	HYDROGRAPH AT	S726	484.	12.17	53.	14.	10.	0.33
+	ROUTED TO	726727	454.	12.33	53.	14.	10.	0.33
+	HYDROGRAPH AT	S727	361.	12.43	83.	21.	15.	0.38
+	2 COMBINED AT	C727	796.	12.37	135.	35.	25.	0.71
+	4 COMBINED AT	TOTAL	25792.	13.20	9204.	2518.	1821.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 50-Year, 6-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   09AUG01  TIME  15:22:35   *
*                                       *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX50-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 50-year, 6-hour storm event. A companion model is also created for the existing condition 50-year, 24-hour storm event. Both models (50-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 50-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                     STRM       3.00  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                 0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                 0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                 0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        2.98  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        2.94  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        2.77  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        2.43  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	596.	4.47	104.	26.	19.	0.57		
+	ROUTED TO	100102	566.	4.73	104.	26.	19.	0.57		
+	HYDROGRAPH AT	S101	828.	4.37	106.	27.	19.	0.63		
+	2 COMBINED AT	C102R	945.	4.57	197.	50.	36.	1.20		
+	HYDROGRAPH AT	S102	429.	4.57	84.	21.	15.	0.45		
+	ROUTED TO	101102	414.	4.77	84.	21.	15.	0.45		
+	HYDROGRAPH AT	S103	358.	4.60	70.	18.	13.	0.40		
+	2 COMBINED AT	C102L	683.	4.73	148.	38.	27.	0.84		
+	2 COMBINED AT	C102	1409.	4.67	324.	82.	59.	2.05		
+	ROUTED TO	102103	1376.	4.90	324.	82.	59.	2.05		
+	HYDROGRAPH AT	S104	897.	4.57	148.	37.	27.	0.90		
+	2 COMBINED AT	C103R	1864.	4.83	443.	113.	81.	2.95		
+	HYDROGRAPH AT	S105	427.	4.73	100.	25.	18.	0.59		
+	2 COMBINED AT	C103	2127.	4.83	518.	132.	95.	3.54		
+	ROUTED TO	103104	2099.	5.00	518.	132.	95.	3.54		
+	HYDROGRAPH AT	S106	537.	4.50	90.	22.	16.	0.57		
+	2 COMBINED AT	C104	2296.	4.97	579.	147.	106.	4.11		
+	ROUTED TO	104105	2261.	5.17	578.	147.	106.	4.11		
	HYDROGRAPH AT									

+	S107	600.	4.70	127.	32.	23.	0.94
2 COMBINED AT +	C105L	2504.	5.13	662.	168.	121.	5.05
HYDROGRAPH AT +	S200	1110.	4.43	175.	44.	32.	0.96
ROUTED TO +	200201	1096.	4.50	175.	44.	32.	0.96
HYDROGRAPH AT +	S201	490.	4.33	67.	17.	12.	0.35
2 COMBINED AT +	C201	1354.	4.47	233.	59.	42.	1.31
ROUTED TO +	201203	1330.	4.57	233.	59.	42.	1.31
HYDROGRAPH AT +	S202	230.	4.20	24.	6.	4.	0.13
ROUTED TO +	202203	217.	4.27	24.	6.	4.	0.13
HYDROGRAPH AT +	S203	331.	4.53	71.	18.	13.	0.37
3 COMBINED AT +	C203R	1582.	4.57	312.	79.	57.	1.81
HYDROGRAPH AT +	S204	894.	4.53	167.	42.	30.	0.95
2 COMBINED AT +	C203	2112.	4.57	454.	115.	83.	2.76
ROUTED TO +	203204	2104.	4.60	454.	115.	83.	2.76
HYDROGRAPH AT +	S205	443.	4.43	72.	18.	13.	0.41
2 COMBINED AT +	C204	2336.	4.60	508.	129.	93.	3.17
ROUTED TO +	204205	2310.	4.73	507.	129.	93.	3.17
HYDROGRAPH AT +	S206	596.	4.77	148.	38.	27.	0.85
2 COMBINED AT +	C205L	2664.	4.73	623.	159.	114.	4.03
HYDROGRAPH AT +	S207	681.	4.77	172.	44.	32.	0.96
2 COMBINED AT +	C205	3075.	4.77	758.	193.	139.	4.98
ROUTED TO +	205206	2970.	5.13	756.	193.	139.	4.98
HYDROGRAPH AT +	S208	795.	4.83	193.	49.	35.	1.10
2 COMBINED AT +	C206	3409.	5.13	904.	231.	167.	6.09
ROUTED TO +	206207	3379.	5.20	903.	231.	167.	6.09
HYDROGRAPH AT +	S209	699.	4.53	107.	27.	19.	0.65
2 COMBINED AT +	C207R	3499.	5.20	974.	250.	180.	6.74
HYDROGRAPH AT							

+		S210	607.	4.40	72.	18.	13.	0.48
	2 COMBINED AT							
+		C207	3534.	5.17	1015.	260.	187.	7.22
	ROUTED TO							
+		207105	3500.	5.27	1014.	260.	187.	7.22
	HYDROGRAPH AT							
+		S211	508.	4.50	76.	19.	14.	0.49
	2 COMBINED AT							
+		C105R	3565.	5.27	1058.	271.	196.	7.70
	2 COMBINED AT							
+		C105	5290.	5.27	1571.	403.	291.	12.75
	HYDROGRAPH AT							
+		S300	558.	4.57	108.	27.	20.	0.62
	HYDROGRAPH AT							
+		S301	973.	4.53	180.	46.	33.	0.99
	2 COMBINED AT							
+		C300	1324.	4.57	272.	69.	50.	1.61
	ROUTED TO							
+		300301	1297.	4.67	272.	69.	50.	1.61
	HYDROGRAPH AT							
+		S302	589.	4.43	83.	21.	15.	0.47
	2 COMBINED AT							
+		C301	1578.	4.63	338.	86.	62.	2.07
	ROUTED TO							
+		301302	1530.	4.93	337.	86.	62.	2.07
	HYDROGRAPH AT							
+		S303	700.	4.50	105.	26.	19.	0.71
	2 COMBINED AT							
+		C302	1775.	4.87	416.	106.	76.	2.78
	ROUTED TO							
+		302303	1753.	5.00	416.	106.	76.	2.78
	HYDROGRAPH AT							
+		S304	603.	4.63	119.	30.	22.	0.82
	2 COMBINED AT							
+		C303	2054.	4.97	501.	127.	92.	3.60
	2 COMBINED AT							
+		WEST-1	6371.	5.23	1922.	493.	356.	16.36
	HYDROGRAPH AT							
+		S400	962.	4.63	179.	45.	32.	1.05
	ROUTED TO							
+		C400O	456.	5.23	178.	45.	32.	1.05
	ROUTED TO							
+		400401	455.	5.53	178.	45.	32.	1.05
	HYDROGRAPH AT							
+		S401	590.	4.60	98.	25.	18.	0.65
	2 COMBINED AT							
+		C401	759.	4.80	259.	65.	47.	1.69
	ROUTED TO							
+		401402	746.	5.10	259.	65.	47.	1.69
	HYDROGRAPH AT							
+		S402	739.	4.53	110.	27.	20.	0.74
	2 COMBINED AT							
+		C402	1034.	4.97	345.	87.	63.	2.43
	ROUTED TO							

+		402403	1001.	5.33	345.	87.	63.	2.43
+	HYDROGRAPH AT	S403	491.	4.73	103.	26.	19.	0.56
+	2 COMBINED AT	C403	1240.	5.30	431.	109.	78.	2.99
+	ROUTED TO	403404	1226.	5.40	431.	108.	78.	2.99
+	HYDROGRAPH AT	S404	544.	4.20	44.	11.	8.	0.26
+	2 COMBINED AT	C404	1224.	5.40	467.	117.	85.	3.26
+	2 COMBINED AT	WEST-2	6878.	5.23	2211.	567.	409.	19.61
+	HYDROGRAPH AT	S500	721.	4.80	187.	48.	35.	1.05
+	ROUTED TO	500501	712.	4.97	187.	48.	35.	1.05
+	HYDROGRAPH AT	S501	665.	4.47	105.	26.	19.	0.61
+	2 COMBINED AT	C501	980.	4.83	274.	70.	51.	1.67
+	ROUTED TO	501502	969.	4.93	271.	69.	50.	1.67
+	HYDROGRAPH AT	S502	558.	4.37	65.	16.	12.	0.40
+	2 COMBINED AT	C502L	1077.	4.83	319.	81.	59.	2.07
+	HYDROGRAPH AT	S503	1036.	4.50	171.	43.	31.	0.99
+	2 COMBINED AT	C502I	1767.	4.63	459.	117.	84.	3.07
+	ROUTED TO	C502O	1648.	4.83	459.	117.	84.	3.07
+	ROUTED TO	502505	1622.	5.07	447.	113.	81.	3.07
+	HYDROGRAPH AT	S504	157.	4.83	41.	10.	7.	0.33
+	2 COMBINED AT	C505L	1695.	5.07	471.	119.	86.	3.39
+	HYDROGRAPH AT	S505	326.	4.13	23.	6.	4.	0.14
+	ROUTED TO	C503O	93.	4.37	23.	6.	4.	0.14
+	ROUTED TO	503505	90.	4.87	22.	5.	4.	0.14
+	HYDROGRAPH AT	S506	260.	4.23	25.	6.	5.	0.15
+	ROUTED TO	C504O	90.	4.60	25.	6.	5.	0.15
+	ROUTED TO	504505	89.	5.00	25.	6.	5.	0.15
+	HYDROGRAPH AT	S507	618.	4.57	97.	24.	17.	0.67
	3 COMBINED AT							

+	C505R	700.	4.60	137.	34.	25.	0.96
2 COMBINED AT +	C505	2070.	4.93	569.	144.	104.	4.35
ROUTED TO +	505509	2024.	5.27	548.	137.	99.	4.35
HYDROGRAPH AT +	S508	323.	4.40	43.	11.	8.	0.29
2 COMBINED AT +	C509L	2055.	5.23	574.	144.	104.	4.65
HYDROGRAPH AT +	S509	353.	4.17	31.	8.	6.	0.17
ROUTED TO +	C506O	90.	4.50	31.	8.	6.	0.17
ROUTED TO +	506508	90.	4.70	31.	8.	6.	0.17
HYDROGRAPH AT +	S510	157.	4.37	23.	6.	4.	0.13
2 COMBINED AT +	C508R	241.	4.40	54.	13.	10.	0.30
HYDROGRAPH AT +	S511	640.	4.27	70.	18.	13.	0.38
ROUTED TO +	C507O	97.	4.93	69.	18.	13.	0.38
ROUTED TO +	507508	96.	5.23	68.	18.	13.	0.38
HYDROGRAPH AT +	S512	247.	4.47	39.	10.	7.	0.21
2 COMBINED AT +	C508L	313.	4.50	106.	28.	20.	0.60
2 COMBINED AT +	C508	513.	4.47	153.	40.	29.	0.90
ROUTED TO +	508509	483.	5.00	150.	40.	29.	0.90
HYDROGRAPH AT +	S513	364.	5.07	110.	28.	20.	0.78
2 COMBINED AT +	C509R	768.	5.07	243.	64.	46.	1.67
2 COMBINED AT +	C509	2581.	5.23	757.	193.	139.	6.32
ROUTED TO +	509510	2567.	5.30	756.	192.	139.	6.32
HYDROGRAPH AT +	S514	494.	4.77	117.	29.	21.	0.65
2 COMBINED AT +	C510	2809.	5.27	843.	214.	154.	6.97
ROUTED TO +	510511	2758.	5.63	841.	214.	155.	6.97
HYDROGRAPH AT +	S515	1027.	4.73	208.	52.	37.	1.10
2 COMBINED AT +	C511	3052.	5.57	1002.	256.	184.	8.07
ROUTED TO +	511512	3003.	5.90	996.	255.	184.	8.07
HYDROGRAPH AT							

+		S516	315.	4.83	74.	19.	13.	0.54
	2 COMBINED AT							
+		C512	3050.	5.90	1031.	265.	191.	8.61
	2 COMBINED AT							
+		WEST-3	7660.	5.40	2855.	741.	534.	28.22
	HYDROGRAPH AT							
+		S600	1415.	4.63	282.	71.	51.	2.02
	ROUTED TO							
+		600601	1402.	4.70	282.	71.	51.	2.02
	HYDROGRAPH AT							
+		S601	1215.	4.40	196.	49.	36.	0.90
	2 COMBINED AT							
+		C601	2056.	4.63	453.	114.	82.	2.92
	ROUTED TO							
+		601602	2034.	4.73	453.	114.	82.	2.92
	HYDROGRAPH AT							
+		S603	1229.	4.27	145.	36.	26.	0.67
	2 COMBINED AT							
+		C602L	2378.	4.63	573.	145.	105.	3.58
	HYDROGRAPH AT							
+		S602	1505.	4.63	329.	83.	60.	1.88
	2 COMBINED AT							
+		C602	3455.	4.63	847.	215.	155.	5.47
	ROUTED TO							
+		602603	3355.	4.87	802.	201.	145.	5.47
	HYDROGRAPH AT							
+		S606	735.	4.43	127.	32.	23.	0.66
	2 COMBINED AT							
+		C603L	3629.	4.83	897.	225.	162.	6.13
	HYDROGRAPH AT							
+		S605	1000.	4.53	198.	50.	36.	1.09
	HYDROGRAPH AT							
+		S604	1526.	4.97	444.	114.	82.	2.66
	3 COMBINED AT							
+		C603	5096.	4.83	1395.	355.	256.	9.87
	ROUTED TO							
+		603604	4998.	5.00	1346.	339.	244.	9.87
	HYDROGRAPH AT							
+		S609	442.	4.57	95.	24.	17.	0.56
	2 COMBINED AT							
+		C604R	5147.	5.00	1405.	354.	255.	10.43
	HYDROGRAPH AT							
+		S607	763.	4.53	160.	41.	29.	0.82
	2 COMBINED AT							
+		C604	5461.	4.97	1521.	384.	277.	11.25
	ROUTED TO							
+		604605	5450.	5.03	1521.	384.	277.	11.25
	HYDROGRAPH AT							
+		S608	804.	4.33	108.	27.	20.	0.51
	2 COMBINED AT							
+		C605	5584.	5.00	1598.	404.	291.	11.76
	ROUTED TO							
+		605606	5534.	5.13	1589.	401.	289.	11.76
	HYDROGRAPH AT							

+	S610	587.	4.60	125.	32.	23.	0.60
2 COMBINED AT +	C606L	5752.	5.10	1679.	425.	306.	12.36
HYDROGRAPH AT +	S612	779.	4.53	163.	41.	30.	0.81
2 COMBINED AT +	C606	6046.	5.10	1797.	455.	328.	13.17
ROUTED TO +	606608	6040.	5.10	1794.	454.	327.	13.17
HYDROGRAPH AT +	S611	873.	4.33	109.	27.	20.	0.57
ROUTED TO +	607608	796.	4.53	109.	27.	20.	0.57
HYDROGRAPH AT +	S613	1261.	4.87	317.	81.	58.	1.80
3 COMBINED AT +	C608	6915.	5.07	2094.	532.	383.	15.53
ROUTED TO +	608609	6859.	5.20	2082.	528.	381.	15.53
HYDROGRAPH AT +	S614	821.	4.73	194.	49.	36.	1.08
2 COMBINED AT +	C609	7166.	5.17	2208.	561.	404.	16.61
ROUTED TO +	609611	7075.	5.37	2177.	551.	397.	16.61
HYDROGRAPH AT +	S617	708.	4.57	120.	30.	22.	0.68
2 COMBINED AT +	C611R	7165.	5.33	2243.	569.	410.	17.29
HYDROGRAPH AT +	S615	1095.	4.67	250.	63.	46.	1.05
ROUTED TO +	610611	1068.	4.83	250.	63.	46.	1.05
HYDROGRAPH AT +	S616	280.	5.03	88.	23.	16.	0.50
2 COMBINED AT +	C611L	1220.	4.90	322.	83.	60.	1.56
2 COMBINED AT +	C611	7728.	5.33	2472.	630.	454.	18.85
ROUTED TO +	611613	7686.	5.37	2461.	626.	451.	18.85
HYDROGRAPH AT +	S618	832.	4.60	167.	42.	30.	0.96
2 COMBINED AT +	C613R	7838.	5.37	2557.	652.	470.	19.81
HYDROGRAPH AT +	S619	1163.	4.47	182.	46.	33.	0.83
ROUTED TO +	612613	1121.	4.63	181.	46.	33.	0.83
HYDROGRAPH AT +	S620	502.	4.47	97.	24.	18.	0.44
2 COMBINED AT +	C613L	1435.	4.63	270.	68.	49.	1.27
2 COMBINED AT							

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+                    C613      8171.   5.33      2738.      700.      505.     21.08
        ROUTED TO
+                  613614      8128.   5.43      2727.      696.      502.     21.08
        HYDROGRAPH AT
+                    S621      1038.   4.43       128.       32.       23.      0.92
        2 COMBINED AT
+                    C614      8111.   5.40      2781.      710.      511.     22.00
        ROUTED TO
+                  614615      8040.   5.53      2767.      705.      508.     22.00
        HYDROGRAPH AT
+                    S622       616.   4.73       127.       32.       23.      0.90
        2 COMBINED AT
+                    C615      8111.   5.53      2820.      719.      518.     22.90
        2 COMBINED AT
+                  WEST-4     12673.   5.53      4873.     1261.      909.     51.12
        HYDROGRAPH AT
+                    S700       556.   4.53        94.       24.       17.      0.61
        HYDROGRAPH AT
+                    S701       401.   4.87       119.       31.       22.      0.72
        HYDROGRAPH AT
+                    S702       264.   4.40        40.       10.        7.      0.26
        HYDROGRAPH AT
+                    S703       318.   4.33        38.        9.        7.      0.26
        HYDROGRAPH AT
+                    S704       609.   4.30        66.       16.       12.      0.41
        ROUTED TO
+                  704705       538.   4.53        66.       16.       12.      0.41
        HYDROGRAPH AT
+                    S705       786.   4.47       126.       32.       23.      0.75
        2 COMBINED AT
+                    C705      1141.   4.53       181.       45.       33.      1.16
        ROUTED TO
+                   C705O       619.   4.97       181.       45.       33.      1.16
        ROUTED TO
+                  705OAF       616.   5.13       181.       45.       33.      1.16
        HYDROGRAPH AT
+                  S705AF       295.   4.30        40.       10.        7.      0.18
        2 COMBINED AT
+                  C705AF       687.   4.97       217.       55.       39.      1.34
        5 COMBINED AT
+                  WEST-5      1497.   4.73       441.      112.       80.      3.19
        HYDROGRAPH AT
+                    S706       645.   4.53       112.       28.       20.      0.71
        HYDROGRAPH AT
+                    S707       575.   4.53       107.       27.       19.      0.64
        HYDROGRAPH AT
+                    S728       219.   4.50        41.       10.        7.      0.28
        5 COMBINED AT
+                    WEST     13054.   5.50      5148.     1332.      960.     55.94
        HYDROGRAPH AT
+                    S708      1123.   4.37       149.       37.       27.      0.71
        HYDROGRAPH AT
+                    S709       766.   4.33       101.       25.       18.      0.44
        ROUTED TO
```

+		C709O	385.	4.70	101.	25.	18.	0.44
	ROUTED TO							
+		709710	384.	4.77	101.	25.	18.	0.44
	HYDROGRAPH AT							
+		S710	257.	4.17	26.	6.	5.	0.11
	2 COMBINED AT							
+		C710I	456.	4.43	127.	32.	23.	0.55
	ROUTED TO							
+		C710O	383.	5.03	126.	32.	23.	0.55
	HYDROGRAPH AT							
+		S711	417.	4.13	37.	9.	7.	0.16
	ROUTED TO							
+		C711O	172.	4.40	37.	9.	7.	0.16
	ROUTED TO							
+		711712	171.	4.43	37.	9.	7.	0.16
	HYDROGRAPH AT							
+		S712	211.	4.07	15.	4.	3.	0.07
	2 COMBINED AT							
+		C712I	336.	4.07	52.	13.	9.	0.23
	ROUTED TO							
+		C712O	228.	4.23	52.	13.	9.	0.23
	ROUTED TO							
+		712714	228.	4.33	52.	13.	9.	0.23
	HYDROGRAPH AT							
+		S713	285.	4.10	24.	6.	4.	0.11
	ROUTED TO							
+		C713O	160.	4.27	24.	6.	4.	0.11
	ROUTED TO							
+		713714	160.	4.30	24.	6.	4.	0.11
	HYDROGRAPH AT							
+		S714	140.	4.13	12.	3.	2.	0.06
	3 COMBINED AT							
+		C714	493.	4.20	88.	22.	16.	0.39
	HYDROGRAPH AT							
+		S715	382.	4.30	50.	13.	9.	0.22
	HYDROGRAPH AT							
+		S716	1373.	4.50	245.	61.	44.	1.13
	ROUTED TO							
+		C716O	579.	5.17	245.	61.	44.	1.13
	ROUTED TO							
+		716717	579.	5.30	245.	61.	44.	1.13
	HYDROGRAPH AT							
+		S717	752.	4.17	67.	17.	12.	0.29
	2 COMBINED AT							
+		C717	755.	4.17	309.	77.	56.	1.41
	ROUTED TO							
+		717718	655.	4.80	309.	77.	56.	1.41
	HYDROGRAPH AT							
+		S718	397.	4.70	105.	26.	19.	0.44
	2 COMBINED AT							
+		C718	998.	4.80	410.	103.	74.	1.86
	HYDROGRAPH AT							
+		S719	205.	4.37	40.	10.	7.	0.15
	6 COMBINED AT							

+	EAST-1	2585.	4.57	830.	208.	150.	3.88
HYDROGRAPH AT +	S720	547.	4.37	86.	22.	16.	0.37
HYDROGRAPH AT +	S721	735.	4.20	61.	15.	11.	0.34
ROUTED TO +	C7210	238.	4.50	61.	15.	11.	0.34
ROUTED TO +	721722	235.	4.80	61.	15.	11.	0.34
HYDROGRAPH AT +	S722	1065.	4.53	194.	49.	35.	0.95
2 COMBINED AT +	C722	1157.	4.63	250.	63.	45.	1.29
HYDROGRAPH AT +	S723	185.	4.17	19.	5.	3.	0.09
HYDROGRAPH AT +	S724	1516.	4.47	265.	66.	48.	1.16
HYDROGRAPH AT +	S725	638.	5.23	222.	57.	41.	1.16
5 COMBINED AT +	EAST-2	2825.	4.63	800.	202.	145.	4.06
HYDROGRAPH AT +	S726	723.	4.17	56.	14.	10.	0.33
ROUTED TO +	726727	621.	4.30	56.	14.	10.	0.33
HYDROGRAPH AT +	S727	428.	4.47	79.	20.	14.	0.38
2 COMBINED AT +	C727	910.	4.37	132.	33.	24.	0.71
4 COMBINED AT +	TOTAL	14891.	5.43	6264.	1614.	1163.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 50-Year, 24-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   09AUG01  TIME  15:21:43   *
*                                       *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX50-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 50-year, 24-hour storm event. A companion model is also created for the existing condition 50-year, 6-hour storm event. Both models (50-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 50-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                     STRM        3.76  PRECIPITATION DEPTH
                     TRDA        0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 3.74 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 3.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 3.53 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 3.40 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 3.22 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	414.	12.47	86.	26.	19.	0.57		
+	ROUTED TO	100102	395.	12.73	86.	26.	19.	0.57		
+	HYDROGRAPH AT	S101	581.	12.33	87.	24.	18.	0.63		
+	2 COMBINED AT	C102R	790.	12.43	172.	50.	36.	1.20		
+	HYDROGRAPH AT	S102	291.	12.57	70.	21.	16.	0.45		
+	ROUTED TO	101102	281.	12.80	70.	21.	16.	0.45		
+	HYDROGRAPH AT	S103	246.	12.63	57.	16.	12.	0.40		
+	2 COMBINED AT	C102L	508.	12.73	127.	38.	27.	0.84		

+	2 COMBINED AT	C102	1185.	12.63	295.	86.	63.	2.05
+	ROUTED TO	102103	1164.	12.87	295.	86.	63.	2.05
+	HYDROGRAPH AT	S104	701.	12.53	123.	34.	25.	0.90
+	2 COMBINED AT	C103R	1668.	12.70	413.	119.	86.	2.95
+	HYDROGRAPH AT	S105	307.	12.73	81.	23.	16.	0.59
+	2 COMBINED AT	C103	1958.	12.70	490.	141.	102.	3.54
+	ROUTED TO	103104	1937.	12.90	490.	141.	102.	3.54
+	HYDROGRAPH AT	S106	374.	12.50	71.	19.	14.	0.57
+	2 COMBINED AT	C104	2168.	12.87	556.	158.	115.	4.11
+	ROUTED TO	104105	2127.	13.07	556.	158.	115.	4.11
+	HYDROGRAPH AT	S107	484.	12.63	104.	26.	19.	0.94
+	2 COMBINED AT	C105L	2432.	13.03	653.	183.	132.	5.05
+	HYDROGRAPH AT	S200	873.	12.40	154.	48.	35.	0.96
+	ROUTED TO	200201	852.	12.43	154.	48.	35.	0.96
+	HYDROGRAPH AT	S201	316.	12.33	56.	18.	13.	0.35
+	2 COMBINED AT	C201	1133.	12.40	210.	66.	47.	1.31
+	ROUTED TO	201203	1114.	12.50	210.	66.	47.	1.31
+	HYDROGRAPH AT	S202	133.	12.20	21.	6.	5.	0.13
+	ROUTED TO	202203	129.	12.27	21.	6.	5.	0.13
+	HYDROGRAPH AT	S203	226.	12.53	60.	19.	14.	0.37
+	3 COMBINED AT	C203R	1417.	12.50	287.	90.	65.	1.81
+	HYDROGRAPH AT	S204	710.	12.50	148.	46.	33.	0.95
+	2 COMBINED AT	C203	2098.	12.50	430.	134.	97.	2.76
+	ROUTED TO	203204	2086.	12.53	430.	134.	97.	2.76
+	HYDROGRAPH AT	S205	297.	12.43	59.	17.	12.	0.41
+	2 COMBINED AT	C204	2354.	12.53	486.	151.	109.	3.17
+	ROUTED TO	204205	2297.	12.63	485.	151.	109.	3.17

+	HYDROGRAPH AT S206	466.	12.73	130.	39.	28.	0.85
+	2 COMBINED AT C205L	2723.	12.67	609.	188.	136.	4.03
+	HYDROGRAPH AT S207	543.	12.73	153.	48.	35.	0.96
+	2 COMBINED AT C205	3224.	12.67	755.	234.	169.	4.98
+	ROUTED TO 205206	3074.	13.03	754.	233.	169.	4.98
+	HYDROGRAPH AT S208	649.	12.77	168.	50.	36.	1.10
+	2 COMBINED AT C206	3561.	13.03	905.	278.	202.	6.09
+	ROUTED TO 206207	3521.	13.10	905.	278.	202.	6.09
+	HYDROGRAPH AT S209	504.	12.50	88.	25.	18.	0.65
+	2 COMBINED AT C207R	3676.	13.10	982.	299.	217.	6.74
+	HYDROGRAPH AT S210	396.	12.37	55.	14.	10.	0.48
+	2 COMBINED AT C207	3736.	13.10	1029.	311.	226.	7.22
+	ROUTED TO 207105	3687.	13.20	1029.	311.	226.	7.22
+	HYDROGRAPH AT S211	341.	12.50	58.	15.	11.	0.49
+	2 COMBINED AT C105R	3780.	13.17	1078.	324.	235.	7.70
+	2 COMBINED AT C105	5845.	13.17	1658.	486.	353.	12.75
+	HYDROGRAPH AT S300	401.	12.57	91.	27.	20.	0.62
+	HYDROGRAPH AT S301	778.	12.50	160.	50.	36.	0.99
+	2 COMBINED AT C300	1158.	12.50	248.	77.	55.	1.61
+	ROUTED TO 300301	1137.	12.63	248.	77.	55.	1.61
+	HYDROGRAPH AT S302	390.	12.43	68.	20.	15.	0.47
+	2 COMBINED AT C301	1449.	12.57	314.	96.	70.	2.07
+	ROUTED TO 301302	1399.	12.87	314.	96.	70.	2.07
+	HYDROGRAPH AT S303	515.	12.47	87.	24.	17.	0.71
+	2 COMBINED AT C302	1699.	12.80	396.	119.	86.	2.78
+	ROUTED TO 302303	1672.	12.93	396.	119.	86.	2.78
+	HYDROGRAPH AT S304	470.	12.60	97.	25.	18.	0.82

+	2 COMBINED AT	C303	2003.	12.90	488.	142.	103.	3.60
+	2 COMBINED AT	WEST-1	7338.	13.13	2081.	610.	442.	16.36
+	HYDROGRAPH AT	S400	779.	12.60	150.	42.	30.	1.05
+	ROUTED TO	C4000	417.	13.10	150.	42.	30.	1.05
+	ROUTED TO	400401	416.	13.40	150.	42.	30.	1.05
+	HYDROGRAPH AT	S401	435.	12.60	80.	21.	15.	0.65
+	2 COMBINED AT	C401	686.	12.70	227.	62.	45.	1.69
+	ROUTED TO	401402	672.	13.07	227.	62.	45.	1.69
+	HYDROGRAPH AT	S402	559.	12.50	89.	23.	16.	0.74
+	2 COMBINED AT	C402	921.	12.93	312.	84.	61.	2.43
+	ROUTED TO	402403	886.	13.30	312.	84.	61.	2.43
+	HYDROGRAPH AT	S403	360.	12.70	85.	21.	15.	0.56
+	2 COMBINED AT	C403	1102.	13.27	392.	104.	75.	2.99
+	ROUTED TO	403404	1091.	13.40	392.	104.	75.	2.99
+	HYDROGRAPH AT	S404	322.	12.20	34.	9.	6.	0.26
+	2 COMBINED AT	C404	1091.	13.40	425.	112.	81.	3.26
+	2 COMBINED AT	WEST-2	8129.	13.13	2441.	705.	511.	19.61
+	HYDROGRAPH AT	S500	587.	12.77	169.	53.	38.	1.05
+	ROUTED TO	500501	578.	12.93	169.	53.	38.	1.05
+	HYDROGRAPH AT	S501	469.	12.47	88.	26.	19.	0.61
+	2 COMBINED AT	C501	839.	12.80	253.	78.	57.	1.67
+	ROUTED TO	501502	830.	12.90	250.	75.	54.	1.67
+	HYDROGRAPH AT	S502	360.	12.33	52.	15.	11.	0.40
+	2 COMBINED AT	C502L	944.	12.80	299.	89.	64.	2.07
+	HYDROGRAPH AT	S503	819.	12.47	143.	41.	29.	0.99
+	2 COMBINED AT	C502I	1677.	12.53	436.	128.	92.	3.07
+	ROUTED TO	C5020	1577.	12.67	436.	128.	92.	3.07

+	ROUTED TO 502505	1543.	12.93	425.	118.	85.	3.07
+	HYDROGRAPH AT S504	85.	13.10	31.	8.	6.	0.33
+	2 COMBINED AT C505L	1616.	12.93	454.	126.	91.	3.39
+	HYDROGRAPH AT S505	168.	12.13	18.	5.	4.	0.14
+	ROUTED TO C503O	85.	12.33	18.	5.	4.	0.14
+	ROUTED TO 503505	83.	12.80	17.	4.	3.	0.14
+	HYDROGRAPH AT S506	159.	12.23	20.	5.	4.	0.15
+	ROUTED TO C504O	78.	12.53	20.	5.	4.	0.15
+	ROUTED TO 504505	77.	13.17	20.	5.	4.	0.15
+	HYDROGRAPH AT S507	464.	12.53	78.	20.	14.	0.67
+	3 COMBINED AT C505R	587.	12.57	115.	29.	21.	0.96
+	2 COMBINED AT C505	2044.	12.87	562.	153.	110.	4.35
+	ROUTED TO 505509	1979.	13.17	541.	138.	99.	4.35
+	HYDROGRAPH AT S508	220.	12.40	33.	8.	6.	0.29
+	2 COMBINED AT C509L	2029.	13.17	571.	146.	105.	4.65
+	HYDROGRAPH AT S509	197.	12.17	25.	7.	5.	0.17
+	ROUTED TO C506O	85.	12.47	25.	7.	5.	0.17
+	ROUTED TO 506508	84.	12.67	25.	7.	5.	0.17
+	HYDROGRAPH AT S510	109.	12.37	19.	5.	4.	0.13
+	2 COMBINED AT C508R	187.	12.37	44.	12.	9.	0.30
+	HYDROGRAPH AT S511	405.	12.27	57.	16.	12.	0.38
+	ROUTED TO C507O	92.	12.87	57.	16.	12.	0.38
+	ROUTED TO 507508	91.	13.17	56.	17.	12.	0.38
+	HYDROGRAPH AT S512	173.	12.47	32.	8.	6.	0.21
+	2 COMBINED AT C508L	248.	12.50	88.	25.	18.	0.60
+	2 COMBINED AT C508	429.	12.47	132.	37.	27.	0.90
+	ROUTED TO 508509	404.	12.97	128.	36.	26.	0.90

+	HYDROGRAPH AT S513	288.	13.00	89.	23.	16.	0.78
+	2 COMBINED AT C509R	684.	12.97	215.	58.	42.	1.67
+	2 COMBINED AT C509	2616.	13.13	766.	199.	143.	6.32
+	ROUTED TO 509510	2603.	13.23	764.	198.	143.	6.32
+	HYDROGRAPH AT S514	373.	12.73	95.	24.	17.	0.65
+	2 COMBINED AT C510	2842.	13.20	848.	219.	158.	6.97
+	ROUTED TO 510511	2777.	13.57	844.	219.	158.	6.97
+	HYDROGRAPH AT S515	855.	12.70	181.	45.	33.	1.10
+	2 COMBINED AT C511	3055.	13.53	997.	258.	186.	8.07
+	ROUTED TO 511512	2990.	13.83	990.	258.	186.	8.07
+	HYDROGRAPH AT S516	233.	12.80	58.	15.	11.	0.54
+	2 COMBINED AT C512	3057.	13.83	1032.	270.	194.	8.61
+	2 COMBINED AT WEST-3	9195.	13.20	3321.	933.	678.	28.22
+	HYDROGRAPH AT S600	1426.	12.50	266.	79.	57.	2.02
+	ROUTED TO 600601	1408.	12.57	266.	79.	57.	2.02
+	HYDROGRAPH AT S601	935.	12.37	170.	54.	39.	0.90
+	2 COMBINED AT C601	2150.	12.50	430.	132.	95.	2.92
+	ROUTED TO 601602	2124.	12.60	430.	132.	95.	2.92
+	HYDROGRAPH AT S603	355.	13.10	121.	39.	28.	0.67
+	2 COMBINED AT C602L	2289.	12.63	545.	169.	122.	3.58
+	HYDROGRAPH AT S602	1411.	12.53	302.	95.	68.	1.88
+	2 COMBINED AT C602	3603.	12.57	833.	259.	187.	5.47
+	ROUTED TO 602603	3469.	12.80	789.	216.	155.	5.47
+	HYDROGRAPH AT S606	530.	12.40	109.	34.	25.	0.66
+	2 COMBINED AT C603L	3754.	12.77	886.	246.	178.	6.13
+	HYDROGRAPH AT S605	820.	12.50	176.	55.	40.	1.09
+	HYDROGRAPH AT S604	1493.	12.80	422.	132.	96.	2.66

+	3 COMBINED AT	C603	5609.	12.77	1419.	415.	299.	9.87
+	ROUTED TO	603604	5471.	12.93	1371.	369.	266.	9.87
+	HYDROGRAPH AT	S609	310.	12.57	80.	25.	18.	0.56
+	2 COMBINED AT	C604R	5668.	12.90	1439.	390.	281.	10.43
+	HYDROGRAPH AT	S607	584.	12.50	139.	43.	31.	0.82
+	2 COMBINED AT	C604	6018.	12.90	1561.	428.	308.	11.25
+	ROUTED TO	604605	5983.	12.93	1561.	428.	308.	11.25
+	HYDROGRAPH AT	S608	532.	12.33	91.	28.	20.	0.51
+	2 COMBINED AT	C605	6121.	12.93	1639.	453.	326.	11.76
+	ROUTED TO	605606	6047.	13.07	1631.	446.	322.	11.76
+	HYDROGRAPH AT	S610	419.	12.57	107.	34.	24.	0.60
+	2 COMBINED AT	C606L	6284.	13.03	1724.	476.	343.	12.36
+	HYDROGRAPH AT	S612	592.	12.53	140.	42.	31.	0.81
+	2 COMBINED AT	C606	6588.	13.03	1845.	513.	370.	13.17
+	ROUTED TO	606608	6577.	13.07	1842.	510.	368.	13.17
+	HYDROGRAPH AT	S611	578.	12.30	93.	29.	21.	0.57
+	ROUTED TO	607608	545.	12.50	93.	29.	21.	0.57
+	HYDROGRAPH AT	S613	1139.	12.77	291.	90.	65.	1.80
+	3 COMBINED AT	C608	7608.	13.00	2173.	614.	443.	15.53
+	ROUTED TO	608609	7528.	13.13	2161.	606.	436.	15.53
+	HYDROGRAPH AT	S614	670.	12.70	174.	54.	39.	1.08
+	2 COMBINED AT	C609	7913.	13.13	2308.	652.	470.	16.61
+	ROUTED TO	609611	7771.	13.30	2279.	625.	451.	16.61
+	HYDROGRAPH AT	S617	514.	12.53	100.	30.	21.	0.68
+	2 COMBINED AT	C611R	7906.	13.30	2361.	650.	469.	17.29
+	HYDROGRAPH AT	S615	860.	12.63	221.	72.	52.	1.05
+	ROUTED TO	610611	838.	12.83	221.	72.	52.	1.05

	HYDROGRAPH AT						
+	S616	197.	13.07	71.	21.	15.	0.50
	2 COMBINED AT						
+	C611L	1003.	12.87	289.	92.	67.	1.56
	2 COMBINED AT						
+	C611	8532.	13.30	2610.	731.	527.	18.85
	ROUTED TO						
+	611613	8493.	13.33	2600.	721.	520.	18.85
	HYDROGRAPH AT						
+	S618	662.	12.57	143.	42.	30.	0.96
	2 COMBINED AT						
+	C613R	8699.	13.33	2718.	756.	545.	19.81
	HYDROGRAPH AT						
+	S619	871.	12.47	157.	49.	35.	0.83
	ROUTED TO						
+	612613	836.	12.60	157.	49.	35.	0.83
	HYDROGRAPH AT						
+	S620	342.	12.50	81.	25.	18.	0.44
	2 COMBINED AT						
+	C613L	1152.	12.60	237.	73.	53.	1.27
	2 COMBINED AT						
+	C613	9056.	13.30	2917.	819.	591.	21.08
	ROUTED TO						
+	613614	8987.	13.37	2905.	808.	583.	21.08
	HYDROGRAPH AT						
+	S621	812.	12.40	106.	27.	20.	0.92
	2 COMBINED AT						
+	C614	9018.	13.37	2989.	830.	598.	22.00
	ROUTED TO						
+	614615	8950.	13.50	2977.	819.	591.	22.00
	HYDROGRAPH AT						
+	S622	492.	12.70	105.	27.	20.	0.90
	2 COMBINED AT						
+	C615	9101.	13.47	3060.	841.	606.	22.90
	2 COMBINED AT						
+	WEST-4	16914.	13.43	6044.	1679.	1216.	51.12
	HYDROGRAPH AT						
+	S700	395.	12.50	74.	19.	14.	0.61
	HYDROGRAPH AT						
+	S701	301.	12.83	98.	28.	20.	0.72
	HYDROGRAPH AT						
+	S702	177.	12.40	31.	8.	6.	0.26
	HYDROGRAPH AT						
+	S703	206.	12.33	29.	7.	5.	0.26
	HYDROGRAPH AT						
+	S704	387.	12.27	52.	14.	10.	0.41
	ROUTED TO						
+	704705	361.	12.53	52.	14.	10.	0.41
	HYDROGRAPH AT						
+	S705	593.	12.43	103.	27.	20.	0.75
	2 COMBINED AT						
+	C705	937.	12.47	154.	41.	30.	1.16
	ROUTED TO						
+	C705O	557.	12.87	154.	41.	30.	1.16

+	ROUTED TO 705OAF	554.	13.03	154.	41.	30.	1.16
+	HYDROGRAPH AT S705AF	203.	12.30	37.	9.	7.	0.18
+	2 COMBINED AT C705AF	632.	12.90	191.	51.	37.	1.34
+	5 COMBINED AT WEST-5	1382.	12.67	412.	110.	80.	3.19
+	HYDROGRAPH AT S706	485.	12.50	91.	24.	17.	0.71
+	HYDROGRAPH AT S707	422.	12.50	87.	23.	17.	0.64
+	HYDROGRAPH AT S728	153.	12.50	32.	8.	6.	0.28
+	5 COMBINED AT WEST	17803.	13.40	6507.	1803.	1306.	55.94
+	HYDROGRAPH AT S708	828.	12.33	132.	33.	24.	0.71
+	HYDROGRAPH AT S709	524.	12.30	98.	26.	18.	0.44
+	ROUTED TO C709O	331.	12.63	98.	26.	18.	0.44
+	ROUTED TO 709710	331.	12.73	98.	26.	18.	0.44
+	HYDROGRAPH AT S710	156.	12.17	24.	6.	4.	0.11
+	2 COMBINED AT C710I	390.	12.53	122.	32.	23.	0.55
+	ROUTED TO C710O	352.	12.93	122.	32.	23.	0.55
+	HYDROGRAPH AT S711	248.	12.13	36.	9.	7.	0.16
+	ROUTED TO C711O	148.	12.37	36.	9.	7.	0.16
+	ROUTED TO 711712	148.	12.43	36.	9.	7.	0.16
+	HYDROGRAPH AT S712	117.	12.03	14.	4.	3.	0.07
+	2 COMBINED AT C712I	239.	12.07	50.	13.	9.	0.23
+	ROUTED TO C712O	195.	12.23	50.	13.	9.	0.23
+	ROUTED TO 712714	194.	12.33	50.	13.	9.	0.23
+	HYDROGRAPH AT S713	166.	12.10	23.	6.	4.	0.11
+	ROUTED TO C713O	118.	12.27	22.	6.	4.	0.11
+	ROUTED TO 713714	118.	12.30	22.	6.	4.	0.11
+	HYDROGRAPH AT S714	83.	12.13	10.	2.	2.	0.06
+	3 COMBINED AT C714	379.	12.23	82.	21.	15.	0.39

+	HYDROGRAPH AT	S715	262.	12.30	49.	13.	9.	0.22
+	HYDROGRAPH AT	S716	1129.	12.47	230.	59.	42.	1.13
+	ROUTED TO	C716O	541.	13.10	230.	59.	42.	1.13
+	ROUTED TO	716717	540.	13.23	230.	59.	42.	1.13
+	HYDROGRAPH AT	S717	448.	12.13	65.	17.	12.	0.29
+	2 COMBINED AT	C717	641.	12.20	292.	75.	54.	1.41
+	ROUTED TO	717718	601.	12.73	292.	75.	54.	1.41
+	HYDROGRAPH AT	S718	282.	12.73	100.	27.	19.	0.44
+	2 COMBINED AT	C718	877.	12.73	388.	101.	73.	1.86
+	HYDROGRAPH AT	S719	141.	12.40	39.	11.	8.	0.15
+	6 COMBINED AT	EAST-1	2370.	12.43	793.	206.	148.	3.88
+	HYDROGRAPH AT	S720	378.	12.37	83.	22.	16.	0.37
+	HYDROGRAPH AT	S721	447.	12.20	49.	12.	9.	0.34
+	ROUTED TO	C721O	192.	12.50	49.	12.	9.	0.34
+	ROUTED TO	721722	190.	12.80	49.	12.	9.	0.34
+	HYDROGRAPH AT	S722	856.	12.50	175.	44.	32.	0.95
+	2 COMBINED AT	C722	952.	12.53	223.	56.	40.	1.29
+	HYDROGRAPH AT	S723	114.	12.20	17.	4.	3.	0.09
+	HYDROGRAPH AT	S724	1253.	12.43	258.	67.	49.	1.16
+	HYDROGRAPH AT	S725	782.	12.70	200.	50.	36.	1.16
+	5 COMBINED AT	EAST-2	3167.	12.50	760.	194.	140.	4.06
+	HYDROGRAPH AT	S726	408.	12.17	44.	12.	8.	0.33
+	ROUTED TO	726727	380.	12.33	44.	12.	8.	0.33
+	HYDROGRAPH AT	S727	301.	12.47	69.	17.	13.	0.38
+	2 COMBINED AT	C727	661.	12.37	113.	29.	21.	0.71
+	4 COMBINED AT	TOTAL	20062.	13.37	7799.	2134.	1544.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 25-Year, 6-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   09AUG01  TIME  15:18:56   *
*                                       *
*****************************************
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```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX25-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 25-year, 6-hour storm event. A companion model is also created for the existing condition 25-year, 24-hour storm event. Both models (25-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 25-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                     STRM       2.64  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                 0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                 0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                 0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        2.62  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        2.59  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        2.43  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        2.14  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	447.	4.57	86.	22.	16.	0.57		
+	ROUTED TO	100102	424.	4.83	85.	22.	16.	0.57		
+	HYDROGRAPH AT	S101	621.	4.43	86.	22.	16.	0.63		
+	2 COMBINED AT	C102R	719.	4.60	159.	40.	29.	1.20		
+	HYDROGRAPH AT	S102	328.	4.63	70.	18.	13.	0.45		
+	ROUTED TO	101102	317.	4.90	70.	18.	13.	0.45		
+	HYDROGRAPH AT	S103	266.	4.70	57.	15.	10.	0.40		
+	2 COMBINED AT	C102L	516.	4.83	122.	31.	22.	0.84		
+	2 COMBINED AT	C102	1054.	4.77	262.	67.	48.	2.05		
+	ROUTED TO	102103	1033.	5.00	262.	67.	48.	2.05		
+	HYDROGRAPH AT	S104	662.	4.67	120.	30.	22.	0.90		
+	2 COMBINED AT	C103R	1401.	4.90	355.	91.	65.	2.95		
+	HYDROGRAPH AT	S105	233.	5.17	80.	21.	15.	0.59		
+	2 COMBINED AT	C103	1501.	4.93	411.	105.	76.	3.54		
+	ROUTED TO	103104	1484.	5.13	410.	105.	76.	3.54		
+	HYDROGRAPH AT	S106	387.	4.60	72.	18.	13.	0.57		

+	2 COMBINED AT	C104	1614.	5.10	456.	117.	84.	4.11
+	ROUTED TO	104105	1586.	5.33	456.	117.	84.	4.11
+	HYDROGRAPH AT	S107	415.	4.83	100.	25.	18.	0.94
+	2 COMBINED AT	C105L	1734.	5.30	515.	132.	95.	5.05
+	HYDROGRAPH AT	S200	851.	4.50	146.	37.	26.	0.96
+	ROUTED TO	200201	839.	4.57	145.	37.	26.	0.96
+	HYDROGRAPH AT	S201	378.	4.40	56.	14.	10.	0.35
+	2 COMBINED AT	C201	1033.	4.53	193.	49.	35.	1.31
+	ROUTED TO	201203	1012.	4.63	193.	49.	35.	1.31
+	HYDROGRAPH AT	S202	181.	4.23	21.	5.	4.	0.13
+	ROUTED TO	202203	172.	4.30	21.	5.	4.	0.13
+	HYDROGRAPH AT	S203	254.	4.60	59.	15.	11.	0.37
+	3 COMBINED AT	C203R	1201.	4.63	257.	65.	47.	1.81
+	HYDROGRAPH AT	S204	673.	4.63	138.	35.	25.	0.95
+	2 COMBINED AT	C203	1593.	4.67	370.	94.	68.	2.76
+	ROUTED TO	203204	1588.	4.70	369.	94.	68.	2.76
+	HYDROGRAPH AT	S205	330.	4.53	59.	15.	11.	0.41
+	2 COMBINED AT	C204	1754.	4.70	412.	105.	75.	3.17
+	ROUTED TO	204205	1730.	4.83	412.	105.	75.	3.17
+	HYDROGRAPH AT	S206	442.	4.90	122.	31.	23.	0.85
+	2 COMBINED AT	C205L	1980.	4.83	504.	129.	93.	4.03
+	HYDROGRAPH AT	S207	510.	4.90	142.	37.	26.	0.96
+	2 COMBINED AT	C205	2274.	4.87	611.	157.	113.	4.98
+	ROUTED TO	205206	2179.	5.30	610.	157.	113.	4.98
+	HYDROGRAPH AT	S208	590.	4.93	158.	40.	29.	1.10
+	2 COMBINED AT	C206	2481.	5.27	726.	187.	135.	6.09
+	ROUTED TO	206207	2467.	5.37	726.	187.	135.	6.09

+	HYDROGRAPH AT	S209	516.	4.60	87.	22.	16.	0.65
+	2 COMBINED AT	C207R	2540.	5.33	779.	201.	145.	6.74
+	HYDROGRAPH AT	S210	443.	4.47	57.	14.	10.	0.48
+	2 COMBINED AT	C207	2553.	5.33	808.	208.	150.	7.22
+	ROUTED TO	207105	2533.	5.43	807.	208.	150.	7.22
+	HYDROGRAPH AT	S211	365.	4.60	61.	15.	11.	0.49
+	2 COMBINED AT	C105R	2569.	5.43	839.	217.	156.	7.70
+	2 COMBINED AT	C105	3687.	5.47	1220.	316.	228.	12.75
+	HYDROGRAPH AT	S300	257.	5.17	86.	22.	16.	0.62
+	HYDROGRAPH AT	S301	736.	4.60	150.	38.	27.	0.99
+	2 COMBINED AT	C300	756.	4.70	217.	57.	41.	1.61
+	ROUTED TO	300301	748.	4.83	217.	57.	41.	1.61
+	HYDROGRAPH AT	S302	447.	4.50	68.	17.	12.	0.47
+	2 COMBINED AT	C301	960.	4.73	268.	70.	51.	2.07
+	ROUTED TO	301302	943.	5.00	268.	70.	51.	2.07
+	HYDROGRAPH AT	S303	503.	4.60	84.	21.	15.	0.71
+	2 COMBINED AT	C302	1147.	4.93	328.	85.	61.	2.78
+	ROUTED TO	302303	1133.	5.10	327.	85.	61.	2.78
+	HYDROGRAPH AT	S304	426.	4.73	94.	24.	17.	0.82
+	2 COMBINED AT	C303	1344.	5.07	391.	101.	73.	3.60
+	2 COMBINED AT	WEST-1	4307.	5.43	1476.	384.	277.	16.36
+	HYDROGRAPH AT	S400	719.	4.73	146.	37.	26.	1.05
+	ROUTED TO	C400O	406.	5.27	146.	37.	26.	1.05
+	ROUTED TO	400401	405.	5.57	145.	37.	26.	1.05
+	HYDROGRAPH AT	S401	420.	4.73	78.	20.	14.	0.65
+	2 COMBINED AT	C401	609.	4.93	207.	52.	38.	1.69
+	ROUTED TO	401402	601.	5.27	207.	52.	38.	1.69

+	HYDROGRAPH AT S402	524.	4.63	87.	22.	16.	0.74
+	2 COMBINED AT C402	790.	5.17	272.	69.	49.	2.43
+	ROUTED TO 402403	761.	5.57	272.	69.	49.	2.43
+	HYDROGRAPH AT S403	368.	4.83	85.	21.	15.	0.56
+	2 COMBINED AT C403	920.	5.53	341.	86.	62.	2.99
+	ROUTED TO 403404	911.	5.67	340.	86.	62.	2.99
+	HYDROGRAPH AT S404	433.	4.20	36.	9.	6.	0.26
+	2 COMBINED AT C404	910.	5.67	369.	93.	67.	3.26
+	2 COMBINED AT WEST-2	4675.	5.43	1692.	439.	316.	19.61
+	HYDROGRAPH AT S500	540.	4.93	155.	40.	29.	1.05
+	ROUTED TO 500501	533.	5.10	155.	40.	29.	1.05
+	HYDROGRAPH AT S501	496.	4.57	86.	22.	16.	0.61
+	2 COMBINED AT C501	722.	4.97	223.	58.	42.	1.67
+	ROUTED TO 501502	714.	5.07	220.	56.	41.	1.67
+	HYDROGRAPH AT S502	419.	4.40	52.	13.	9.	0.40
+	2 COMBINED AT C502L	786.	4.97	257.	66.	48.	2.07
+	HYDROGRAPH AT S503	780.	4.60	139.	35.	25.	0.99
+	2 COMBINED AT C502I	1296.	4.73	367.	94.	68.	3.07
+	ROUTED TO C502O	1255.	4.87	367.	94.	68.	3.07
+	ROUTED TO 502505	1221.	5.20	356.	90.	65.	3.07
+	HYDROGRAPH AT S504	108.	4.97	32.	8.	6.	0.33
+	2 COMBINED AT C505L	1263.	5.20	372.	94.	68.	3.39
+	HYDROGRAPH AT S505	260.	4.13	18.	5.	3.	0.14
+	ROUTED TO C503O	88.	4.37	18.	5.	3.	0.14
+	ROUTED TO 503505	86.	4.87	18.	4.	3.	0.14
+	HYDROGRAPH AT S506	203.	4.23	20.	5.	4.	0.15
+	ROUTED TO C504O	81.	4.60	20.	5.	4.	0.15

+	ROUTED TO 504505	80.	5.07	20.	5.	4.	0.15
+	HYDROGRAPH AT S507	433.	4.67	76.	19.	14.	0.67
+	3 COMBINED AT C505R	532.	4.73	107.	27.	19.	0.96
+	2 COMBINED AT C505	1536.	5.07	444.	112.	81.	4.35
+	ROUTED TO 505509	1497.	5.37	423.	106.	76.	4.35
+	HYDROGRAPH AT S508	229.	4.50	33.	8.	6.	0.29
+	2 COMBINED AT C509L	1520.	5.37	441.	110.	80.	4.65
+	HYDROGRAPH AT S509	282.	4.17	25.	6.	5.	0.17
+	ROUTED TO C506O	86.	4.50	25.	6.	5.	0.17
+	ROUTED TO 506508	86.	4.70	25.	6.	5.	0.17
+	HYDROGRAPH AT S510	121.	4.40	19.	5.	3.	0.13
+	2 COMBINED AT C508R	202.	4.43	44.	11.	8.	0.30
+	HYDROGRAPH AT S511	499.	4.30	58.	15.	10.	0.38
+	ROUTED TO C507O	93.	4.97	57.	15.	10.	0.38
+	ROUTED TO 507508	93.	5.23	56.	15.	11.	0.38
+	HYDROGRAPH AT S512	190.	4.53	32.	8.	6.	0.21
+	2 COMBINED AT C508L	256.	4.57	87.	23.	16.	0.60
+	2 COMBINED AT C508	426.	4.53	126.	33.	24.	0.90
+	ROUTED TO 508509	403.	5.07	122.	33.	24.	0.90
+	HYDROGRAPH AT S513	267.	5.17	85.	22.	16.	0.78
+	2 COMBINED AT C509R	607.	5.13	192.	51.	37.	1.67
+	2 COMBINED AT C509	1928.	5.30	579.	148.	107.	6.32
+	ROUTED TO 509510	1921.	5.40	578.	148.	106.	6.32
+	HYDROGRAPH AT S514	367.	4.87	96.	24.	17.	0.65
+	2 COMBINED AT C510	2105.	5.37	646.	165.	119.	6.97
+	ROUTED TO 510511	2061.	5.73	643.	165.	119.	6.97
+	HYDROGRAPH AT S515	785.	4.83	171.	43.	31.	1.10

+	2 COMBINED AT	C511	2304.	5.67	771.	198.	143.	8.07
+	ROUTED TO	511512	2267.	6.00	766.	197.	142.	8.07
+	HYDROGRAPH AT	S516	213.	4.97	58.	14.	10.	0.54
+	2 COMBINED AT	C512	2300.	5.97	788.	204.	147.	8.61
+	2 COMBINED AT	WEST-3	5421.	5.73	2159.	566.	408.	28.22
+	HYDROGRAPH AT	S600	1003.	4.73	223.	56.	41.	2.02
+	ROUTED TO	600601	998.	4.83	223.	56.	41.	2.02
+	HYDROGRAPH AT	S601	965.	4.43	166.	42.	30.	0.90
+	2 COMBINED AT	C601	1493.	4.70	364.	92.	67.	2.92
+	ROUTED TO	601602	1478.	4.80	364.	92.	67.	2.92
+	HYDROGRAPH AT	S603	994.	4.30	122.	31.	22.	0.67
+	2 COMBINED AT	C602L	1716.	4.73	463.	118.	85.	3.58
+	HYDROGRAPH AT	S602	1136.	4.73	271.	69.	50.	1.88
+	2 COMBINED AT	C602	2500.	4.73	684.	174.	126.	5.47
+	ROUTED TO	602603	2418.	4.97	639.	160.	116.	5.47
+	HYDROGRAPH AT	S606	563.	4.47	106.	27.	19.	0.66
+	2 COMBINED AT	C603L	2620.	4.93	716.	180.	130.	6.13
+	HYDROGRAPH AT	S605	759.	4.63	164.	42.	30.	1.09
+	HYDROGRAPH AT	S604	1137.	5.10	362.	94.	68.	2.66
+	3 COMBINED AT	C603	3665.	4.93	1111.	284.	205.	9.87
+	ROUTED TO	603604	3590.	5.10	1062.	268.	193.	9.87
+	HYDROGRAPH AT	S609	332.	4.63	79.	20.	15.	0.56
+	2 COMBINED AT	C604R	3692.	5.10	1107.	279.	201.	10.43
+	HYDROGRAPH AT	S607	584.	4.60	133.	34.	24.	0.82
+	2 COMBINED AT	C604	3925.	5.07	1200.	304.	219.	11.25
+	ROUTED TO	604605	3913.	5.10	1200.	304.	219.	11.25
+	HYDROGRAPH AT	S608	636.	4.37	91.	23.	17.	0.51

+	2 COMBINED AT C605	4014.	5.10	1263.	320.	231.	11.76
+	ROUTED TO 605606	3979.	5.23	1254.	317.	229.	11.76
+	HYDROGRAPH AT S610	453.	4.67	104.	27.	19.	0.60
+	2 COMBINED AT C606L	4145.	5.20	1326.	336.	242.	12.36
+	HYDROGRAPH AT S612	602.	4.60	136.	35.	25.	0.81
+	2 COMBINED AT C606	4367.	5.17	1422.	361.	260.	13.17
+	ROUTED TO 606608	4364.	5.20	1419.	360.	260.	13.17
+	HYDROGRAPH AT S611	679.	4.37	92.	23.	17.	0.57
+	ROUTED TO 607608	624.	4.60	92.	23.	17.	0.57
+	HYDROGRAPH AT S613	950.	5.00	261.	67.	48.	1.80
+	3 COMBINED AT C608	5006.	5.17	1656.	422.	304.	15.53
+	ROUTED TO 608609	4956.	5.30	1645.	419.	302.	15.53
+	HYDROGRAPH AT S614	618.	4.83	161.	41.	30.	1.08
+	2 COMBINED AT C609	5183.	5.30	1745.	445.	321.	16.61
+	ROUTED TO 609611	5100.	5.53	1715.	435.	314.	16.61
+	HYDROGRAPH AT S617	531.	4.63	98.	25.	18.	0.68
+	2 COMBINED AT C611R	5162.	5.50	1766.	449.	324.	17.29
+	HYDROGRAPH AT S615	878.	4.73	213.	54.	39.	1.05
+	ROUTED TO 610611	860.	4.93	213.	54.	39.	1.05
+	HYDROGRAPH AT S616	212.	5.13	71.	19.	13.	0.50
+	2 COMBINED AT C611L	976.	5.00	271.	70.	51.	1.56
+	2 COMBINED AT C611	5581.	5.50	1956.	500.	361.	18.85
+	ROUTED TO 611613	5555.	5.53	1945.	496.	358.	18.85
+	HYDROGRAPH AT S618	624.	4.67	137.	35.	25.	0.96
+	2 COMBINED AT C613R	5661.	5.53	2020.	516.	372.	19.81
+	HYDROGRAPH AT S619	928.	4.53	154.	39.	28.	0.83
+	ROUTED TO 612613	891.	4.70	153.	39.	28.	0.83

+	HYDROGRAPH AT	S620	395.	4.53	81.	21.	15.	0.44
+	2 COMBINED AT	C613L	1141.	4.70	228.	58.	41.	1.27
+	2 COMBINED AT	C613	5901.	5.50	2170.	557.	401.	21.08
+	ROUTED TO	613614	5858.	5.57	2158.	552.	398.	21.08
+	HYDROGRAPH AT	S621	755.	4.50	101.	25.	18.	0.92
+	2 COMBINED AT	C614	5843.	5.57	2194.	562.	405.	22.00
+	ROUTED TO	614615	5787.	5.67	2181.	557.	402.	22.00
+	HYDROGRAPH AT	S622	431.	4.87	100.	25.	18.	0.90
+	2 COMBINED AT	C615	5833.	5.67	2216.	566.	408.	22.90
+	2 COMBINED AT	WEST-4	9014.	5.73	3722.	971.	700.	51.12
+	HYDROGRAPH AT	S700	401.	4.60	75.	19.	14.	0.61
+	HYDROGRAPH AT	S701	291.	5.00	96.	25.	18.	0.72
+	HYDROGRAPH AT	S702	192.	4.47	32.	8.	6.	0.26
+	HYDROGRAPH AT	S703	232.	4.40	30.	8.	5.	0.26
+	HYDROGRAPH AT	S704	459.	4.33	53.	13.	10.	0.41
+	ROUTED TO	704705	411.	4.63	53.	13.	10.	0.41
+	HYDROGRAPH AT	S705	592.	4.53	103.	26.	19.	0.75
+	2 COMBINED AT	C705	864.	4.60	146.	37.	26.	1.16
+	ROUTED TO	C705O	530.	5.00	146.	37.	26.	1.16
+	ROUTED TO	705OAF	527.	5.17	146.	37.	26.	1.16
+	HYDROGRAPH AT	S705AF	240.	4.33	33.	8.	6.	0.18
+	2 COMBINED AT	C705AF	581.	5.07	176.	44.	32.	1.34
+	5 COMBINED AT	WEST-5	1135.	4.83	347.	88.	64.	3.19
+	HYDROGRAPH AT	S706	464.	4.63	90.	23.	16.	0.71
+	HYDROGRAPH AT	S707	422.	4.60	87.	22.	16.	0.64
+	HYDROGRAPH AT	S728	153.	4.60	32.	8.	6.	0.28
+	5 COMBINED AT	WEST	9223.	5.70	3911.	1021.	736.	55.94

+	HYDROGRAPH AT S708	913.	4.40	125.	31.	23.	0.71
+	HYDROGRAPH AT S709	628.	4.37	85.	21.	15.	0.44
+	ROUTED TO C709O	355.	4.70	85.	21.	15.	0.44
+	ROUTED TO 709710	354.	4.80	85.	21.	15.	0.44
+	HYDROGRAPH AT S710	214.	4.17	22.	5.	4.	0.11
+	2 COMBINED AT C710I	402.	4.47	107.	27.	19.	0.55
+	ROUTED TO C710O	356.	4.97	107.	27.	19.	0.55
+	HYDROGRAPH AT S711	353.	4.17	31.	8.	6.	0.16
+	ROUTED TO C711O	159.	4.40	31.	8.	6.	0.16
+	ROUTED TO 711712	159.	4.43	31.	8.	6.	0.16
+	HYDROGRAPH AT S712	182.	4.07	13.	3.	2.	0.07
+	2 COMBINED AT C712I	299.	4.07	44.	11.	8.	0.23
+	ROUTED TO C712O	211.	4.23	44.	11.	8.	0.23
+	ROUTED TO 712714	210.	4.33	44.	11.	8.	0.23
+	HYDROGRAPH AT S713	243.	4.13	21.	5.	4.	0.11
+	ROUTED TO C713O	140.	4.30	21.	5.	4.	0.11
+	ROUTED TO 713714	140.	4.30	21.	5.	4.	0.11
+	HYDROGRAPH AT S714	117.	4.13	10.	2.	2.	0.06
+	3 COMBINED AT C714	438.	4.20	74.	19.	13.	0.39
+	HYDROGRAPH AT S715	314.	4.33	42.	11.	8.	0.22
+	HYDROGRAPH AT S716	1110.	4.57	205.	51.	37.	1.13
+	ROUTED TO C716O	537.	5.17	205.	51.	37.	1.13
+	ROUTED TO 716717	536.	5.33	205.	51.	37.	1.13
+	HYDROGRAPH AT S717	637.	4.17	57.	14.	10.	0.29
+	2 COMBINED AT C717	629.	4.20	260.	65.	47.	1.41
+	ROUTED TO 717718	570.	4.77	259.	65.	47.	1.41
+	HYDROGRAPH AT S718	318.	4.77	89.	22.	16.	0.44

+	2 COMBINED AT	C718	837.	4.87	345.	86.	62.	1.86
+	HYDROGRAPH AT	S719	168.	4.40	35.	9.	6.	0.15
+	6 COMBINED AT	EAST-1	2175.	4.60	695.	174.	125.	3.88
+	HYDROGRAPH AT	S720	444.	4.43	73.	18.	13.	0.37
+	HYDROGRAPH AT	S721	594.	4.23	50.	13.	9.	0.34
+	ROUTED TO	C721O	206.	4.53	50.	13.	9.	0.34
+	ROUTED TO	721722	203.	4.83	50.	13.	9.	0.34
+	HYDROGRAPH AT	S722	846.	4.60	162.	41.	29.	0.95
+	2 COMBINED AT	C722	928.	4.70	207.	52.	37.	1.29
+	HYDROGRAPH AT	S723	153.	4.20	16.	4.	3.	0.09
+	HYDROGRAPH AT	S724	1244.	4.50	223.	56.	40.	1.16
+	HYDROGRAPH AT	S725	725.	4.83	188.	47.	34.	1.16
+	5 COMBINED AT	EAST-2	2658.	4.67	668.	167.	120.	4.06
+	HYDROGRAPH AT	S726	579.	4.17	45.	11.	8.	0.33
+	ROUTED TO	726727	505.	4.37	45.	11.	8.	0.33
+	HYDROGRAPH AT	S727	340.	4.50	66.	16.	12.	0.38
+	2 COMBINED AT	C727	738.	4.40	108.	27.	20.	0.71
+	4 COMBINED AT	TOTAL	10624.	5.50	4821.	1249.	900.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 25-Year, 24-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   09AUG01  TIME  15:15:49  *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX25-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 25-year, 24-hour storm event. A companion model is also created for the existing condition 25-year, 6-hour storm event. Both models (25-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 25-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                     STRM       3.31  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 3.29 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 3.21 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 3.11 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 3.00 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 2.83 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	320.	12.53	72.	22.	16.	0.57		
+	ROUTED TO	100102	305.	12.80	72.	22.	16.	0.57		
+	HYDROGRAPH AT	S101	449.	12.40	72.	20.	15.	0.63		
+	2 COMBINED AT	C102R	612.	12.50	143.	42.	30.	1.20		
+	HYDROGRAPH AT	S102	224.	12.63	59.	18.	13.	0.45		
+	ROUTED TO	101102	217.	12.90	59.	18.	13.	0.45		
+	HYDROGRAPH AT	S103	188.	12.70	47.	14.	10.	0.40		
+	2 COMBINED AT	C102L	390.	12.83	106.	32.	23.	0.84		

+	2 COMBINED AT	C102	919.	12.70	245.	73.	53.	2.05
+	ROUTED TO	102103	902.	12.93	245.	73.	53.	2.05
+	HYDROGRAPH AT	S104	538.	12.60	103.	29.	21.	0.90
+	2 COMBINED AT	C103R	1290.	12.80	343.	100.	72.	2.95
+	HYDROGRAPH AT	S105	232.	12.80	67.	19.	14.	0.59
+	2 COMBINED AT	C103	1510.	12.80	407.	118.	85.	3.54
+	ROUTED TO	103104	1492.	13.00	406.	118.	85.	3.54
+	HYDROGRAPH AT	S106	282.	12.57	58.	16.	11.	0.57
+	2 COMBINED AT	C104	1665.	12.97	461.	132.	96.	4.11
+	ROUTED TO	104105	1636.	13.20	460.	132.	96.	4.11
+	HYDROGRAPH AT	S107	355.	12.73	84.	21.	15.	0.94
+	2 COMBINED AT	C105L	1860.	13.17	538.	152.	110.	5.05
+	HYDROGRAPH AT	S200	675.	12.47	129.	41.	30.	0.96
+	ROUTED TO	200201	659.	12.50	129.	41.	30.	0.96
+	HYDROGRAPH AT	S201	245.	12.37	47.	15.	11.	0.35
+	2 COMBINED AT	C201	874.	12.47	175.	55.	40.	1.31
+	ROUTED TO	201203	856.	12.57	175.	55.	40.	1.31
+	HYDROGRAPH AT	S202	106.	12.23	17.	5.	4.	0.13
+	ROUTED TO	202203	103.	12.30	17.	5.	4.	0.13
+	HYDROGRAPH AT	S203	172.	12.60	50.	16.	12.	0.37
+	3 COMBINED AT	C203R	1085.	12.57	240.	76.	55.	1.81
+	HYDROGRAPH AT	S204	543.	12.57	123.	39.	28.	0.95
+	2 COMBINED AT	C203	1603.	12.57	358.	113.	82.	2.76
+	ROUTED TO	203204	1594.	12.60	358.	113.	82.	2.76
+	HYDROGRAPH AT	S205	226.	12.50	49.	14.	10.	0.41
+	2 COMBINED AT	C204	1797.	12.60	404.	127.	92.	3.17
+	ROUTED TO	204205	1760.	12.73	404.	127.	92.	3.17

+	HYDROGRAPH AT	S206	355.	12.83	108.	33.	24.	0.85
+	2 COMBINED AT	C205L	2083.	12.73	506.	158.	115.	4.03
+	HYDROGRAPH AT	S207	415.	12.83	128.	41.	29.	0.96
+	2 COMBINED AT	C205	2464.	12.77	627.	197.	142.	4.98
+	ROUTED TO	205206	2345.	13.17	627.	196.	142.	4.98
+	HYDROGRAPH AT	S208	500.	12.87	141.	42.	31.	1.10
+	2 COMBINED AT	C206	2709.	13.17	753.	234.	170.	6.09
+	ROUTED TO	206207	2673.	13.23	753.	234.	170.	6.09
+	HYDROGRAPH AT	S209	382.	12.57	73.	21.	15.	0.65
+	2 COMBINED AT	C207R	2790.	13.23	816.	252.	183.	6.74
+	HYDROGRAPH AT	S210	298.	12.43	45.	11.	8.	0.48
+	2 COMBINED AT	C207	2833.	13.23	854.	261.	190.	7.22
+	ROUTED TO	207105	2800.	13.33	853.	261.	190.	7.22
+	HYDROGRAPH AT	S211	254.	12.57	48.	12.	9.	0.49
+	2 COMBINED AT	C105R	2868.	13.33	893.	271.	197.	7.70
+	2 COMBINED AT	C105	4423.	13.30	1368.	406.	294.	12.75
+	HYDROGRAPH AT	S300	305.	12.63	76.	23.	17.	0.62
+	HYDROGRAPH AT	S301	599.	12.53	134.	42.	31.	0.99
+	2 COMBINED AT	C300	887.	12.57	207.	65.	47.	1.61
+	ROUTED TO	300301	870.	12.70	207.	65.	47.	1.61
+	HYDROGRAPH AT	S302	299.	12.50	57.	17.	12.	0.47
+	2 COMBINED AT	C301	1107.	12.67	261.	81.	58.	2.07
+	ROUTED TO	301302	1070.	12.90	261.	81.	58.	2.07
+	HYDROGRAPH AT	S303	384.	12.53	71.	19.	14.	0.71
+	2 COMBINED AT	C302	1313.	12.87	328.	99.	72.	2.78
+	ROUTED TO	302303	1293.	13.03	327.	99.	72.	2.78
+	HYDROGRAPH AT	S304	349.	12.67	79.	20.	15.	0.82

+	2 COMBINED AT	C303	1547.	13.00	402.	118.	86.	3.60
+	2 COMBINED AT	WEST-1	5509.	13.27	1714.	508.	369.	16.36
+	HYDROGRAPH AT	S400	601.	12.67	125.	35.	25.	1.05
+	ROUTED TO	C400O	370.	13.10	125.	35.	25.	1.05
+	ROUTED TO	400401	368.	13.43	125.	35.	25.	1.05
+	HYDROGRAPH AT	S401	324.	12.67	65.	17.	13.	0.65
+	2 COMBINED AT	C401	568.	12.83	188.	52.	37.	1.69
+	ROUTED TO	401402	560.	13.17	188.	52.	37.	1.69
+	HYDROGRAPH AT	S402	419.	12.57	72.	19.	13.	0.74
+	2 COMBINED AT	C402	740.	13.10	256.	70.	50.	2.43
+	ROUTED TO	402403	710.	13.50	256.	69.	50.	2.43
+	HYDROGRAPH AT	S403	278.	12.80	70.	17.	13.	0.56
+	2 COMBINED AT	C403	864.	13.47	323.	86.	62.	2.99
+	ROUTED TO	403404	855.	13.60	322.	86.	62.	2.99
+	HYDROGRAPH AT	S404	261.	12.20	28.	7.	5.	0.26
+	2 COMBINED AT	C404	855.	13.60	348.	93.	67.	3.26
+	2 COMBINED AT	WEST-2	6103.	13.27	2007.	586.	425.	19.61
+	HYDROGRAPH AT	S500	448.	12.83	141.	45.	32.	1.05
+	ROUTED TO	500501	442.	13.03	141.	45.	32.	1.05
+	HYDROGRAPH AT	S501	356.	12.53	72.	22.	16.	0.61
+	2 COMBINED AT	C501	640.	12.90	210.	66.	48.	1.67
+	ROUTED TO	501502	633.	13.00	207.	63.	45.	1.67
+	HYDROGRAPH AT	S502	273.	12.37	43.	12.	9.	0.40
+	2 COMBINED AT	C502L	718.	12.90	247.	74.	53.	2.07
+	HYDROGRAPH AT	S503	638.	12.53	120.	34.	25.	0.99
+	2 COMBINED AT	C502I	1273.	12.57	361.	107.	77.	3.07
+	ROUTED TO	C502O	1221.	12.70	361.	107.	77.	3.07

+	ROUTED TO	502505	1188.	13.07	351.	97.	70.	3.07
+	HYDROGRAPH AT	S504	78.	12.90	25.	6.	4.	0.33
+	2 COMBINED AT	C505L	1257.	13.07	373.	103.	74.	3.39
+	HYDROGRAPH AT	S505	133.	12.17	15.	4.	3.	0.14
+	ROUTED TO	C503O	78.	12.33	15.	4.	3.	0.14
+	ROUTED TO	503505	76.	12.80	14.	4.	3.	0.14
+	HYDROGRAPH AT	S506	126.	12.23	16.	4.	3.	0.15
+	ROUTED TO	C504O	72.	12.50	16.	4.	3.	0.15
+	ROUTED TO	504505	71.	13.17	16.	4.	3.	0.15
+	HYDROGRAPH AT	S507	343.	12.63	63.	16.	11.	0.67
+	3 COMBINED AT	C505R	465.	12.67	93.	24.	17.	0.96
+	2 COMBINED AT	C505	1598.	12.97	460.	125.	90.	4.35
+	ROUTED TO	505509	1556.	13.27	439.	111.	80.	4.35
+	HYDROGRAPH AT	S508	162.	12.47	27.	7.	5.	0.29
+	2 COMBINED AT	C509L	1598.	13.23	462.	118.	85.	4.65
+	HYDROGRAPH AT	S509	158.	12.20	21.	6.	4.	0.17
+	ROUTED TO	C506O	78.	12.47	21.	6.	4.	0.17
+	ROUTED TO	506508	78.	12.67	21.	6.	4.	0.17
+	HYDROGRAPH AT	S510	85.	12.40	15.	4.	3.	0.13
+	2 COMBINED AT	C508R	158.	12.43	36.	10.	7.	0.30
+	HYDROGRAPH AT	S511	325.	12.27	48.	14.	10.	0.38
+	ROUTED TO	C507O	88.	12.87	48.	14.	10.	0.38
+	ROUTED TO	507508	87.	13.17	47.	14.	10.	0.38
+	HYDROGRAPH AT	S512	136.	12.50	26.	7.	5.	0.21
+	2 COMBINED AT	C508L	210.	12.53	73.	21.	15.	0.60
+	2 COMBINED AT	C508	364.	12.50	110.	31.	22.	0.90
+	ROUTED TO	508509	344.	13.03	106.	30.	22.	0.90

+	HYDROGRAPH AT S513	223.	13.07	72.	18.	13.	0.78
+	2 COMBINED AT C509R	560.	13.03	176.	48.	35.	1.67
+	2 COMBINED AT C509	2084.	13.20	621.	161.	116.	6.32
+	ROUTED TO 509510	2070.	13.30	620.	160.	116.	6.32
+	HYDROGRAPH AT S514	284.	12.83	79.	20.	14.	0.65
+	2 COMBINED AT C510	2263.	13.27	688.	178.	128.	6.97
+	ROUTED TO 510511	2210.	13.63	685.	178.	128.	6.97
+	HYDROGRAPH AT S515	516.	13.07	147.	37.	26.	1.10
+	2 COMBINED AT C511	2537.	13.60	810.	210.	151.	8.07
+	ROUTED TO 511512	2489.	13.93	804.	209.	151.	8.07
+	HYDROGRAPH AT S516	165.	12.90	46.	12.	8.	0.54
+	2 COMBINED AT C512	2545.	13.93	835.	219.	158.	8.61
+	2 COMBINED AT WEST-3	7083.	13.60	2707.	768.	559.	28.22
+	HYDROGRAPH AT S600	1057.	12.60	216.	65.	47.	2.02
+	ROUTED TO 600601	1033.	12.63	216.	65.	47.	2.02
+	HYDROGRAPH AT S601	753.	12.40	146.	47.	34.	0.90
+	2 COMBINED AT C601	1618.	12.57	357.	110.	80.	2.92
+	ROUTED TO 601602	1601.	12.67	357.	110.	80.	2.92
+	HYDROGRAPH AT S603	688.	12.27	105.	33.	24.	0.67
+	2 COMBINED AT C602L	1873.	12.60	457.	142.	103.	3.58
+	HYDROGRAPH AT S602	1092.	12.60	253.	80.	58.	1.88
+	2 COMBINED AT C602	2904.	12.60	697.	219.	158.	5.47
+	ROUTED TO 602603	2774.	12.83	653.	176.	127.	5.47
+	HYDROGRAPH AT S606	412.	12.47	92.	29.	21.	0.66
+	2 COMBINED AT C603L	3016.	12.80	735.	202.	145.	6.13
+	HYDROGRAPH AT S605	635.	12.57	148.	47.	34.	1.09
+	HYDROGRAPH AT S604	1144.	12.90	353.	112.	81.	2.66

+	3 COMBINED AT	C603	4426.	12.80	1178.	344.	248.	9.87
+	ROUTED TO	603604	4319.	12.97	1130.	300.	216.	9.87
+	HYDROGRAPH AT	S609	232.	12.63	66.	20.	15.	0.56
+	2 COMBINED AT	C604R	4472.	12.97	1186.	318.	229.	10.43
+	HYDROGRAPH AT	S607	278.	13.13	114.	36.	26.	0.82
+	2 COMBINED AT	C604	4689.	12.97	1284.	350.	252.	11.25
+	ROUTED TO	604605	4665.	13.00	1283.	350.	252.	11.25
+	HYDROGRAPH AT	S608	427.	12.37	77.	24.	17.	0.51
+	2 COMBINED AT	C605	4783.	13.00	1350.	371.	268.	11.76
+	ROUTED TO	605606	4725.	13.10	1342.	365.	263.	11.76
+	HYDROGRAPH AT	S610	331.	12.63	91.	29.	21.	0.60
+	2 COMBINED AT	C606L	4923.	13.10	1421.	390.	281.	12.36
+	HYDROGRAPH AT	S612	467.	12.57	118.	36.	26.	0.81
+	2 COMBINED AT	C606	5172.	13.10	1523.	422.	304.	13.17
+	ROUTED TO	606608	5163.	13.10	1520.	419.	302.	13.17
+	HYDROGRAPH AT	S611	451.	12.33	78.	25.	18.	0.57
+	ROUTED TO	607608	425.	12.60	78.	25.	18.	0.57
+	HYDROGRAPH AT	S613	879.	12.87	244.	77.	55.	1.80
+	3 COMBINED AT	C608	5996.	13.07	1796.	507.	366.	15.53
+	ROUTED TO	608609	5936.	13.20	1785.	498.	359.	15.53
+	HYDROGRAPH AT	S614	515.	12.77	145.	46.	33.	1.08
+	2 COMBINED AT	C609	6248.	13.20	1907.	538.	388.	16.61
+	ROUTED TO	609611	6124.	13.40	1879.	511.	368.	16.61
+	HYDROGRAPH AT	S617	395.	12.60	84.	25.	18.	0.68
+	2 COMBINED AT	C611R	6235.	13.40	1946.	532.	384.	17.29
+	HYDROGRAPH AT	S615	696.	12.70	190.	62.	45.	1.05
+	ROUTED TO	610611	680.	12.90	190.	62.	45.	1.05

+	HYDROGRAPH AT	S616	163.	13.07	59.	18.	13.	0.50
+	2 COMBINED AT	C611L	825.	12.93	247.	79.	58.	1.56
+	2 COMBINED AT	C611	6739.	13.37	2159.	602.	434.	18.85
+	ROUTED TO	611613	6721.	13.43	2149.	592.	427.	18.85
+	HYDROGRAPH AT	S618	511.	12.63	120.	35.	26.	0.96
+	2 COMBINED AT	C613R	6889.	13.40	2247.	621.	448.	19.81
+	HYDROGRAPH AT	S619	704.	12.50	133.	41.	30.	0.83
+	ROUTED TO	612613	679.	12.67	133.	41.	30.	0.83
+	HYDROGRAPH AT	S620	273.	12.53	69.	21.	16.	0.44
+	2 COMBINED AT	C613L	929.	12.67	201.	63.	45.	1.27
+	2 COMBINED AT	C613	7179.	13.40	2416.	676.	487.	21.08
+	ROUTED TO	613614	7132.	13.47	2405.	665.	479.	21.08
+	HYDROGRAPH AT	S621	612.	12.43	86.	22.	16.	0.92
+	2 COMBINED AT	C614	7162.	13.47	2471.	682.	491.	22.00
+	ROUTED TO	614615	7099.	13.57	2459.	672.	484.	22.00
+	HYDROGRAPH AT	S622	364.	12.80	85.	22.	16.	0.90
+	2 COMBINED AT	C615	7224.	13.57	2525.	689.	497.	22.90
+	2 COMBINED AT	WEST-4	13280.	13.63	4910.	1367.	991.	51.12
+	HYDROGRAPH AT	S700	297.	12.57	61.	16.	12.	0.61
+	HYDROGRAPH AT	S701	228.	12.93	81.	23.	17.	0.72
+	HYDROGRAPH AT	S702	132.	12.43	25.	7.	5.	0.26
+	HYDROGRAPH AT	S703	155.	12.37	23.	6.	4.	0.26
+	HYDROGRAPH AT	S704	299.	12.30	43.	12.	9.	0.41
+	ROUTED TO	704705	279.	12.57	43.	12.	9.	0.41
+	HYDROGRAPH AT	S705	455.	12.50	84.	22.	16.	0.75
+	2 COMBINED AT	C705	723.	12.53	126.	34.	25.	1.16
+	ROUTED TO	C705O	475.	12.87	126.	34.	25.	1.16

+	ROUTED TO 705OAF	471.	13.10	126.	34.	25.	1.16
+	HYDROGRAPH AT S705AF	168.	12.33	30.	8.	6.	0.18
+	2 COMBINED AT C705AF	533.	13.00	156.	41.	30.	1.34
+	5 COMBINED AT WEST-5	1105.	12.80	337.	91.	66.	3.19
+	HYDROGRAPH AT S706	365.	12.57	75.	20.	14.	0.71
+	HYDROGRAPH AT S707	320.	12.57	71.	19.	14.	0.64
+	HYDROGRAPH AT S728	112.	12.57	26.	6.	5.	0.28
+	5 COMBINED AT WEST	13865.	13.63	5275.	1465.	1062.	55.94
+	HYDROGRAPH AT S708	684.	12.37	109.	27.	20.	0.71
+	HYDROGRAPH AT S709	435.	12.33	82.	21.	15.	0.44
+	ROUTED TO C709O	294.	12.67	82.	21.	15.	0.44
+	ROUTED TO 709710	293.	12.73	82.	21.	15.	0.44
+	HYDROGRAPH AT S710	133.	12.20	19.	5.	4.	0.11
+	2 COMBINED AT C710I	345.	12.57	101.	26.	19.	0.55
+	ROUTED TO C710O	313.	12.93	101.	26.	19.	0.55
+	HYDROGRAPH AT S711	213.	12.17	30.	8.	6.	0.16
+	ROUTED TO C711O	138.	12.37	30.	8.	6.	0.16
+	ROUTED TO 711712	137.	12.43	30.	8.	6.	0.16
+	HYDROGRAPH AT S712	101.	12.03	12.	3.	2.	0.07
+	2 COMBINED AT C712I	219.	12.10	42.	11.	8.	0.23
+	ROUTED TO C712O	182.	12.23	42.	11.	8.	0.23
+	ROUTED TO 712714	181.	12.33	42.	11.	8.	0.23
+	HYDROGRAPH AT S713	143.	12.13	19.	5.	3.	0.11
+	ROUTED TO C713O	102.	12.27	19.	5.	3.	0.11
+	ROUTED TO 713714	101.	12.33	19.	5.	3.	0.11
+	HYDROGRAPH AT S714	69.	12.17	8.	2.	1.	0.06
+	3 COMBINED AT C714	337.	12.23	68.	17.	12.	0.39

+	HYDROGRAPH AT	S715	218.	12.33	41.	10.	8.	0.22
+	HYDROGRAPH AT	S716	926.	12.50	189.	48.	35.	1.13
+	ROUTED TO	C716O	498.	13.10	189.	48.	35.	1.13
+	ROUTED TO	716717	497.	13.23	189.	48.	35.	1.13
+	HYDROGRAPH AT	S717	386.	12.17	54.	14.	10.	0.29
+	2 COMBINED AT	C717	545.	12.77	241.	61.	44.	1.41
+	ROUTED TO	717718	537.	13.33	241.	61.	44.	1.41
+	HYDROGRAPH AT	S718	229.	12.80	83.	22.	16.	0.44
+	2 COMBINED AT	C718	730.	12.80	321.	82.	59.	1.86
+	HYDROGRAPH AT	S719	118.	12.40	34.	10.	7.	0.15
+	6 COMBINED AT	EAST-1	1997.	12.47	656.	168.	121.	3.88
+	HYDROGRAPH AT	S720	314.	12.40	69.	18.	13.	0.37
+	HYDROGRAPH AT	S721	369.	12.20	41.	10.	7.	0.34
+	ROUTED TO	C721O	170.	12.50	41.	10.	7.	0.34
+	ROUTED TO	721722	167.	12.87	40.	10.	7.	0.34
+	HYDROGRAPH AT	S722	689.	12.57	144.	36.	26.	0.95
+	2 COMBINED AT	C722	781.	12.60	183.	46.	33.	1.29
+	HYDROGRAPH AT	S723	97.	12.20	14.	4.	3.	0.09
+	HYDROGRAPH AT	S724	1040.	12.47	215.	55.	40.	1.16
+	HYDROGRAPH AT	S725	616.	12.77	164.	41.	29.	1.16
+	5 COMBINED AT	EAST-2	2564.	12.53	626.	159.	114.	4.06
+	HYDROGRAPH AT	S726	329.	12.17	36.	10.	7.	0.33
+	ROUTED TO	726727	309.	12.37	36.	10.	7.	0.33
+	HYDROGRAPH AT	S727	243.	12.50	57.	14.	10.	0.38
+	2 COMBINED AT	C727	531.	12.40	93.	24.	17.	0.71
+	4 COMBINED AT	TOTAL	15375.	13.57	6323.	1731.	1254.	64.59

**** NORMAL END OF HEC-1 ***

Existing Condition 10-Year, 6-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1*************************************                    *************************************
*                                   *                    *                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *  U.S. ARMY CORPS OF ENGINEERS     *
*            JUN  1998              *                    *  HYDROLOGIC ENGINEERING CENTER    *
*          VERSION 4.1              *                    *        609 SECOND STREET          *
*                                   *                    *     DAVIS, CALIFORNIA 95616       *
* RUN DATE   09AUG01  TIME  15:12:58*                    *        (916) 756-1104             *
*                                   *                    *                                   *
*************************************                    *************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX10-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 10-year, 6-hour storm event. A companion model is also created for the existing condition 10-year, 24-hour storm event. Both models 10-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 10-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                     STRM       2.18  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                 0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                 0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                 0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        2.17  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        2.14  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        2.01  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        1.77  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	292.	4.67	65.	16.	12.	0.57		
+	ROUTED TO	100102	282.	4.97	64.	16.	12.	0.57		
+	HYDROGRAPH AT	S101	390.	4.53	63.	16.	11.	0.63		
+	2 COMBINED AT	C102R	472.	4.77	115.	29.	21.	1.20		
+	HYDROGRAPH AT	S102	218.	4.77	54.	14.	10.	0.45		
+	ROUTED TO	101102	211.	5.03	54.	14.	10.	0.45		
+	HYDROGRAPH AT	S103	165.	4.87	42.	11.	8.	0.40		
+	2 COMBINED AT	C102L	332.	5.00	90.	23.	17.	0.84		
+	2 COMBINED AT	C102	662.	4.90	184.	47.	34.	2.05		
+	ROUTED TO	102103	650.	5.17	184.	47.	34.	2.05		
+	HYDROGRAPH AT	S104	397.	4.83	86.	22.	16.	0.90		
+	2 COMBINED AT	C103R	859.	5.10	244.	63.	45.	2.95		
+	HYDROGRAPH AT	S105	186.	5.07	59.	15.	11.	0.59		
+	2 COMBINED AT	C103	957.	5.10	282.	73.	52.	3.54		
+	ROUTED TO	103104	944.	5.33	282.	73.	52.	3.54		
+	HYDROGRAPH AT	S106	230.	4.77	51.	13.	9.	0.57		
+	2 COMBINED AT	C104	1011.	5.30	309.	80.	58.	4.11		

+	ROUTED TO 104105	985.	5.60	309.	80.	58.	4.11
+	HYDROGRAPH AT S107	220.	5.10	67.	17.	12.	0.94
+	2 COMBINED AT C105L	1044.	5.60	340.	88.	63.	5.05
+	HYDROGRAPH AT S200	566.	4.60	111.	28.	20.	0.96
+	ROUTED TO 200201	560.	4.70	111.	28.	20.	0.96
+	HYDROGRAPH AT S201	258.	4.47	44.	11.	8.	0.35
+	2 COMBINED AT C201	682.	4.67	144.	37.	26.	1.31
+	ROUTED TO 201203	664.	4.77	144.	37.	26.	1.31
+	HYDROGRAPH AT S202	126.	4.27	16.	4.	3.	0.13
+	ROUTED TO 202203	120.	4.37	16.	4.	3.	0.13
+	HYDROGRAPH AT S203	172.	4.73	46.	12.	9.	0.37
+	3 COMBINED AT C203R	775.	4.77	189.	48.	35.	1.81
+	HYDROGRAPH AT S204	439.	4.77	104.	27.	19.	0.95
+	2 COMBINED AT C203	997.	4.80	264.	68.	49.	2.76
+	ROUTED TO 203204	995.	4.87	264.	68.	49.	2.76
+	HYDROGRAPH AT S205	214.	4.63	44.	11.	8.	0.41
+	2 COMBINED AT C204	1091.	4.83	293.	75.	54.	3.17
+	ROUTED TO 204205	1076.	5.00	292.	75.	54.	3.17
+	HYDROGRAPH AT S206	264.	5.17	90.	24.	17.	0.85
+	2 COMBINED AT C205L	1206.	5.03	355.	92.	66.	4.03
+	HYDROGRAPH AT S207	331.	5.07	107.	28.	20.	0.96
+	2 COMBINED AT C205	1384.	5.07	430.	112.	81.	4.98
+	ROUTED TO 205206	1344.	5.57	430.	112.	81.	4.98
+	HYDROGRAPH AT S208	376.	5.13	115.	30.	22.	1.10
+	2 COMBINED AT C206	1527.	5.53	510.	133.	96.	6.09
+	ROUTED TO 206207	1519.	5.60	509.	133.	96.	6.09
+	HYDROGRAPH AT S209	318.	4.73	64.	16.	12.	0.65

	2 COMBINED AT							
+		C207R	1567.	5.57	543.	142.	103.	6.74
	HYDROGRAPH AT							
+		S210	267.	4.57	41.	10.	7.	0.48
	2 COMBINED AT							
+		C207	1575.	5.57	559.	146.	105.	7.22
	ROUTED TO							
+		207105	1568.	5.67	558.	146.	105.	7.22
	HYDROGRAPH AT							
+		S211	218.	4.73	43.	11.	8.	0.49
	2 COMBINED AT							
+		C105R	1590.	5.67	575.	151.	109.	7.70
	2 COMBINED AT							
+		C105	2232.	5.67	810.	213.	153.	12.75
	HYDROGRAPH AT							
+		S300	268.	4.80	67.	17.	12.	0.62
	HYDROGRAPH AT							
+		S301	486.	4.73	113.	29.	21.	0.99
	2 COMBINED AT							
+		C300	635.	4.77	163.	42.	30.	1.61
	ROUTED TO							
+		300301	627.	4.93	163.	42.	30.	1.61
	HYDROGRAPH AT							
+		S302	295.	4.60	52.	13.	9.	0.47
	2 COMBINED AT							
+		C301	744.	4.90	197.	51.	36.	2.07
	ROUTED TO							
+		301302	724.	5.13	197.	51.	36.	2.07
	HYDROGRAPH AT							
+		S303	299.	4.77	60.	15.	11.	0.71
	2 COMBINED AT							
+		C302	814.	5.13	230.	59.	43.	2.78
	ROUTED TO							
+		302303	801.	5.30	229.	59.	43.	2.78
	HYDROGRAPH AT							
+		S304	236.	5.00	65.	16.	12.	0.82
	2 COMBINED AT							
+		C303	901.	5.30	268.	69.	50.	3.60
	2 COMBINED AT							
+		WEST-1	2634.	5.63	974.	256.	185.	16.36
	HYDROGRAPH AT							
+		S400	438.	4.93	104.	26.	19.	1.05
	ROUTED TO							
+		C4000	315.	5.37	104.	26.	19.	1.05
	ROUTED TO							
+		400401	313.	5.67	104.	26.	19.	1.05
	HYDROGRAPH AT							
+		S401	244.	4.93	55.	14.	10.	0.65
	2 COMBINED AT							
+		C401	436.	5.23	143.	36.	26.	1.69
	ROUTED TO							
+		401402	428.	5.67	143.	36.	26.	1.69
	HYDROGRAPH AT							
+		S402	295.	4.83	60.	15.	11.	0.74

+	2 COMBINED AT	C402	504.	5.63	181.	46.	33.	2.43
+	ROUTED TO	402403	486.	6.00	181.	46.	33.	2.43
+	HYDROGRAPH AT	S403	230.	5.00	63.	16.	11.	0.56
+	2 COMBINED AT	C403	561.	6.00	227.	58.	41.	2.99
+	ROUTED TO	403404	556.	6.13	227.	57.	41.	2.99
+	HYDROGRAPH AT	S404	293.	4.27	25.	6.	5.	0.26
+	2 COMBINED AT	C404	556.	6.13	244.	62.	45.	3.26
+	2 COMBINED AT	WEST-2	2794.	5.67	1103.	290.	209.	19.61
+	HYDROGRAPH AT	S500	350.	5.13	116.	30.	22.	1.05
+	ROUTED TO	500501	345.	5.30	116.	30.	22.	1.05
+	HYDROGRAPH AT	S501	321.	4.67	65.	16.	12.	0.61
+	2 COMBINED AT	C501	453.	5.17	161.	42.	30.	1.67
+	ROUTED TO	501502	447.	5.30	158.	41.	29.	1.67
+	HYDROGRAPH AT	S502	266.	4.50	39.	10.	7.	0.40
+	2 COMBINED AT	C502L	481.	5.20	180.	47.	34.	2.07
+	HYDROGRAPH AT	S503	485.	4.73	101.	26.	18.	0.99
+	2 COMBINED AT	C502I	775.	4.87	253.	66.	47.	3.07
+	ROUTED TO	C502O	775.	4.90	253.	66.	47.	3.07
+	ROUTED TO	502505	750.	5.27	243.	61.	44.	3.07
+	HYDROGRAPH AT	S504	64.	5.17	22.	6.	4.	0.33
+	2 COMBINED AT	C505L	762.	5.27	249.	63.	45.	3.39
+	HYDROGRAPH AT	S505	179.	4.20	14.	3.	2.	0.14
+	ROUTED TO	C503O	81.	4.40	14.	3.	2.	0.14
+	ROUTED TO	503505	78.	4.87	13.	3.	2.	0.14
+	HYDROGRAPH AT	S506	132.	4.30	15.	4.	3.	0.15
+	ROUTED TO	C504O	71.	4.60	15.	4.	3.	0.15
+	ROUTED TO	504505	69.	5.27	15.	4.	3.	0.15

+	HYDROGRAPH AT	S507	240.	4.90	52.	13.	9.	0.67
+	3 COMBINED AT	C505R	342.	4.93	73.	18.	13.	0.96
+	2 COMBINED AT	C505	930.	5.20	290.	73.	53.	4.35
+	ROUTED TO	505509	862.	5.60	269.	67.	49.	4.35
+	HYDROGRAPH AT	S508	133.	4.63	24.	6.	4.	0.29
+	2 COMBINED AT	C509L	868.	5.60	279.	70.	50.	4.65
+	HYDROGRAPH AT	S509	193.	4.23	19.	5.	3.	0.17
+	ROUTED TO	C506O	79.	4.53	19.	5.	3.	0.17
+	ROUTED TO	506508	79.	4.70	19.	5.	3.	0.17
+	HYDROGRAPH AT	S510	77.	4.50	14.	3.	3.	0.13
+	2 COMBINED AT	C508R	153.	4.57	33.	8.	6.	0.30
+	HYDROGRAPH AT	S511	329.	4.37	43.	11.	8.	0.38
+	ROUTED TO	C507O	86.	5.00	43.	11.	8.	0.38
+	ROUTED TO	507508	85.	5.30	42.	11.	8.	0.38
+	HYDROGRAPH AT	S512	119.	4.67	24.	6.	4.	0.21
+	2 COMBINED AT	C508L	187.	4.73	64.	17.	12.	0.60
+	2 COMBINED AT	C508	315.	4.70	92.	24.	17.	0.90
+	ROUTED TO	508509	300.	5.20	89.	25.	18.	0.90
+	HYDROGRAPH AT	S513	184.	5.17	58.	15.	11.	0.78
+	2 COMBINED AT	C509R	431.	5.23	130.	35.	25.	1.67
+	2 COMBINED AT	C509	1082.	5.60	363.	93.	67.	6.32
+	ROUTED TO	509510	1075.	5.67	362.	93.	67.	6.32
+	HYDROGRAPH AT	S514	227.	5.07	70.	18.	13.	0.65
+	2 COMBINED AT	C510	1168.	5.67	407.	105.	75.	6.97
+	ROUTED TO	510511	1148.	5.97	404.	105.	76.	6.97
+	HYDROGRAPH AT	S515	500.	5.03	126.	32.	23.	1.10
+	2 COMBINED AT	C511	1297.	5.93	492.	128.	92.	8.07

	ROUTED TO							
+		511512	1228.	6.30	487.	127.	92.	8.07
	HYDROGRAPH AT							
+		S516	130.	5.13	40.	10.	7.	0.54
	2 COMBINED AT							
+		C512	1231.	6.30	496.	130.	94.	8.61
	2 COMBINED AT							
+		WEST-3	3059.	5.80	1372.	365.	263.	28.22
	HYDROGRAPH AT							
+		S600	558.	4.97	151.	39.	28.	2.02
	ROUTED TO							
+		600601	555.	5.03	151.	39.	28.	2.02
	HYDROGRAPH AT							
+		S601	673.	4.53	128.	32.	23.	0.90
	2 COMBINED AT							
+		C601	856.	4.87	254.	65.	47.	2.92
	ROUTED TO							
+		601602	844.	5.07	254.	65.	47.	2.92
	HYDROGRAPH AT							
+		S603	708.	4.33	94.	24.	17.	0.67
	2 COMBINED AT							
+		C602L	964.	4.93	329.	85.	61.	3.58
	HYDROGRAPH AT							
+		S602	717.	4.90	198.	51.	37.	1.88
	2 COMBINED AT							
+		C602	1466.	4.90	486.	126.	90.	5.47
	ROUTED TO							
+		602603	1412.	5.10	442.	111.	80.	5.47
	HYDROGRAPH AT							
+		S606	380.	4.57	81.	21.	15.	0.66
	2 COMBINED AT							
+		C603L	1550.	5.03	497.	125.	90.	6.13
	HYDROGRAPH AT							
+		S605	497.	4.77	123.	32.	23.	1.09
	HYDROGRAPH AT							
+		S604	755.	5.20	261.	68.	49.	2.66
	3 COMBINED AT							
+		C603	2258.	5.07	779.	201.	145.	9.87
	ROUTED TO							
+		603604	2174.	5.33	731.	184.	133.	9.87
	HYDROGRAPH AT							
+		S609	218.	4.77	60.	15.	11.	0.56
	2 COMBINED AT							
+		C604R	2231.	5.33	761.	192.	138.	10.43
	HYDROGRAPH AT							
+		S607	386.	4.73	101.	26.	19.	0.82
	2 COMBINED AT							
+		C604	2375.	5.30	828.	210.	151.	11.25
	ROUTED TO							
+		604605	2370.	5.33	828.	210.	151.	11.25
	HYDROGRAPH AT							
+		S608	436.	4.43	70.	18.	13.	0.51
	2 COMBINED AT							
+		C605	2431.	5.33	873.	222.	160.	11.76

+	ROUTED TO	605606	2409.	5.43	865.	219.	158.	11.76
+	HYDROGRAPH AT	S610	307.	4.80	80.	21.	15.	0.60
+	2 COMBINED AT	C606L	2514.	5.43	918.	233.	168.	12.36
+	HYDROGRAPH AT	S612	397.	4.73	102.	26.	19.	0.81
+	2 COMBINED AT	C606	2652.	5.40	987.	251.	181.	13.17
+	ROUTED TO	606608	2645.	5.43	984.	250.	180.	13.17
+	HYDROGRAPH AT	S611	465.	4.43	71.	18.	13.	0.57
+	ROUTED TO	607608	429.	4.70	71.	18.	13.	0.57
+	HYDROGRAPH AT	S613	630.	5.13	192.	50.	36.	1.80
+	3 COMBINED AT	C608	3047.	5.40	1151.	295.	212.	15.53
+	ROUTED TO	608609	3024.	5.53	1141.	291.	210.	15.53
+	HYDROGRAPH AT	S614	398.	5.03	120.	31.	22.	1.08
+	2 COMBINED AT	C609	3168.	5.53	1212.	311.	224.	16.61
+	ROUTED TO	609611	3117.	5.80	1183.	301.	217.	16.61
+	HYDROGRAPH AT	S617	338.	4.80	73.	19.	13.	0.68
+	2 COMBINED AT	C611R	3160.	5.80	1218.	310.	224.	17.29
+	HYDROGRAPH AT	S615	619.	4.87	167.	43.	31.	1.05
+	ROUTED TO	610611	609.	5.07	167.	43.	31.	1.05
+	HYDROGRAPH AT	S616	159.	5.13	53.	14.	10.	0.50
+	2 COMBINED AT	C611L	702.	5.10	208.	54.	39.	1.56
+	2 COMBINED AT	C611	3440.	5.77	1363.	350.	252.	18.85
+	ROUTED TO	611613	3424.	5.83	1353.	346.	249.	18.85
+	HYDROGRAPH AT	S618	387.	4.87	100.	26.	18.	0.96
+	2 COMBINED AT	C613R	3496.	5.80	1403.	360.	259.	19.81
+	HYDROGRAPH AT	S619	641.	4.63	118.	30.	22.	0.83
+	ROUTED TO	612613	617.	4.83	118.	30.	22.	0.83
+	HYDROGRAPH AT	S620	267.	4.63	62.	16.	12.	0.44

+	2 COMBINED AT	C613L	781.	4.83	174.	44.	32.	1.27
+	2 COMBINED AT	C613	3685.	5.77	1516.	391.	281.	21.08
+	ROUTED TO	613614	3662.	5.90	1505.	386.	278.	21.08
+	HYDROGRAPH AT	S621	426.	4.70	70.	17.	13.	0.92
+	2 COMBINED AT	C614	3662.	5.90	1523.	391.	282.	22.00
+	ROUTED TO	614615	3632.	6.03	1509.	386.	278.	22.00
+	HYDROGRAPH AT	S622	242.	5.13	69.	17.	13.	0.90
+	2 COMBINED AT	C615	3651.	6.03	1526.	391.	282.	22.90
+	2 COMBINED AT	WEST-4	5483.	5.93	2464.	649.	468.	51.12
+	HYDROGRAPH AT	S700	234.	4.77	53.	13.	10.	0.61
+	HYDROGRAPH AT	S701	182.	5.17	68.	18.	13.	0.72
+	HYDROGRAPH AT	S702	115.	4.57	23.	6.	4.	0.26
+	HYDROGRAPH AT	S703	139.	4.50	21.	5.	4.	0.26
+	HYDROGRAPH AT	S704	289.	4.43	39.	10.	7.	0.41
+	ROUTED TO	704705	264.	4.73	39.	10.	7.	0.41
+	HYDROGRAPH AT	S705	358.	4.67	73.	18.	13.	0.75
+	2 COMBINED AT	C705	530.	4.73	102.	26.	19.	1.16
+	ROUTED TO	C705O	383.	5.07	102.	26.	19.	1.16
+	ROUTED TO	705OAF	379.	5.30	102.	26.	19.	1.16
+	HYDROGRAPH AT	S705AF	171.	4.40	25.	6.	5.	0.18
+	2 COMBINED AT	C705AF	415.	5.20	124.	31.	23.	1.34
+	5 COMBINED AT	WEST-5	702.	5.10	230.	59.	43.	3.19
+	HYDROGRAPH AT	S706	268.	4.83	63.	16.	11.	0.71
+	HYDROGRAPH AT	S707	251.	4.77	62.	16.	11.	0.64
+	HYDROGRAPH AT	S728	86.	4.80	22.	6.	4.	0.28
+	5 COMBINED AT	WEST	5597.	5.90	2560.	675.	487.	55.94
+	HYDROGRAPH AT	S708	656.	4.47	96.	24.	17.	0.71

+	HYDROGRAPH AT	S709	459.	4.40	66.	16.	12.	0.44
+	ROUTED TO	C709O	293.	4.73	66.	16.	12.	0.44
+	ROUTED TO	709710	291.	4.80	66.	16.	12.	0.44
+	HYDROGRAPH AT	S710	163.	4.20	17.	4.	3.	0.11
+	2 COMBINED AT	C710I	327.	4.60	82.	21.	15.	0.55
+	ROUTED TO	C710O	295.	5.00	82.	21.	15.	0.55
+	HYDROGRAPH AT	S711	273.	4.20	24.	6.	4.	0.16
+	ROUTED TO	C711O	144.	4.40	24.	6.	4.	0.16
+	ROUTED TO	711712	143.	4.47	24.	6.	4.	0.16
+	HYDROGRAPH AT	S712	144.	4.07	10.	3.	2.	0.07
+	2 COMBINED AT	C712I	250.	4.10	34.	9.	6.	0.23
+	ROUTED TO	C712O	186.	4.27	34.	9.	6.	0.23
+	ROUTED TO	712714	185.	4.33	34.	9.	6.	0.23
+	HYDROGRAPH AT	S713	190.	4.13	16.	4.	3.	0.11
+	ROUTED TO	C713O	114.	4.30	16.	4.	3.	0.11
+	ROUTED TO	713714	114.	4.33	16.	4.	3.	0.11
+	HYDROGRAPH AT	S714	86.	4.17	7.	2.	1.	0.06
+	3 COMBINED AT	C714	361.	4.27	57.	14.	10.	0.39
+	HYDROGRAPH AT	S715	228.	4.40	33.	8.	6.	0.22
+	HYDROGRAPH AT	S716	786.	4.67	157.	39.	28.	1.13
+	ROUTED TO	C716O	471.	5.17	157.	39.	28.	1.13
+	ROUTED TO	716717	471.	5.33	157.	39.	28.	1.13
+	HYDROGRAPH AT	S717	494.	4.20	44.	11.	8.	0.29
+	2 COMBINED AT	C717	473.	5.20	198.	50.	36.	1.41
+	ROUTED TO	717718	471.	5.70	198.	49.	36.	1.41
+	HYDROGRAPH AT	S718	222.	4.90	69.	17.	13.	0.44
+	2 COMBINED AT	C718	624.	5.37	262.	66.	47.	1.86

+	HYDROGRAPH AT	S719	125.	4.47	27.	7.	5.	0.15
+	6 COMBINED AT	EAST-1	1638.	4.67	525.	132.	95.	3.88
+	HYDROGRAPH AT	S720	322.	4.50	56.	14.	10.	0.37
+	HYDROGRAPH AT	S721	419.	4.27	37.	9.	7.	0.34
+	ROUTED TO	C721O	167.	4.57	37.	9.	7.	0.34
+	ROUTED TO	721722	162.	4.97	37.	9.	7.	0.34
+	HYDROGRAPH AT	S722	573.	4.73	122.	31.	22.	0.95
+	2 COMBINED AT	C722	649.	4.80	154.	38.	28.	1.29
+	HYDROGRAPH AT	S723	114.	4.23	12.	3.	2.	0.09
+	HYDROGRAPH AT	S724	907.	4.60	171.	43.	31.	1.16
+	HYDROGRAPH AT	S725	469.	5.03	139.	35.	25.	1.16
+	5 COMBINED AT	EAST-2	1840.	4.80	493.	124.	89.	4.06
+	HYDROGRAPH AT	S726	392.	4.23	32.	8.	6.	0.33
+	ROUTED TO	726727	334.	4.43	32.	8.	6.	0.33
+	HYDROGRAPH AT	S727	233.	4.60	50.	13.	9.	0.38
+	2 COMBINED AT	C727	491.	4.50	80.	20.	14.	0.71
+	4 COMBINED AT	TOTAL	6569.	5.73	3214.	840.	605.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 10-Year, 24-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   09AUG01  TIME  15:12:04  *
*                                      *
****************************************
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```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
****************************************
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N. Peoria Area Drainage Master Plan                File: EX10-24.IH1
   For Maricopa County FCD 99-45                 Original:06-18-01     MCG
   By Stantec Consulting, Inc. P82000146          Revised:
```

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 10-year, 24-hour storm event. A companion model is also created for the existing condition 10-year, 6-hour storm event. Both models (10-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 10-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       2.73  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 2.71 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 2.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 2.57 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 2.47 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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38 JD          INDEX STORM NO. 6
                    STRM        2.34  PRECIPITATION DEPTH
                    TRDA       70.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	204.	12.63	53.	16.	12.	0.57		
+	ROUTED TO	100102	198.	12.90	53.	16.	12.	0.57		
+	HYDROGRAPH AT	S101	284.	12.50	52.	15.	11.	0.63		
+	2 COMBINED AT	C102R	385.	12.67	105.	31.	23.	1.20		
+	HYDROGRAPH AT	S102	144.	12.77	44.	14.	10.	0.45		
+	ROUTED TO	101102	140.	13.10	44.	14.	10.	0.45		
+	HYDROGRAPH AT	S103	119.	12.83	35.	10.	7.	0.40		

+	2 COMBINED AT	C102L	249.	13.00	78.	24.	17.	0.84
+	2 COMBINED AT	C102	595.	12.83	180.	54.	39.	2.05
+	ROUTED TO	102103	584.	13.10	180.	54.	39.	2.05
+	HYDROGRAPH AT	S104	341.	12.73	75.	21.	15.	0.90
+	2 COMBINED AT	C103R	829.	13.00	251.	74.	54.	2.95
+	HYDROGRAPH AT	S105	145.	12.97	49.	14.	10.	0.59
+	2 COMBINED AT	C103	964.	13.00	297.	88.	64.	3.54
+	ROUTED TO	103104	952.	13.20	296.	88.	64.	3.54
+	HYDROGRAPH AT	S106	171.	12.70	41.	11.	8.	0.57
+	2 COMBINED AT	C104	1056.	13.17	334.	98.	71.	4.11
+	ROUTED TO	104105	1040.	13.47	334.	98.	71.	4.11
+	HYDROGRAPH AT	S107	204.	12.90	57.	14.	10.	0.94
+	2 COMBINED AT	C105L	1168.	13.43	385.	111.	81.	5.05
+	HYDROGRAPH AT	S200	438.	12.57	96.	31.	22.	0.96
+	ROUTED TO	200201	431.	12.63	96.	31.	22.	0.96
+	HYDROGRAPH AT	S201	158.	12.47	35.	11.	8.	0.35
+	2 COMBINED AT	C201	569.	12.60	130.	42.	30.	1.31
+	ROUTED TO	201203	556.	12.73	130.	42.	30.	1.31
+	HYDROGRAPH AT	S202	72.	12.27	13.	4.	3.	0.13
+	ROUTED TO	202203	69.	12.37	13.	4.	3.	0.13
+	HYDROGRAPH AT	S203	110.	12.73	37.	12.	9.	0.37
+	3 COMBINED AT	C203R	699.	12.73	178.	58.	42.	1.81
+	HYDROGRAPH AT	S204	342.	12.70	90.	29.	21.	0.95
+	2 COMBINED AT	C203	1023.	12.70	264.	86.	62.	2.76
+	ROUTED TO	203204	1020.	12.77	264.	86.	62.	2.76
+	HYDROGRAPH AT	S205	141.	12.60	35.	11.	8.	0.41
+	2 COMBINED AT	C204	1145.	12.73	297.	96.	69.	3.17

+	ROUTED TO 204205	1122.	12.90	297.	96.	69.	3.17
+	HYDROGRAPH AT S206	224.	13.00	79.	25.	18.	0.85
+	2 COMBINED AT C205L	1328.	12.93	372.	119.	86.	4.03
+	HYDROGRAPH AT S207	265.	13.00	95.	31.	22.	0.96
+	2 COMBINED AT C205	1572.	12.93	461.	148.	108.	4.98
+	ROUTED TO 205206	1505.	13.47	461.	148.	108.	4.98
+	HYDROGRAPH AT S208	322.	13.03	105.	32.	23.	1.10
+	2 COMBINED AT C206	1730.	13.43	553.	177.	128.	6.09
+	ROUTED TO 206207	1721.	13.53	553.	177.	128.	6.09
+	HYDROGRAPH AT S209	238.	12.70	52.	15.	11.	0.65
+	2 COMBINED AT C207R	1792.	13.50	597.	189.	138.	6.74
+	HYDROGRAPH AT S210	180.	12.53	31.	8.	6.	0.48
+	2 COMBINED AT C207	1818.	13.50	622.	196.	142.	7.22
+	ROUTED TO 207105	1808.	13.60	622.	196.	142.	7.22
+	HYDROGRAPH AT S211	153.	12.70	33.	9.	6.	0.49
+	2 COMBINED AT C105R	1849.	13.60	649.	203.	147.	7.70
+	2 COMBINED AT C105	2827.	13.53	979.	299.	217.	12.75
+	HYDROGRAPH AT S300	190.	12.77	55.	17.	12.	0.62
+	HYDROGRAPH AT S301	384.	12.67	99.	32.	23.	0.99
+	2 COMBINED AT C300	561.	12.70	152.	49.	35.	1.61
+	ROUTED TO 300301	550.	12.83	152.	49.	35.	1.61
+	HYDROGRAPH AT S302	188.	12.60	41.	13.	9.	0.47
+	2 COMBINED AT C301	699.	12.80	191.	61.	44.	2.07
+	ROUTED TO 301302	680.	13.07	191.	61.	44.	2.07
+	HYDROGRAPH AT S303	226.	12.67	49.	14.	10.	0.71
+	2 COMBINED AT C302	830.	13.03	237.	74.	53.	2.78
+	ROUTED TO 302303	816.	13.23	237.	74.	53.	2.78

+	HYDROGRAPH AT S304	207.	12.83	55.	14.	10.	0.82
+	2 COMBINED AT C303	968.	13.20	288.	87.	63.	3.60
+	2 COMBINED AT WEST-1	3506.	13.47	1217.	371.	270.	16.36
+	HYDROGRAPH AT S400	390.	12.80	93.	26.	19.	1.05
+	ROUTED TO C400O	294.	13.17	93.	26.	19.	1.05
+	ROUTED TO 400401	292.	13.47	93.	26.	19.	1.05
+	HYDROGRAPH AT S401	191.	12.83	45.	12.	9.	0.65
+	2 COMBINED AT C401	427.	13.10	136.	38.	28.	1.69
+	ROUTED TO 401402	419.	13.50	136.	38.	28.	1.69
+	HYDROGRAPH AT S402	248.	12.73	50.	13.	9.	0.74
+	2 COMBINED AT C402	512.	13.47	183.	50.	36.	2.43
+	ROUTED TO 402403	492.	13.87	183.	50.	36.	2.43
+	HYDROGRAPH AT S403	180.	12.93	51.	13.	9.	0.56
+	2 COMBINED AT C403	578.	13.83	231.	62.	45.	2.99
+	ROUTED TO 403404	573.	13.97	231.	62.	45.	2.99
+	HYDROGRAPH AT S404	182.	12.23	20.	5.	4.	0.26
+	2 COMBINED AT C404	573.	13.97	249.	67.	48.	3.26
+	2 COMBINED AT WEST-2	3865.	13.47	1416.	425.	309.	19.61
+	HYDROGRAPH AT S500	284.	13.03	104.	34.	25.	1.05
+	ROUTED TO 500501	280.	13.23	104.	34.	25.	1.05
+	HYDROGRAPH AT S501	220.	12.63	52.	16.	12.	0.61
+	2 COMBINED AT C501	406.	13.10	153.	49.	36.	1.67
+	ROUTED TO 501502	401.	13.23	150.	46.	33.	1.67
+	HYDROGRAPH AT S502	165.	12.50	30.	9.	6.	0.40
+	2 COMBINED AT C502L	453.	13.13	178.	54.	39.	2.07
+	HYDROGRAPH AT S503	416.	12.63	89.	26.	19.	0.99
+	2 COMBINED AT C502I	799.	12.70	263.	79.	57.	3.07

+	ROUTED TO C5020	798.	12.73	263.	79.	57.	3.07
+	ROUTED TO 502505	765.	13.10	252.	70.	50.	3.07
+	HYDROGRAPH AT S504	40.	13.10	14.	4.	3.	0.33
+	2 COMBINED AT C505L	801.	13.10	265.	73.	53.	3.39
+	HYDROGRAPH AT S505	88.	12.20	10.	3.	2.	0.14
+	ROUTED TO C5030	68.	12.33	10.	3.	2.	0.14
+	ROUTED TO 503505	65.	12.77	10.	2.	2.	0.14
+	HYDROGRAPH AT S506	84.	12.30	12.	3.	2.	0.15
+	ROUTED TO C5040	59.	12.50	12.	3.	2.	0.15
+	ROUTED TO 504505	58.	13.13	12.	3.	2.	0.15
+	HYDROGRAPH AT S507	198.	12.77	43.	11.	8.	0.67
+	3 COMBINED AT C505R	312.	12.80	64.	16.	12.	0.96
+	2 COMBINED AT C505	1044.	13.03	324.	88.	64.	4.35
+	ROUTED TO 505509	999.	13.37	303.	77.	55.	4.35
+	HYDROGRAPH AT S508	92.	12.60	18.	4.	3.	0.29
+	2 COMBINED AT C509L	1030.	13.37	318.	81.	58.	4.65
+	HYDROGRAPH AT S509	108.	12.23	15.	5.	3.	0.17
+	ROUTED TO C5060	70.	12.43	15.	5.	3.	0.17
+	ROUTED TO 506508	70.	12.67	15.	5.	3.	0.17
+	HYDROGRAPH AT S510	56.	12.47	11.	3.	2.	0.13
+	2 COMBINED AT C508R	124.	12.50	26.	8.	5.	0.30
+	HYDROGRAPH AT S511	219.	12.33	35.	10.	7.	0.38
+	ROUTED TO C5070	82.	12.87	35.	10.	7.	0.38
+	ROUTED TO 507508	81.	13.23	35.	11.	8.	0.38
+	HYDROGRAPH AT S512	90.	12.60	19.	5.	3.	0.21
+	2 COMBINED AT C508L	160.	12.67	54.	15.	11.	0.60
+	2 COMBINED AT C508	279.	12.60	80.	23.	17.	0.90

+	ROUTED TO 508509	266.	13.13	77.	22.	16.	0.90
+	HYDROGRAPH AT S513	151.	13.07	49.	13.	9.	0.78
+	2 COMBINED AT C509R	412.	13.10	124.	34.	25.	1.67
+	2 COMBINED AT C509	1363.	13.37	428.	111.	80.	6.32
+	ROUTED TO 509510	1347.	13.47	427.	111.	80.	6.32
+	HYDROGRAPH AT S514	180.	12.97	56.	14.	10.	0.65
+	2 COMBINED AT C510	1464.	13.43	475.	123.	89.	6.97
+	ROUTED TO 510511	1420.	13.73	472.	123.	89.	6.97
+	HYDROGRAPH AT S515	449.	12.90	109.	27.	20.	1.10
+	2 COMBINED AT C511	1594.	13.70	561.	147.	106.	8.07
+	ROUTED TO 511512	1525.	14.10	556.	147.	106.	8.07
+	HYDROGRAPH AT S516	94.	13.07	30.	7.	5.	0.54
+	2 COMBINED AT C512	1556.	14.10	575.	152.	110.	8.61
+	2 COMBINED AT WEST-3	4433.	13.60	1872.	544.	398.	28.22
+	HYDROGRAPH AT S600	615.	12.73	150.	47.	34.	2.02
+	ROUTED TO 600601	608.	12.80	150.	47.	34.	2.02
+	HYDROGRAPH AT S601	530.	12.47	114.	37.	27.	0.90
+	2 COMBINED AT C601	990.	12.70	260.	82.	60.	2.92
+	ROUTED TO 601602	975.	12.90	260.	82.	60.	2.92
+	HYDROGRAPH AT S603	499.	12.30	82.	26.	19.	0.67
+	2 COMBINED AT C602L	1117.	12.83	338.	108.	78.	3.58
+	HYDROGRAPH AT S602	702.	12.73	189.	61.	44.	1.88
+	2 COMBINED AT C602	1766.	12.77	516.	166.	120.	5.47
+	ROUTED TO 602603	1695.	13.00	472.	125.	90.	5.47
+	HYDROGRAPH AT S606	270.	12.53	69.	22.	16.	0.66
+	2 COMBINED AT C603L	1855.	12.97	533.	145.	104.	6.13
+	HYDROGRAPH AT S605	409.	12.67	110.	36.	26.	1.09

+	HYDROGRAPH AT	S604	736.	13.07	261.	85.	62.	2.66
+	3 COMBINED AT	C603	2757.	12.97	857.	252.	182.	9.87
+	ROUTED TO	603604	2681.	13.13	809.	212.	152.	9.87
+	HYDROGRAPH AT	S609	138.	12.77	47.	15.	11.	0.56
+	2 COMBINED AT	C604R	2768.	13.13	847.	224.	162.	10.43
+	HYDROGRAPH AT	S607	305.	12.67	89.	28.	20.	0.82
+	2 COMBINED AT	C604	2947.	13.13	923.	249.	180.	11.25
+	ROUTED TO	604605	2930.	13.17	923.	249.	180.	11.25
+	HYDROGRAPH AT	S608	297.	12.43	60.	19.	14.	0.51
+	2 COMBINED AT	C605	3007.	13.17	974.	265.	191.	11.76
+	ROUTED TO	605606	2965.	13.30	966.	259.	187.	11.76
+	HYDROGRAPH AT	S610	223.	12.77	70.	22.	16.	0.60
+	2 COMBINED AT	C606L	3092.	13.30	1026.	279.	201.	12.36
+	HYDROGRAPH AT	S612	318.	12.67	91.	28.	20.	0.81
+	2 COMBINED AT	C606	3251.	13.30	1103.	303.	219.	13.17
+	ROUTED TO	606608	3246.	13.30	1100.	300.	217.	13.17
+	HYDROGRAPH AT	S611	297.	12.43	58.	19.	14.	0.57
+	ROUTED TO	607608	279.	12.73	58.	19.	14.	0.57
+	HYDROGRAPH AT	S613	569.	13.03	183.	59.	42.	1.80
+	3 COMBINED AT	C608	3767.	13.30	1301.	367.	264.	15.53
+	ROUTED TO	608609	3719.	13.43	1291.	358.	258.	15.53
+	HYDROGRAPH AT	S614	330.	12.93	108.	35.	25.	1.08
+	2 COMBINED AT	C609	3908.	13.43	1379.	387.	279.	16.61
+	ROUTED TO	609611	3838.	13.63	1350.	362.	261.	16.61
+	HYDROGRAPH AT	S617	252.	12.73	62.	19.	14.	0.68
+	2 COMBINED AT	C611R	3908.	13.63	1398.	377.	272.	17.29
+	HYDROGRAPH AT	S615	500.	12.80	151.	50.	36.	1.05

+	ROUTED TO 610611	490.	13.00	151.	50.	36.	1.05
+	HYDROGRAPH AT S616	118.	13.07	44.	13.	10.	0.50
+	2 COMBINED AT C611L	602.	13.00	193.	63.	45.	1.56
+	2 COMBINED AT C611	4239.	13.60	1560.	431.	311.	18.85
+	ROUTED TO 611613	4213.	13.67	1550.	421.	304.	18.85
+	HYDROGRAPH AT S618	245.	13.10	88.	27.	19.	0.96
+	2 COMBINED AT C613R	4352.	13.67	1620.	443.	319.	19.81
+	HYDROGRAPH AT S619	500.	12.60	104.	33.	24.	0.83
+	ROUTED TO 612613	481.	12.83	104.	33.	24.	0.83
+	HYDROGRAPH AT S620	189.	12.63	54.	17.	12.	0.44
+	2 COMBINED AT C613L	652.	12.80	157.	49.	36.	1.27
+	2 COMBINED AT C613	4567.	13.67	1749.	485.	350.	21.08
+	ROUTED TO 613614	4527.	13.80	1738.	474.	342.	21.08
+	HYDROGRAPH AT S621	369.	12.57	59.	15.	11.	0.92
+	2 COMBINED AT C614	4539.	13.80	1779.	485.	350.	22.00
+	ROUTED TO 614615	4505.	13.93	1768.	476.	343.	22.00
+	HYDROGRAPH AT S622	212.	12.97	59.	16.	11.	0.90
+	2 COMBINED AT C615	4568.	13.93	1810.	487.	351.	22.90
+	2 COMBINED AT WEST-4	8139.	13.83	3427.	961.	698.	51.12
+	HYDROGRAPH AT S700	179.	12.70	43.	11.	8.	0.61
+	HYDROGRAPH AT S701	146.	13.10	59.	17.	13.	0.72
+	HYDROGRAPH AT S702	80.	12.53	18.	5.	3.	0.26
+	HYDROGRAPH AT S703	92.	12.47	16.	4.	3.	0.26
+	HYDROGRAPH AT S704	185.	12.40	30.	8.	6.	0.41
+	ROUTED TO 704705	173.	12.70	30.	8.	6.	0.41
+	HYDROGRAPH AT S705	179.	13.10	61.	17.	12.	0.75
+	2 COMBINED AT C705	299.	12.87	90.	25.	18.	1.16

+	ROUTED TO C705O	263.	13.23	90.	25.	18.	1.16
+	ROUTED TO 705OAF	260.	13.47	90.	25.	18.	1.16
+	HYDROGRAPH AT S705AF	123.	12.40	22.	6.	4.	0.18
+	2 COMBINED AT C705AF	288.	13.40	111.	30.	22.	1.34
+	5 COMBINED AT WEST-5	599.	13.03	238.	66.	48.	3.19
+	HYDROGRAPH AT S706	222.	12.70	53.	14.	10.	0.71
+	HYDROGRAPH AT S707	201.	12.70	52.	14.	10.	0.64
+	HYDROGRAPH AT S728	64.	12.70	17.	4.	3.	0.28
+	5 COMBINED AT WEST	8529.	13.80	3670.	1029.	747.	55.94
+	HYDROGRAPH AT S708	499.	12.43	80.	20.	14.	0.71
+	HYDROGRAPH AT S709	327.	12.40	61.	15.	11.	0.44
+	ROUTED TO C709O	245.	12.67	61.	15.	11.	0.44
+	ROUTED TO 709710	244.	12.73	61.	15.	11.	0.44
+	HYDROGRAPH AT S710	103.	12.20	14.	4.	3.	0.11
+	2 COMBINED AT C710I	286.	12.63	75.	19.	14.	0.55
+	ROUTED TO C710O	262.	12.90	75.	19.	14.	0.55
+	HYDROGRAPH AT S711	169.	12.17	22.	6.	4.	0.16
+	ROUTED TO C711O	126.	12.33	22.	6.	4.	0.16
+	ROUTED TO 711712	125.	12.40	22.	6.	4.	0.16
+	HYDROGRAPH AT S712	81.	12.03	9.	2.	2.	0.07
+	2 COMBINED AT C712I	191.	12.10	31.	8.	6.	0.23
+	ROUTED TO C712O	161.	12.27	31.	8.	6.	0.23
+	ROUTED TO 712714	160.	12.33	31.	8.	6.	0.23
+	HYDROGRAPH AT S713	113.	12.13	14.	3.	2.	0.11
+	ROUTED TO C713O	81.	12.30	14.	3.	2.	0.11
+	ROUTED TO 713714	80.	12.33	14.	3.	2.	0.11
+	HYDROGRAPH AT S714	52.	12.17	6.	1.	1.	0.06

+	3 COMBINED AT	C714	279.	12.30	50.	13.	9.	0.39
+	HYDROGRAPH AT	S715	163.	12.37	30.	8.	5.	0.22
+	HYDROGRAPH AT	S716	674.	12.57	140.	35.	25.	1.13
+	ROUTED TO	C716O	434.	13.07	140.	35.	25.	1.13
+	ROUTED TO	716717	433.	13.20	140.	35.	25.	1.13
+	HYDROGRAPH AT	S717	305.	12.20	40.	10.	7.	0.29
+	2 COMBINED AT	C717	457.	13.10	179.	45.	32.	1.41
+	ROUTED TO	717718	453.	13.57	178.	45.	32.	1.41
+	HYDROGRAPH AT	S718	165.	12.90	62.	16.	12.	0.44
+	2 COMBINED AT	C718	584.	13.40	238.	61.	44.	1.86
+	HYDROGRAPH AT	S719	90.	12.47	27.	7.	5.	0.15
+	6 COMBINED AT	EAST-1	1534.	12.53	488.	124.	89.	3.88
+	HYDROGRAPH AT	S720	233.	12.47	52.	13.	9.	0.37
+	HYDROGRAPH AT	S721	268.	12.23	29.	7.	5.	0.34
+	ROUTED TO	C721O	137.	12.50	29.	7.	5.	0.34
+	ROUTED TO	721722	132.	13.07	29.	7.	5.	0.34
+	HYDROGRAPH AT	S722	487.	12.63	105.	26.	19.	0.95
+	2 COMBINED AT	C722	573.	12.67	133.	33.	24.	1.29
+	HYDROGRAPH AT	S723	74.	12.23	10.	3.	2.	0.09
+	HYDROGRAPH AT	S724	773.	12.53	160.	41.	29.	1.16
+	HYDROGRAPH AT	S725	416.	12.90	120.	30.	22.	1.16
+	5 COMBINED AT	EAST-2	1837.	12.63	462.	116.	84.	4.06
+	HYDROGRAPH AT	S726	227.	12.20	26.	7.	5.	0.33
+	ROUTED TO	726727	209.	12.43	26.	7.	5.	0.33
+	HYDROGRAPH AT	S727	171.	12.60	42.	10.	8.	0.38
+	2 COMBINED AT	C727	363.	12.47	67.	17.	13.	0.71
+	4 COMBINED AT	TOTAL	9671.	13.67	4436.	1223.	887.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 5-Year, 6-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
 *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUN  1998               *
 *            VERSION 4.1               *
 *                                      *
 *  RUN DATE   09AUG01  TIME  15:20:46  *
 *                                      *
 ****************************************

 ****************************************
 *                                      *
 *    U.S. ARMY CORPS OF ENGINEERS      *
 *    HYDROLOGIC ENGINEERING CENTER     *
 *          609 SECOND STREET           *
 *       DAVIS, CALIFORNIA 95616        *
 *           (916) 756-1104             *
 *                                      *
 ****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX5-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 5-year, 6-hour storm event. A companion model is also created for the existing condition 5-year, 24-hour storm event. Both models (5-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 5-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

          ENGLISH UNITS
               DRAINAGE AREA          SQUARE MILES
               PRECIPITATION DEPTH    INCHES
               LENGTH, ELEVATION      FEET
               FLOW                   CUBIC FEET PER SECOND
               STORAGE VOLUME         ACRE-FEET
               SURFACE AREA           ACRES
               TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       1.85  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        1.84  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        1.81  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        1.71  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        1.50  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	200.	4.80	50.	13.	9.	0.57		
+	ROUTED TO	100102	194.	5.07	50.	13.	9.	0.57		
+	HYDROGRAPH AT	S101	255.	4.63	48.	12.	9.	0.63		
+	2 COMBINED AT	C102R	309.	4.93	85.	22.	16.	1.20		
+	HYDROGRAPH AT	S102	152.	4.90	43.	11.	8.	0.45		
+	ROUTED TO	101102	148.	5.20	43.	11.	8.	0.45		
+	HYDROGRAPH AT	S103	110.	5.03	33.	8.	6.	0.40		
+	2 COMBINED AT	C102L	225.	5.17	68.	18.	13.	0.84		
+	2 COMBINED AT	C102	417.	5.07	131.	34.	25.	2.05		
+	ROUTED TO	102103	410.	5.33	131.	34.	25.	2.05		
+	HYDROGRAPH AT	S104	246.	5.03	63.	16.	12.	0.90		
+	2 COMBINED AT	C103R	517.	5.30	167.	43.	31.	2.95		
+	HYDROGRAPH AT	S105	132.	5.17	44.	12.	8.	0.59		
+	2 COMBINED AT	C103	576.	5.30	191.	50.	36.	3.54		
+	ROUTED TO	103104	567.	5.57	191.	50.	36.	3.54		
+	HYDROGRAPH AT	S106	145.	4.93	39.	10.	7.	0.57		
+	2 COMBINED AT	C104	598.	5.57	207.	54.	39.	4.11		
+	ROUTED TO	104105	587.	5.97	207.	54.	39.	4.11		

+	HYDROGRAPH AT	S107	147.	5.17	46.	12.	8.	0.94
+	2 COMBINED AT	C105L	602.	5.93	220.	58.	42.	5.05
+	HYDROGRAPH AT	S200	391.	4.70	86.	22.	16.	0.96
+	ROUTED TO	200201	387.	4.80	86.	22.	16.	0.96
+	HYDROGRAPH AT	S201	181.	4.53	35.	9.	6.	0.35
+	2 COMBINED AT	C201	467.	4.77	111.	28.	20.	1.31
+	ROUTED TO	201203	457.	4.90	111.	28.	20.	1.31
+	HYDROGRAPH AT	S202	89.	4.30	13.	3.	2.	0.13
+	ROUTED TO	202203	85.	4.40	13.	3.	2.	0.13
+	HYDROGRAPH AT	S203	120.	4.83	36.	9.	7.	0.37
+	3 COMBINED AT	C203R	525.	4.90	143.	37.	27.	1.81
+	HYDROGRAPH AT	S204	296.	4.90	80.	21.	15.	0.95
+	2 COMBINED AT	C203	654.	4.93	196.	51.	36.	2.76
+	ROUTED TO	203204	651.	4.97	196.	51.	36.	2.76
+	HYDROGRAPH AT	S205	146.	4.73	35.	9.	6.	0.41
+	2 COMBINED AT	C204	708.	4.97	216.	56.	40.	3.17
+	ROUTED TO	204205	701.	5.13	215.	56.	40.	3.17
+	HYDROGRAPH AT	S206	202.	5.17	69.	18.	13.	0.85
+	2 COMBINED AT	C205L	805.	5.13	262.	68.	49.	4.03
+	HYDROGRAPH AT	S207	241.	5.13	83.	22.	16.	0.96
+	2 COMBINED AT	C205	935.	5.17	320.	84.	60.	4.98
+	ROUTED TO	205206	916.	5.60	319.	84.	60.	4.98
+	HYDROGRAPH AT	S208	283.	5.13	87.	23.	16.	1.10
+	2 COMBINED AT	C206	1043.	5.57	377.	99.	72.	6.09
+	ROUTED TO	206207	1038.	5.63	376.	99.	72.	6.09
+	HYDROGRAPH AT	S209	206.	4.90	48.	12.	9.	0.65
+	2 COMBINED AT	C207R	1076.	5.63	398.	105.	76.	6.74

+	HYDROGRAPH AT	S210	168.	4.70	31.	8.	6.	0.48
+	2 COMBINED AT	C207	1081.	5.60	406.	107.	77.	7.22
+	ROUTED TO	207105	1075.	5.73	405.	107.	77.	7.22
+	HYDROGRAPH AT	S211	136.	4.90	33.	8.	6.	0.49
+	2 COMBINED AT	C105R	1087.	5.73	414.	110.	79.	7.70
+	2 COMBINED AT	C105	1408.	5.83	561.	150.	108.	12.75
+	HYDROGRAPH AT	S300	181.	4.93	51.	13.	10.	0.62
+	HYDROGRAPH AT	S301	333.	4.83	88.	23.	16.	0.99
+	2 COMBINED AT	C300	420.	4.90	122.	32.	23.	1.61
+	ROUTED TO	300301	415.	5.07	122.	32.	23.	1.61
+	HYDROGRAPH AT	S302	201.	4.70	41.	10.	7.	0.47
+	2 COMBINED AT	C301	481.	5.03	145.	38.	27.	2.07
+	ROUTED TO	301302	471.	5.30	145.	38.	27.	2.07
+	HYDROGRAPH AT	S303	186.	4.93	44.	11.	8.	0.71
+	2 COMBINED AT	C302	502.	5.30	161.	42.	30.	2.78
+	ROUTED TO	302303	495.	5.53	161.	42.	30.	2.78
+	HYDROGRAPH AT	S304	147.	5.17	46.	12.	8.	0.82
+	2 COMBINED AT	C303	540.	5.53	182.	47.	34.	3.60
+	2 COMBINED AT	WEST-1	1666.	5.80	675.	180.	130.	16.36
+	HYDROGRAPH AT	S400	278.	5.13	77.	20.	14.	1.05
+	ROUTED TO	C400O	243.	5.40	77.	20.	14.	1.05
+	ROUTED TO	400401	242.	5.70	77.	20.	14.	1.05
+	HYDROGRAPH AT	S401	154.	5.10	41.	10.	7.	0.65
+	2 COMBINED AT	C401	301.	5.57	100.	26.	18.	1.69
+	ROUTED TO	401402	292.	6.10	100.	26.	18.	1.69
+	HYDROGRAPH AT	S402	174.	5.07	43.	11.	8.	0.74
+	2 COMBINED AT	C402	312.	6.03	118.	30.	22.	2.43

+	ROUTED TO 402403	307.	6.40	118.	30.	22.	2.43
+	HYDROGRAPH AT S403	155.	5.13	46.	12.	8.	0.56
+	2 COMBINED AT C403	339.	6.37	148.	38.	27.	2.99
+	ROUTED TO 403404	337.	6.57	148.	38.	27.	2.99
+	HYDROGRAPH AT S404	194.	4.33	18.	5.	3.	0.26
+	2 COMBINED AT C404	336.	6.57	158.	41.	29.	3.26
+	2 COMBINED AT WEST-2	1740.	5.83	755.	201.	145.	19.61
+	HYDROGRAPH AT S500	263.	5.13	90.	24.	17.	1.05
+	ROUTED TO 500501	260.	5.33	90.	24.	17.	1.05
+	HYDROGRAPH AT S501	215.	4.80	50.	13.	9.	0.61
+	2 COMBINED AT C501	336.	5.23	121.	32.	23.	1.67
+	ROUTED TO 501502	330.	5.37	118.	30.	22.	1.67
+	HYDROGRAPH AT S502	174.	4.60	30.	8.	5.	0.40
+	2 COMBINED AT C502L	348.	5.33	131.	34.	24.	2.07
+	HYDROGRAPH AT S503	307.	4.93	75.	19.	14.	0.99
+	2 COMBINED AT C502I	506.	5.10	179.	46.	33.	3.07
+	ROUTED TO C502O	505.	5.13	179.	46.	33.	3.07
+	ROUTED TO 502505	487.	5.50	169.	43.	31.	3.07
+	HYDROGRAPH AT S504	44.	5.17	15.	4.	3.	0.33
+	2 COMBINED AT C505L	487.	5.50	170.	43.	31.	3.39
+	HYDROGRAPH AT S505	122.	4.23	11.	3.	2.	0.14
+	ROUTED TO C503O	72.	4.40	11.	3.	2.	0.14
+	ROUTED TO 503505	69.	4.90	10.	2.	2.	0.14
+	HYDROGRAPH AT S506	87.	4.37	11.	3.	2.	0.15
+	ROUTED TO C504O	59.	4.63	11.	3.	2.	0.15
+	ROUTED TO 504505	57.	5.27	11.	3.	2.	0.15
+	HYDROGRAPH AT S507	142.	5.10	37.	9.	7.	0.67

+	3 COMBINED AT C505R	222.	5.07	51.	13.	9.	0.96
+	2 COMBINED AT C505	564.	5.43	192.	49.	35.	4.35
+	ROUTED TO 505509	526.	6.07	172.	43.	31.	4.35
+	HYDROGRAPH AT S508	80.	4.80	17.	4.	3.	0.29
+	2 COMBINED AT C509L	526.	6.07	176.	44.	32.	4.65
+	HYDROGRAPH AT S509	136.	4.27	15.	4.	3.	0.17
+	ROUTED TO C506O	72.	4.53	15.	4.	3.	0.17
+	ROUTED TO 506508	72.	4.77	15.	4.	3.	0.17
+	HYDROGRAPH AT S510	49.	4.63	10.	3.	2.	0.13
+	2 COMBINED AT C508R	120.	4.67	25.	6.	5.	0.30
+	HYDROGRAPH AT S511	225.	4.43	34.	8.	6.	0.38
+	ROUTED TO C507O	82.	5.03	34.	8.	6.	0.38
+	ROUTED TO 507508	81.	5.40	33.	9.	7.	0.38
+	HYDROGRAPH AT S512	74.	4.80	17.	4.	3.	0.21
+	2 COMBINED AT C508L	144.	4.93	49.	13.	9.	0.60
+	2 COMBINED AT C508	237.	4.83	68.	18.	13.	0.90
+	ROUTED TO 508509	223.	5.40	65.	19.	13.	0.90
+	HYDROGRAPH AT S513	130.	5.17	41.	10.	8.	0.78
+	2 COMBINED AT C509R	287.	5.40	88.	25.	18.	1.67
+	2 COMBINED AT C509	642.	6.00	227.	59.	43.	6.32
+	ROUTED TO 509510	637.	6.10	227.	59.	43.	6.32
+	HYDROGRAPH AT S514	156.	5.17	51.	13.	9.	0.65
+	2 COMBINED AT C510	682.	6.10	256.	67.	48.	6.97
+	ROUTED TO 510511	670.	6.40	254.	67.	48.	6.97
+	HYDROGRAPH AT S515	350.	5.13	93.	23.	17.	1.10
+	2 COMBINED AT C511	737.	6.33	316.	83.	60.	8.07
+	ROUTED TO 511512	721.	6.80	313.	83.	60.	8.07

+	HYDROGRAPH AT S516	93.	5.13	29.	7.	5.	0.54
+	2 COMBINED AT C512	718.	6.80	315.	84.	61.	8.61
+	2 COMBINED AT WEST-3	1880.	5.97	925.	251.	181.	28.22
+	HYDROGRAPH AT S600	345.	5.13	108.	28.	20.	2.02
+	ROUTED TO 600601	341.	5.23	108.	28.	20.	2.02
+	HYDROGRAPH AT S601	482.	4.63	102.	26.	19.	0.90
+	2 COMBINED AT C601	539.	4.97	185.	48.	35.	2.92
+	ROUTED TO 601602	537.	5.17	185.	48.	35.	2.92
+	HYDROGRAPH AT S603	518.	4.40	76.	19.	14.	0.67
+	2 COMBINED AT C602L	670.	4.80	244.	63.	46.	3.58
+	HYDROGRAPH AT S602	473.	5.03	149.	39.	28.	1.88
+	2 COMBINED AT C602	984.	4.97	363.	95.	68.	5.47
+	ROUTED TO 602603	934.	5.20	319.	80.	58.	5.47
+	HYDROGRAPH AT S606	267.	4.67	64.	16.	12.	0.66
+	2 COMBINED AT C603L	1036.	5.13	362.	91.	66.	6.13
+	HYDROGRAPH AT S605	340.	4.90	95.	25.	18.	1.09
+	HYDROGRAPH AT S604	547.	5.17	195.	51.	37.	2.66
+	3 COMBINED AT C603	1577.	5.13	584.	151.	109.	9.87
+	ROUTED TO 603604	1514.	5.47	536.	135.	97.	9.87
+	HYDROGRAPH AT S609	145.	4.93	46.	12.	9.	0.56
+	2 COMBINED AT C604R	1555.	5.47	559.	141.	102.	10.43
+	HYDROGRAPH AT S607	267.	4.87	79.	21.	15.	0.82
+	2 COMBINED AT C604	1657.	5.43	610.	155.	111.	11.25
+	ROUTED TO 604605	1655.	5.47	610.	155.	111.	11.25
+	HYDROGRAPH AT S608	313.	4.53	57.	14.	10.	0.51
+	2 COMBINED AT C605	1703.	5.43	645.	164.	118.	11.76
+	ROUTED TO 605606	1689.	5.57	638.	161.	116.	11.76

+	HYDROGRAPH AT	S610	218.	4.90	64.	17.	12.	0.60
+	2 COMBINED AT	C606L	1768.	5.57	679.	172.	124.	12.36
+	HYDROGRAPH AT	S612	270.	4.90	79.	21.	15.	0.81
+	2 COMBINED AT	C606	1870.	5.53	730.	186.	134.	13.17
+	ROUTED TO	606608	1866.	5.57	727.	185.	133.	13.17
+	HYDROGRAPH AT	S611	326.	4.53	57.	14.	10.	0.57
+	ROUTED TO	607608	303.	4.83	56.	14.	10.	0.57
+	HYDROGRAPH AT	S613	468.	5.13	146.	38.	27.	1.80
+	3 COMBINED AT	C608	2172.	5.50	858.	220.	159.	15.53
+	ROUTED TO	608609	2150.	5.67	848.	217.	156.	15.53
+	HYDROGRAPH AT	S614	279.	5.13	92.	24.	17.	1.08
+	2 COMBINED AT	C609	2260.	5.67	905.	232.	167.	16.61
+	ROUTED TO	609611	2215.	5.93	877.	223.	160.	16.61
+	HYDROGRAPH AT	S617	227.	4.93	56.	14.	10.	0.68
+	2 COMBINED AT	C611R	2250.	5.93	902.	230.	166.	17.29
+	HYDROGRAPH AT	S615	451.	4.97	134.	35.	25.	1.05
+	ROUTED TO	610611	446.	5.20	134.	35.	25.	1.05
+	HYDROGRAPH AT	S616	123.	5.13	42.	11.	8.	0.50
+	2 COMBINED AT	C611L	513.	5.20	164.	43.	31.	1.56
+	2 COMBINED AT	C611	2488.	5.87	1017.	261.	188.	18.85
+	ROUTED TO	611613	2474.	5.97	1007.	257.	185.	18.85
+	HYDROGRAPH AT	S618	251.	5.03	75.	20.	14.	0.96
+	2 COMBINED AT	C613R	2529.	5.93	1042.	267.	193.	19.81
+	HYDROGRAPH AT	S619	455.	4.73	94.	24.	17.	0.83
+	ROUTED TO	612613	441.	5.00	94.	24.	17.	0.83
+	HYDROGRAPH AT	S620	190.	4.73	50.	13.	9.	0.44
+	2 COMBINED AT	C613L	555.	4.97	136.	35.	25.	1.27

+	2 COMBINED AT	C613	2692.	5.90	1131.	292.	210.	21.08
+	ROUTED TO	613614	2673.	6.03	1119.	287.	207.	21.08
+	HYDROGRAPH AT	S621	246.	4.87	49.	12.	9.	0.92
+	2 COMBINED AT	C614	2672.	6.03	1126.	289.	208.	22.00
+	ROUTED TO	614615	2647.	6.17	1114.	285.	205.	22.00
+	HYDROGRAPH AT	S622	172.	5.13	49.	12.	9.	0.90
+	2 COMBINED AT	C615	2649.	6.17	1120.	287.	207.	22.90
+	2 COMBINED AT	WEST-4	3792.	6.13	1784.	474.	341.	51.12
+	HYDROGRAPH AT	S700	145.	4.97	39.	10.	7.	0.61
+	HYDROGRAPH AT	S701	137.	5.17	52.	14.	10.	0.72
+	HYDROGRAPH AT	S702	73.	4.70	17.	4.	3.	0.26
+	HYDROGRAPH AT	S703	86.	4.60	16.	4.	3.	0.26
+	HYDROGRAPH AT	S704	189.	4.50	30.	7.	5.	0.41
+	ROUTED TO	704705	176.	4.83	30.	7.	5.	0.41
+	HYDROGRAPH AT	S705	163.	5.17	53.	14.	10.	0.75
+	2 COMBINED AT	C705	253.	5.03	71.	18.	13.	1.16
+	ROUTED TO	C705O	218.	5.37	71.	18.	13.	1.16
+	ROUTED TO	705OAF	216.	5.60	71.	18.	13.	1.16
+	HYDROGRAPH AT	S705AF	123.	4.47	20.	5.	4.	0.18
+	2 COMBINED AT	C705AF	231.	5.53	87.	22.	16.	1.34
+	5 COMBINED AT	WEST-5	372.	5.33	148.	38.	28.	3.19
+	HYDROGRAPH AT	S706	163.	5.03	46.	12.	8.	0.71
+	HYDROGRAPH AT	S707	155.	4.97	46.	12.	8.	0.64
+	HYDROGRAPH AT	S728	52.	4.97	16.	4.	3.	0.28
+	5 COMBINED AT	WEST	3845.	6.10	1835.	489.	352.	55.94
+	HYDROGRAPH AT	S708	476.	4.53	75.	19.	13.	0.71
+	HYDROGRAPH AT	S709	339.	4.47	52.	13.	9.	0.44

+	ROUTED TO	C709O	244.	4.77	52.	13.	9.	0.44
+	ROUTED TO	709710	243.	4.83	52.	13.	9.	0.44
+	HYDROGRAPH AT	S710	127.	4.23	14.	3.	2.	0.11
+	2 COMBINED AT	C710I	270.	4.73	65.	16.	12.	0.55
+	ROUTED TO	C710O	250.	4.97	65.	16.	12.	0.55
+	HYDROGRAPH AT	S711	213.	4.20	19.	5.	3.	0.16
+	ROUTED TO	C711O	131.	4.40	19.	5.	3.	0.16
+	ROUTED TO	711712	130.	4.47	19.	5.	3.	0.16
+	HYDROGRAPH AT	S712	117.	4.10	8.	2.	1.	0.07
+	2 COMBINED AT	C712I	206.	4.13	27.	7.	5.	0.23
+	ROUTED TO	C712O	163.	4.30	27.	7.	5.	0.23
+	ROUTED TO	712714	162.	4.37	27.	7.	5.	0.23
+	HYDROGRAPH AT	S713	150.	4.17	13.	3.	2.	0.11
+	ROUTED TO	C713O	91.	4.33	13.	3.	2.	0.11
+	ROUTED TO	713714	90.	4.37	13.	3.	2.	0.11
+	HYDROGRAPH AT	S714	63.	4.20	5.	1.	1.	0.06
+	3 COMBINED AT	C714	297.	4.30	45.	11.	8.	0.39
+	HYDROGRAPH AT	S715	169.	4.43	26.	6.	5.	0.22
+	HYDROGRAPH AT	S716	561.	4.77	122.	31.	22.	1.13
+	ROUTED TO	C716O	387.	5.23	122.	31.	22.	1.13
+	ROUTED TO	716717	386.	5.37	122.	31.	22.	1.13
+	HYDROGRAPH AT	S717	389.	4.23	35.	9.	6.	0.29
+	2 COMBINED AT	C717	385.	5.30	154.	39.	28.	1.41
+	ROUTED TO	717718	382.	5.80	154.	38.	28.	1.41
+	HYDROGRAPH AT	S718	157.	5.07	54.	14.	10.	0.44
+	2 COMBINED AT	C718	489.	5.57	203.	51.	37.	1.86
+	HYDROGRAPH AT	S719	95.	4.53	22.	6.	4.	0.15

+	6 COMBINED AT	EAST-1	1231.	4.73	404.	102.	73.	3.88
+	HYDROGRAPH AT	S720	238.	4.57	44.	11.	8.	0.37
+	HYDROGRAPH AT	S721	290.	4.33	27.	7.	5.	0.34
+	ROUTED TO	C721O	130.	4.63	27.	7.	5.	0.34
+	ROUTED TO	721722	126.	5.20	27.	7.	5.	0.34
+	HYDROGRAPH AT	S722	387.	4.87	94.	23.	17.	0.95
+	2 COMBINED AT	C722	462.	4.97	115.	29.	21.	1.29
+	HYDROGRAPH AT	S723	86.	4.27	9.	2.	2.	0.09
+	HYDROGRAPH AT	S724	665.	4.70	134.	34.	24.	1.16
+	HYDROGRAPH AT	S725	316.	5.20	104.	26.	19.	1.16
+	5 COMBINED AT	EAST-2	1301.	4.90	369.	93.	67.	4.06
+	HYDROGRAPH AT	S726	265.	4.27	24.	6.	4.	0.33
+	ROUTED TO	726727	226.	4.53	24.	6.	4.	0.33
+	HYDROGRAPH AT	S727	100.	5.20	38.	10.	7.	0.38
+	2 COMBINED AT	C727	218.	4.53	59.	15.	11.	0.71
+	4 COMBINED AT	TOTAL	4473.	6.00	2313.	610.	439.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 5-Year, 24-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   09AUG01  TIME  15:19:49  *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX5-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 5-year, 24-hour storm event. A companion model is also created for the existing condition 5-year, 6-hour storm event. Both models (5-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 5-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.03 HOURS
                      TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       2.32  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 2.31 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 2.25 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 2.18 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 2.10 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 1.99 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	132.	12.77	40.	13.	9.	0.57		
+	ROUTED TO	100102	128.	13.07	40.	13.	9.	0.57		
+	HYDROGRAPH AT	S101	178.	12.60	38.	11.	8.	0.63		
+	2 COMBINED AT	C102R	245.	12.90	77.	24.	17.	1.20		
+	HYDROGRAPH AT	S102	94.	12.90	33.	11.	8.	0.45		
+	ROUTED TO	101102	92.	13.23	33.	11.	8.	0.45		
+	HYDROGRAPH AT	S103	76.	13.00	26.	8.	6.	0.40		
+	2 COMBINED AT	C102L	164.	13.17	58.	18.	13.	0.84		
+	2 COMBINED AT	C102	383.	13.03	132.	41.	30.	2.05		

+	ROUTED TO 102103	376.	13.30	132.	41.	30.	2.05
+	HYDROGRAPH AT S104	216.	12.87	55.	16.	11.	0.90
+	2 COMBINED AT C103R	529.	13.20	183.	56.	41.	2.95
+	HYDROGRAPH AT S105	97.	13.10	35.	10.	8.	0.59
+	2 COMBINED AT C103	616.	13.17	215.	66.	48.	3.54
+	ROUTED TO 103104	608.	13.43	215.	66.	48.	3.54
+	HYDROGRAPH AT S106	102.	12.87	29.	8.	6.	0.57
+	2 COMBINED AT C104	669.	13.40	241.	73.	53.	4.11
+	ROUTED TO 104105	659.	13.80	240.	73.	53.	4.11
+	HYDROGRAPH AT S107	119.	13.07	38.	10.	7.	0.94
+	2 COMBINED AT C105L	724.	13.77	272.	81.	59.	5.05
+	HYDROGRAPH AT S200	286.	12.67	72.	24.	17.	0.96
+	ROUTED TO 200201	281.	12.73	72.	24.	17.	0.96
+	HYDROGRAPH AT S201	103.	12.57	26.	9.	6.	0.35
+	2 COMBINED AT C201	369.	12.70	98.	33.	24.	1.31
+	ROUTED TO 201203	362.	12.87	98.	33.	24.	1.31
+	HYDROGRAPH AT S202	49.	12.30	10.	3.	2.	0.13
+	ROUTED TO 202203	47.	12.43	10.	3.	2.	0.13
+	HYDROGRAPH AT S203	71.	12.87	28.	9.	7.	0.37
+	3 COMBINED AT C203R	454.	12.87	133.	45.	32.	1.81
+	HYDROGRAPH AT S204	217.	12.83	67.	22.	16.	0.95
+	2 COMBINED AT C203	656.	12.87	197.	66.	48.	2.76
+	ROUTED TO 203204	652.	12.90	197.	66.	48.	2.76
+	HYDROGRAPH AT S205	88.	12.73	26.	8.	6.	0.41
+	2 COMBINED AT C204	727.	12.90	221.	73.	53.	3.17
+	ROUTED TO 204205	717.	13.07	221.	73.	53.	3.17
+	HYDROGRAPH AT S206	153.	13.10	59.	19.	14.	0.85

+	2 COMBINED AT	C205L	856.	13.07	275.	91.	66.	4.03
+	HYDROGRAPH AT	S207	183.	13.10	71.	24.	17.	0.96
+	2 COMBINED AT	C205	1022.	13.07	341.	114.	82.	4.98
+	ROUTED TO	205206	995.	13.50	341.	113.	82.	4.98
+	HYDROGRAPH AT	S208	236.	13.07	79.	25.	18.	1.10
+	2 COMBINED AT	C206	1156.	13.47	408.	135.	98.	6.09
+	ROUTED TO	206207	1150.	13.57	408.	135.	98.	6.09
+	HYDROGRAPH AT	S209	146.	12.83	38.	11.	8.	0.65
+	2 COMBINED AT	C207R	1210.	13.53	438.	144.	105.	6.74
+	HYDROGRAPH AT	S210	104.	12.67	21.	5.	4.	0.48
+	2 COMBINED AT	C207	1234.	13.53	454.	148.	108.	7.22
+	ROUTED TO	207105	1225.	13.67	453.	148.	108.	7.22
+	HYDROGRAPH AT	S211	90.	12.87	23.	6.	4.	0.49
+	2 COMBINED AT	C105R	1257.	13.63	470.	152.	111.	7.70
+	2 COMBINED AT	C105	1828.	13.70	696.	220.	160.	12.75
+	HYDROGRAPH AT	S300	119.	12.93	40.	13.	9.	0.62
+	HYDROGRAPH AT	S301	199.	13.10	74.	25.	18.	0.99
+	2 COMBINED AT	C300	308.	13.03	113.	37.	27.	1.61
+	ROUTED TO	300301	305.	13.27	112.	37.	27.	1.61
+	HYDROGRAPH AT	S302	118.	12.73	30.	10.	7.	0.47
+	2 COMBINED AT	C301	378.	13.17	141.	46.	34.	2.07
+	ROUTED TO	301302	372.	13.50	140.	46.	34.	2.07
+	HYDROGRAPH AT	S303	128.	12.87	33.	10.	7.	0.71
+	2 COMBINED AT	C302	442.	13.43	170.	55.	40.	2.78
+	ROUTED TO	302303	437.	13.67	170.	55.	40.	2.78
+	HYDROGRAPH AT	S304	119.	13.03	37.	10.	7.	0.82
+	2 COMBINED AT	C303	511.	13.60	203.	64.	46.	3.60

+	2 COMBINED AT WEST-1	2221.	13.70	858.	273.	199.	16.36
+	HYDROGRAPH AT S400	256.	12.93	70.	20.	15.	1.05
+	ROUTED TO C400O	232.	13.17	70.	20.	15.	1.05
+	ROUTED TO 400401	228.	13.47	70.	20.	15.	1.05
+	HYDROGRAPH AT S401	108.	13.03	31.	8.	6.	0.65
+	2 COMBINED AT C401	310.	13.37	98.	28.	20.	1.69
+	ROUTED TO 401402	303.	13.90	98.	28.	20.	1.69
+	HYDROGRAPH AT S402	142.	12.90	34.	9.	6.	0.74
+	2 COMBINED AT C402	350.	13.83	129.	36.	26.	2.43
+	ROUTED TO 402403	343.	14.20	129.	36.	26.	2.43
+	HYDROGRAPH AT S403	124.	13.03	38.	10.	7.	0.56
+	2 COMBINED AT C403	393.	14.17	164.	45.	33.	2.99
+	ROUTED TO 403404	390.	14.33	164.	45.	32.	2.99
+	HYDROGRAPH AT S404	126.	12.30	14.	4.	3.	0.26
+	2 COMBINED AT C404	390.	14.33	175.	48.	35.	3.26
+	2 COMBINED AT WEST-2	2402.	13.70	991.	310.	226.	19.61
+	HYDROGRAPH AT S500	201.	13.10	78.	26.	19.	1.05
+	ROUTED TO 500501	199.	13.30	78.	26.	19.	1.05
+	HYDROGRAPH AT S501	135.	12.80	38.	12.	9.	0.61
+	2 COMBINED AT C501	291.	13.20	114.	38.	28.	1.67
+	ROUTED TO 501502	285.	13.33	110.	35.	25.	1.67
+	HYDROGRAPH AT S502	97.	12.60	21.	6.	4.	0.40
+	2 COMBINED AT C502L	322.	13.30	129.	40.	29.	2.07
+	HYDROGRAPH AT S503	213.	13.07	67.	20.	14.	0.99
+	2 COMBINED AT C502I	513.	13.17	192.	59.	43.	3.07
+	ROUTED TO C502O	513.	13.20	192.	59.	43.	3.07
+	ROUTED TO 502505	495.	13.57	182.	50.	36.	3.07

+	HYDROGRAPH AT	S504	21.	13.13	8.	2.	1.	0.33
+	2 COMBINED AT	C505L	509.	13.53	188.	52.	37.	3.39
+	HYDROGRAPH AT	S505	56.	12.23	7.	2.	2.	0.14
+	ROUTED TO	C503O	51.	12.33	7.	2.	2.	0.14
+	ROUTED TO	503505	41.	12.87	6.	2.	1.	0.14
+	HYDROGRAPH AT	S506	54.	12.37	8.	2.	2.	0.15
+	ROUTED TO	C504O	51.	12.43	8.	2.	2.	0.15
+	ROUTED TO	504505	46.	13.03	8.	2.	2.	0.15
+	HYDROGRAPH AT	S507	108.	12.97	28.	7.	5.	0.67
+	3 COMBINED AT	C505R	191.	12.97	42.	11.	8.	0.96
+	2 COMBINED AT	C505	617.	13.40	225.	61.	44.	4.35
+	ROUTED TO	505509	582.	14.03	204.	51.	37.	4.35
+	HYDROGRAPH AT	S508	49.	12.77	11.	3.	2.	0.29
+	2 COMBINED AT	C509L	592.	14.03	213.	54.	39.	4.65
+	HYDROGRAPH AT	S509	74.	12.27	11.	4.	3.	0.17
+	ROUTED TO	C506O	63.	12.37	11.	4.	3.	0.17
+	ROUTED TO	506508	61.	12.60	11.	4.	3.	0.17
+	HYDROGRAPH AT	S510	38.	12.57	8.	2.	2.	0.13
+	2 COMBINED AT	C508R	98.	12.60	20.	6.	4.	0.30
+	HYDROGRAPH AT	S511	144.	12.40	26.	8.	6.	0.38
+	ROUTED TO	C507O	74.	12.87	26.	8.	6.	0.38
+	ROUTED TO	507508	73.	13.23	26.	8.	6.	0.38
+	HYDROGRAPH AT	S512	60.	12.70	14.	4.	3.	0.21
+	2 COMBINED AT	C508L	124.	12.80	40.	12.	8.	0.60
+	2 COMBINED AT	C508	215.	12.67	59.	17.	13.	0.90
+	ROUTED TO	508509	198.	13.27	57.	17.	12.	0.90
+	HYDROGRAPH AT	S513	99.	13.07	32.	8.	6.	0.78

+	2 COMBINED AT C509R	285.	13.27	87.	25.	18.	1.67
+	2 COMBINED AT C509	754.	13.97	286.	75.	54.	6.32
+	ROUTED TO 509510	750.	14.07	285.	75.	54.	6.32
+	HYDROGRAPH AT S514	128.	13.07	42.	11.	8.	0.65
+	2 COMBINED AT C510	804.	14.03	320.	84.	60.	6.97
+	ROUTED TO 510511	792.	14.37	318.	84.	61.	6.97
+	HYDROGRAPH AT S515	311.	13.03	82.	21.	15.	1.10
+	2 COMBINED AT C511	861.	14.33	382.	102.	73.	8.07
+	ROUTED TO 511512	842.	14.77	377.	101.	73.	8.07
+	HYDROGRAPH AT S516	57.	13.10	18.	4.	3.	0.54
+	2 COMBINED AT C512	849.	14.77	386.	104.	75.	8.61
+	2 COMBINED AT WEST-3	2736.	13.77	1284.	387.	284.	28.22
+	HYDROGRAPH AT S600	349.	12.90	104.	34.	25.	2.02
+	ROUTED TO 600601	347.	13.00	104.	34.	25.	2.02
+	HYDROGRAPH AT S601	383.	12.57	91.	30.	22.	0.90
+	2 COMBINED AT C601	588.	12.90	191.	63.	45.	2.92
+	ROUTED TO 601602	580.	13.07	191.	63.	45.	2.92
+	HYDROGRAPH AT S603	364.	12.33	65.	21.	15.	0.67
+	2 COMBINED AT C602L	686.	12.83	252.	83.	60.	3.58
+	HYDROGRAPH AT S602	457.	12.87	142.	47.	34.	1.88
+	2 COMBINED AT C602	1111.	12.83	385.	127.	92.	5.47
+	ROUTED TO 602603	1056.	13.07	341.	89.	64.	5.47
+	HYDROGRAPH AT S606	178.	12.63	52.	17.	13.	0.66
+	2 COMBINED AT C603L	1172.	13.03	386.	104.	75.	6.13
+	HYDROGRAPH AT S605	267.	12.80	83.	28.	20.	1.09
+	HYDROGRAPH AT S604	535.	13.07	197.	66.	48.	2.66
+	3 COMBINED AT C603	1827.	13.03	627.	187.	135.	9.87

+	ROUTED TO 603604	1750.	13.37	579.	150.	108.	9.87
+	HYDROGRAPH AT S609	83.	12.97	33.	11.	8.	0.56
+	2 COMBINED AT C604R	1805.	13.33	605.	159.	115.	10.43
+	HYDROGRAPH AT S607	207.	12.80	69.	22.	16.	0.82
+	2 COMBINED AT C604	1931.	13.33	663.	178.	129.	11.25
+	ROUTED TO 604605	1926.	13.37	663.	178.	129.	11.25
+	HYDROGRAPH AT S608	211.	12.50	47.	15.	11.	0.51
+	2 COMBINED AT C605	1983.	13.37	703.	191.	138.	11.76
+	ROUTED TO 605606	1961.	13.47	695.	186.	134.	11.76
+	HYDROGRAPH AT S610	154.	12.87	54.	18.	13.	0.60
+	2 COMBINED AT C606L	2055.	13.47	741.	201.	145.	12.36
+	HYDROGRAPH AT S612	222.	12.80	71.	22.	16.	0.81
+	2 COMBINED AT C606	2174.	13.43	801.	220.	159.	13.17
+	ROUTED TO 606608	2169.	13.47	798.	217.	157.	13.17
+	HYDROGRAPH AT S611	197.	12.50	44.	15.	11.	0.57
+	ROUTED TO 607608	185.	12.87	44.	15.	11.	0.57
+	HYDROGRAPH AT S613	419.	13.03	139.	46.	33.	1.80
+	3 COMBINED AT C608	2556.	13.40	948.	269.	194.	15.53
+	ROUTED TO 608609	2529.	13.57	938.	260.	187.	15.53
+	HYDROGRAPH AT S614	218.	13.07	81.	27.	20.	1.08
+	2 COMBINED AT C609	2666.	13.57	1003.	283.	204.	16.61
+	ROUTED TO 609611	2613.	13.83	975.	258.	186.	16.61
+	HYDROGRAPH AT S617	162.	12.90	46.	14.	10.	0.68
+	2 COMBINED AT C611R	2665.	13.83	1009.	270.	194.	17.29
+	HYDROGRAPH AT S615	372.	12.90	123.	41.	30.	1.05
+	ROUTED TO 610611	366.	13.10	123.	41.	30.	1.05
+	HYDROGRAPH AT S616	86.	13.10	32.	10.	7.	0.50

	2 COMBINED AT							
+		C611L	447.	13.10	154.	51.	37.	1.56
	2 COMBINED AT							
+		C611	2928.	13.80	1137.	313.	226.	18.85
	ROUTED TO							
+		611613	2911.	13.87	1127.	304.	219.	18.85
	HYDROGRAPH AT							
+		S618	215.	12.87	67.	21.	15.	0.96
	2 COMBINED AT							
+		C613R	2989.	13.87	1177.	320.	231.	19.81
	HYDROGRAPH AT							
+		S619	364.	12.67	83.	27.	19.	0.83
	ROUTED TO							
+		612613	352.	12.90	83.	27.	19.	0.83
	HYDROGRAPH AT							
+		S620	135.	12.70	43.	14.	10.	0.44
	2 COMBINED AT							
+		C613L	475.	12.90	125.	40.	29.	1.27
	2 COMBINED AT							
+		C613	3170.	13.80	1279.	354.	255.	21.08
	ROUTED TO							
+		613614	3148.	13.97	1268.	343.	247.	21.08
	HYDROGRAPH AT							
+		S621	214.	12.70	40.	10.	8.	0.92
	2 COMBINED AT							
+		C614	3164.	13.93	1293.	350.	252.	22.00
	ROUTED TO							
+		614615	3140.	14.07	1281.	342.	246.	22.00
	HYDROGRAPH AT							
+		S622	135.	13.07	40.	11.	8.	0.90
	2 COMBINED AT							
+		C615	3178.	14.07	1307.	348.	251.	22.90
	2 COMBINED AT							
+		WEST-4	5393.	14.00	2388.	680.	495.	51.12
	HYDROGRAPH AT							
+		S700	106.	12.87	30.	8.	6.	0.61
	HYDROGRAPH AT							
+		S701	106.	13.10	43.	13.	9.	0.72
	HYDROGRAPH AT							
+		S702	47.	12.67	12.	3.	2.	0.26
	HYDROGRAPH AT							
+		S703	53.	12.57	11.	3.	2.	0.26
	HYDROGRAPH AT							
+		S704	111.	12.50	21.	6.	4.	0.41
	ROUTED TO							
+		704705	103.	12.90	21.	6.	4.	0.41
	HYDROGRAPH AT							
+		S705	189.	12.70	46.	12.	9.	0.75
	2 COMBINED AT							
+		C705	280.	12.80	66.	18.	13.	1.16
	ROUTED TO							
+		C705O	230.	13.10	66.	18.	13.	1.16
	ROUTED TO							
+		705OAF	226.	13.37	66.	18.	13.	1.16

+	HYDROGRAPH AT	S705AF	93.	12.43	17.	4.	3.	0.18
+	2 COMBINED AT	C705AF	253.	13.33	83.	22.	16.	1.34
+	5 COMBINED AT	WEST-5	482.	13.10	171.	48.	34.	3.19
+	HYDROGRAPH AT	S706	132.	12.87	37.	10.	7.	0.71
+	HYDROGRAPH AT	S707	127.	12.83	38.	10.	8.	0.64
+	HYDROGRAPH AT	S728	34.	12.90	11.	3.	2.	0.28
+	5 COMBINED AT	WEST	5631.	13.97	2542.	724.	527.	55.94
+	HYDROGRAPH AT	S708	376.	12.47	62.	16.	11.	0.71
+	HYDROGRAPH AT	S709	252.	12.43	47.	12.	8.	0.44
+	ROUTED TO	C709O	199.	12.70	47.	12.	8.	0.44
+	ROUTED TO	709710	198.	12.77	47.	12.	8.	0.44
+	HYDROGRAPH AT	S710	83.	12.23	11.	3.	2.	0.11
+	2 COMBINED AT	C710I	229.	12.70	58.	15.	10.	0.55
+	ROUTED TO	C710O	216.	12.90	58.	14.	10.	0.55
+	HYDROGRAPH AT	S711	137.	12.20	17.	4.	3.	0.16
+	ROUTED TO	C711O	117.	12.30	17.	4.	3.	0.16
+	ROUTED TO	711712	117.	12.37	17.	4.	3.	0.16
+	HYDROGRAPH AT	S712	66.	12.07	7.	2.	1.	0.07
+	2 COMBINED AT	C712I	166.	12.13	24.	6.	4.	0.23
+	ROUTED TO	C712O	145.	12.30	24.	6.	4.	0.23
+	ROUTED TO	712714	143.	12.37	24.	6.	4.	0.23
+	HYDROGRAPH AT	S713	91.	12.17	11.	3.	2.	0.11
+	ROUTED TO	C713O	61.	12.33	11.	3.	2.	0.11
+	ROUTED TO	713714	61.	12.37	11.	3.	2.	0.11
+	HYDROGRAPH AT	S714	39.	12.20	4.	1.	1.	0.06
+	3 COMBINED AT	C714	232.	12.33	39.	10.	7.	0.39
+	HYDROGRAPH AT	S715	126.	12.40	23.	6.	4.	0.22

+	HYDROGRAPH AT S716	505.	12.67	108.	27.	20.	1.13
+	ROUTED TO C716O	357.	13.07	108.	27.	20.	1.13
+	ROUTED TO 716717	357.	13.23	108.	27.	20.	1.13
+	HYDROGRAPH AT S717	249.	12.20	31.	8.	6.	0.29
+	2 COMBINED AT C717	375.	13.07	138.	35.	25.	1.41
+	ROUTED TO 717718	372.	13.60	137.	34.	25.	1.41
+	HYDROGRAPH AT S718	124.	13.03	48.	13.	9.	0.44
+	2 COMBINED AT C718	474.	13.47	184.	47.	34.	1.86
+	HYDROGRAPH AT S719	71.	12.50	22.	6.	4.	0.15
+	6 COMBINED AT EAST-1	1193.	12.60	377.	95.	69.	3.88
+	HYDROGRAPH AT S720	178.	12.53	40.	10.	7.	0.37
+	HYDROGRAPH AT S721	197.	12.27	22.	5.	4.	0.34
+	ROUTED TO C721O	109.	12.53	22.	5.	4.	0.34
+	ROUTED TO 721722	105.	13.07	22.	5.	4.	0.34
+	HYDROGRAPH AT S722	353.	12.73	82.	20.	15.	0.95
+	2 COMBINED AT C722	433.	12.77	103.	26.	19.	1.29
+	HYDROGRAPH AT S723	58.	12.23	8.	2.	1.	0.09
+	HYDROGRAPH AT S724	594.	12.60	124.	31.	22.	1.16
+	HYDROGRAPH AT S725	290.	13.03	92.	23.	17.	1.16
+	5 COMBINED AT EAST-2	1343.	12.70	354.	89.	64.	4.06
+	HYDROGRAPH AT S726	154.	12.27	18.	5.	4.	0.33
+	ROUTED TO 726727	135.	12.63	18.	5.	4.	0.33
+	HYDROGRAPH AT S727	125.	12.67	33.	8.	6.	0.38
+	2 COMBINED AT C727	259.	12.67	51.	13.	9.	0.71
+	4 COMBINED AT TOTAL	6410.	13.83	3117.	871.	633.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 2-Year, 6-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   09AUG01  TIME  15:14:45  *
*                                      *
****************************************
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****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX2-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 2-year, 6-hour storm event. A companion model is also created for the existing condition 2-year, 24-hour storm event. Both models (2-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 2-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
            DRAINAGE AREA          SQUARE MILES
            PRECIPITATION DEPTH    INCHES
            LENGTH, ELEVATION      FEET
            FLOW                   CUBIC FEET PER SECOND
            STORAGE VOLUME         ACRE-FEET
            SURFACE AREA           ACRES
            TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       1.36  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        1.35  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        1.33  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        1.25  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        1.10  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	88.	5.10	30.	8.	6.	0.57		
+	ROUTED TO	100102	86.	5.43	30.	8.	6.	0.57		
+	HYDROGRAPH AT	S101	97.	4.97	26.	7.	5.	0.63		
+	2 COMBINED AT	C102R	127.	5.30	45.	12.	9.	1.20		
+	HYDROGRAPH AT	S102	75.	5.13	26.	7.	5.	0.45		
+	ROUTED TO	101102	73.	5.50	26.	7.	5.	0.45		
+	HYDROGRAPH AT	S103	58.	5.13	19.	5.	4.	0.40		
+	2 COMBINED AT	C102L	107.	5.43	40.	10.	8.	0.84		
+	2 COMBINED AT	C102	175.	5.40	69.	18.	13.	2.05		
+	ROUTED TO	102103	171.	5.80	69.	18.	13.	2.05		
+	HYDROGRAPH AT	S104	120.	5.10	33.	9.	6.	0.90		
+	2 COMBINED AT	C103R	187.	5.77	80.	22.	16.	2.95		
+	HYDROGRAPH AT	S105	73.	5.17	25.	6.	5.	0.59		
+	2 COMBINED AT	C103	207.	5.73	90.	24.	18.	3.54		
+	ROUTED TO	103104	205.	6.10	90.	24.	18.	3.54		
+	HYDROGRAPH AT	S106	63.	5.13	20.	5.	4.	0.57		
+	2 COMBINED AT	C104	212.	6.10	95.	26.	19.	4.11		
+	ROUTED TO	104105	209.	6.47	95.	26.	19.	4.11		

+	HYDROGRAPH AT	S107	62.	5.17	19.	5.	3.	0.94
+	2 COMBINED AT	C105L	208.	6.47	96.	26.	19.	5.05
+	HYDROGRAPH AT	S200	184.	5.00	53.	14.	10.	0.96
+	ROUTED TO	200201	182.	5.10	53.	14.	10.	0.96
+	HYDROGRAPH AT	S201	83.	4.77	21.	5.	4.	0.35
+	2 COMBINED AT	C201	225.	5.03	70.	18.	13.	1.31
+	ROUTED TO	201203	223.	5.20	70.	18.	13.	1.31
+	HYDROGRAPH AT	S202	41.	4.47	8.	2.	1.	0.13
+	ROUTED TO	202203	39.	4.60	8.	2.	1.	0.13
+	HYDROGRAPH AT	S203	54.	5.17	21.	6.	4.	0.37
+	3 COMBINED AT	C203R	264.	5.20	91.	24.	17.	1.81
+	HYDROGRAPH AT	S204	146.	5.13	49.	13.	9.	0.95
+	2 COMBINED AT	C203	345.	5.20	127.	33.	24.	2.76
+	ROUTED TO	203204	344.	5.27	127.	33.	24.	2.76
+	HYDROGRAPH AT	S205	60.	5.07	20.	5.	4.	0.41
+	2 COMBINED AT	C204	368.	5.27	137.	36.	26.	3.17
+	ROUTED TO	204205	365.	5.43	137.	36.	26.	3.17
+	HYDROGRAPH AT	S206	116.	5.17	41.	11.	8.	0.85
+	2 COMBINED AT	C205L	428.	5.40	166.	44.	32.	4.03
+	HYDROGRAPH AT	S207	145.	5.17	51.	14.	10.	0.96
+	2 COMBINED AT	C205	520.	5.40	207.	55.	40.	4.98
+	ROUTED TO	205206	512.	5.87	206.	55.	40.	4.98
+	HYDROGRAPH AT	S208	156.	5.13	50.	13.	9.	1.10
+	2 COMBINED AT	C206	572.	5.83	239.	64.	46.	6.09
+	ROUTED TO	206207	570.	5.93	239.	64.	46.	6.09
+	HYDROGRAPH AT	S209	93.	5.10	26.	7.	5.	0.65
+	2 COMBINED AT	C207R	588.	5.93	250.	68.	49.	6.74

+	HYDROGRAPH AT	S210	56.	5.13	15.	4.	3.	0.48
+	2 COMBINED AT	C207	588.	5.93	251.	68.	49.	7.22
+	ROUTED TO	207105	585.	6.10	250.	68.	49.	7.22
+	HYDROGRAPH AT	S211	58.	5.13	17.	4.	3.	0.49
+	2 COMBINED AT	C105R	586.	6.10	252.	69.	49.	7.70
+	2 COMBINED AT	C105	703.	6.23	327.	90.	65.	12.75
+	HYDROGRAPH AT	S300	87.	5.13	30.	8.	6.	0.62
+	HYDROGRAPH AT	S301	163.	5.13	54.	14.	10.	0.99
+	2 COMBINED AT	C300	209.	5.17	75.	20.	14.	1.61
+	ROUTED TO	300301	207.	5.37	75.	20.	14.	1.61
+	HYDROGRAPH AT	S302	84.	5.03	24.	6.	4.	0.47
+	2 COMBINED AT	C301	238.	5.33	88.	23.	17.	2.07
+	ROUTED TO	301302	233.	5.73	88.	23.	17.	2.07
+	HYDROGRAPH AT	S303	77.	5.13	22.	6.	4.	0.71
+	2 COMBINED AT	C302	233.	5.73	92.	25.	18.	2.78
+	ROUTED TO	302303	230.	6.03	92.	25.	18.	2.78
+	HYDROGRAPH AT	S304	68.	5.17	21.	5.	4.	0.82
+	2 COMBINED AT	C303	234.	6.03	96.	26.	19.	3.60
+	2 COMBINED AT	WEST-1	873.	6.23	407.	112.	81.	16.36
+	HYDROGRAPH AT	S400	145.	5.10	41.	11.	8.	1.05
+	ROUTED TO	C400O	132.	5.37	41.	11.	8.	1.05
+	ROUTED TO	400401	125.	5.70	41.	11.	8.	1.05
+	HYDROGRAPH AT	S401	73.	5.10	20.	5.	4.	0.65
+	2 COMBINED AT	C401	122.	5.73	46.	12.	9.	1.69
+	ROUTED TO	401402	120.	6.23	46.	12.	9.	1.69
+	HYDROGRAPH AT	S402	74.	5.10	19.	5.	3.	0.74
+	2 COMBINED AT	C402	116.	6.27	49.	13.	9.	2.43

+	ROUTED TO	402403	97.	6.93	44.	11.	8.	2.43
+	HYDROGRAPH AT	S403	85.	5.13	25.	6.	5.	0.56
+	2 COMBINED AT	C403	102.	6.93	54.	14.	10.	2.99
+	ROUTED TO	403404	101.	7.23	54.	14.	10.	2.99
+	HYDROGRAPH AT	S404	73.	4.53	10.	2.	2.	0.26
+	2 COMBINED AT	C404	101.	7.23	57.	15.	11.	3.26
+	2 COMBINED AT	WEST-2	900.	6.23	436.	120.	86.	19.61
+	HYDROGRAPH AT	S500	160.	5.17	57.	15.	11.	1.05
+	ROUTED TO	500501	157.	5.37	56.	15.	11.	1.05
+	HYDROGRAPH AT	S501	90.	5.13	28.	7.	5.	0.61
+	2 COMBINED AT	C501	202.	5.33	75.	20.	14.	1.67
+	ROUTED TO	501502	197.	5.50	72.	19.	13.	1.67
+	HYDROGRAPH AT	S502	61.	4.97	16.	4.	3.	0.40
+	2 COMBINED AT	C502L	206.	5.47	78.	20.	15.	2.07
+	HYDROGRAPH AT	S503	141.	5.13	41.	11.	8.	0.99
+	2 COMBINED AT	C502I	257.	5.43	99.	26.	19.	3.07
+	ROUTED TO	C502O	257.	5.47	99.	26.	19.	3.07
+	ROUTED TO	502505	237.	5.97	89.	23.	16.	3.07
+	HYDROGRAPH AT	S504	23.	4.77	5.	1.	1.	0.33
+	2 COMBINED AT	C505L	237.	5.97	89.	23.	16.	3.39
+	HYDROGRAPH AT	S505	45.	4.40	6.	1.	1.	0.14
+	ROUTED TO	C503O	40.	4.50	6.	1.	1.	0.14
+	ROUTED TO	503505	32.	5.27	5.	1.	1.	0.14
+	HYDROGRAPH AT	S506	32.	4.60	6.	2.	1.	0.15
+	ROUTED TO	C504O	31.	4.63	6.	2.	1.	0.15
+	ROUTED TO	504505	28.	5.30	6.	2.	1.	0.15
+	HYDROGRAPH AT	S507	60.	5.13	16.	4.	3.	0.67

+	3 COMBINED AT	C505R	90.	5.23	21.	5.	4.	0.96
+	2 COMBINED AT	C505	233.	5.97	93.	24.	17.	4.35
+	ROUTED TO	505509	204.	6.67	74.	19.	13.	4.35
+	HYDROGRAPH AT	S508	25.	5.17	7.	2.	1.	0.29
+	2 COMBINED AT	C509L	203.	6.67	74.	19.	13.	4.65
+	HYDROGRAPH AT	S509	58.	4.40	9.	2.	2.	0.17
+	ROUTED TO	C506O	50.	4.53	9.	2.	2.	0.17
+	ROUTED TO	506508	49.	4.77	9.	2.	2.	0.17
+	HYDROGRAPH AT	S510	19.	4.93	6.	1.	1.	0.13
+	2 COMBINED AT	C508R	66.	4.80	14.	4.	3.	0.30
+	HYDROGRAPH AT	S511	95.	4.63	19.	5.	4.	0.38
+	ROUTED TO	C507O	64.	5.03	19.	5.	4.	0.38
+	ROUTED TO	507508	63.	5.40	19.	6.	4.	0.38
+	HYDROGRAPH AT	S512	29.	5.17	9.	2.	2.	0.21
+	2 COMBINED AT	C508L	87.	5.27	26.	8.	5.	0.60
+	2 COMBINED AT	C508	121.	5.03	36.	10.	7.	0.90
+	ROUTED TO	508509	113.	5.73	33.	11.	8.	0.90
+	HYDROGRAPH AT	S513	82.	4.73	17.	4.	3.	0.78
+	2 COMBINED AT	C509R	112.	5.70	38.	12.	9.	1.67
+	2 COMBINED AT	C509	225.	6.67	92.	25.	18.	6.32
+	ROUTED TO	509510	224.	6.80	91.	25.	18.	6.32
+	HYDROGRAPH AT	S514	84.	5.17	27.	7.	5.	0.65
+	2 COMBINED AT	C510	233.	6.80	102.	28.	20.	6.97
+	ROUTED TO	510511	229.	7.23	100.	28.	21.	6.97
+	HYDROGRAPH AT	S515	183.	5.13	47.	12.	8.	1.10
+	2 COMBINED AT	C511	239.	7.23	126.	35.	25.	8.07
+	ROUTED TO	511512	224.	7.97	123.	35.	25.	8.07

+	HYDROGRAPH AT SS16	270.	4.10	12.	3.	2.	0.54
+	2 COMBINED AT C512	223.	7.97	123.	35.	25.	8.61
+	2 COMBINED AT WEST-3	928.	6.23	510.	144.	103.	28.22
+	HYDROGRAPH AT S600	195.	5.13	65.	17.	12.	2.02
+	ROUTED TO 600601	194.	5.27	65.	17.	12.	2.02
+	HYDROGRAPH AT S601	251.	4.80	66.	17.	12.	0.90
+	2 COMBINED AT C601	330.	5.07	117.	30.	22.	2.92
+	ROUTED TO 601602	327.	5.27	117.	30.	22.	2.92
+	HYDROGRAPH AT S603	268.	4.53	49.	12.	9.	0.67
+	2 COMBINED AT C602L	404.	5.10	154.	40.	29.	3.58
+	HYDROGRAPH AT S602	270.	5.17	95.	25.	18.	1.88
+	2 COMBINED AT C602	610.	5.17	237.	62.	45.	5.47
+	ROUTED TO 602603	562.	5.37	193.	48.	35.	5.47
+	HYDROGRAPH AT S606	124.	4.93	39.	10.	7.	0.66
+	2 COMBINED AT C603L	624.	5.33	221.	56.	40.	6.13
+	HYDROGRAPH AT S605	170.	5.13	59.	16.	11.	1.09
+	HYDROGRAPH AT S604	338.	5.20	126.	33.	24.	2.66
+	3 COMBINED AT C603	996.	5.30	382.	99.	71.	9.87
+	ROUTED TO 603604	939.	5.63	334.	84.	60.	9.87
+	HYDROGRAPH AT S609	65.	5.17	26.	7.	5.	0.56
+	2 COMBINED AT C604R	970.	5.63	351.	88.	64.	10.43
+	HYDROGRAPH AT S607	127.	5.17	48.	13.	9.	0.82
+	2 COMBINED AT C604	1032.	5.60	384.	98.	70.	11.25
+	ROUTED TO 604605	1031.	5.63	384.	98.	70.	11.25
+	HYDROGRAPH AT S608	159.	4.70	36.	9.	7.	0.51
+	2 COMBINED AT C605	1067.	5.63	407.	104.	75.	11.76
+	ROUTED TO 605606	1055.	5.77	400.	101.	73.	11.76

+	HYDROGRAPH AT S610	113.	5.17	40.	11.	8.	0.60
+	2 COMBINED AT C606L	1106.	5.77	428.	109.	78.	12.36
+	HYDROGRAPH AT S612	131.	5.17	48.	13.	9.	0.81
+	2 COMBINED AT C606	1159.	5.73	458.	117.	84.	13.17
+	ROUTED TO 606608	1156.	5.77	455.	116.	83.	13.17
+	HYDROGRAPH AT S611	153.	4.70	35.	9.	6.	0.57
+	ROUTED TO 607608	140.	5.13	35.	9.	6.	0.57
+	HYDROGRAPH AT S613	276.	5.13	91.	24.	17.	1.80
+	3 COMBINED AT C608	1357.	5.70	551.	142.	102.	15.53
+	ROUTED TO 608609	1341.	5.87	542.	138.	100.	15.53
+	HYDROGRAPH AT S614	168.	5.13	58.	15.	11.	1.08
+	2 COMBINED AT C609	1415.	5.87	583.	150.	108.	16.61
+	ROUTED TO 609611	1377.	6.17	556.	140.	101.	16.61
+	HYDROGRAPH AT S617	113.	5.10	33.	8.	6.	0.68
+	2 COMBINED AT C611R	1398.	6.17	572.	145.	104.	17.29
+	HYDROGRAPH AT S615	268.	5.13	89.	23.	17.	1.05
+	ROUTED TO 610611	261.	5.37	89.	23.	17.	1.05
+	HYDROGRAPH AT S616	71.	5.17	24.	6.	5.	0.50
+	2 COMBINED AT C611L	287.	5.40	104.	27.	20.	1.56
+	2 COMBINED AT C611	1536.	6.13	648.	166.	120.	18.85
+	ROUTED TO 611613	1523.	6.20	638.	162.	117.	18.85
+	HYDROGRAPH AT S618	127.	5.13	43.	11.	8.	0.96
+	2 COMBINED AT C613R	1550.	6.20	660.	169.	121.	19.81
+	HYDROGRAPH AT S619	231.	5.00	60.	15.	11.	0.83
+	ROUTED TO 612613	218.	5.27	60.	15.	11.	0.83
+	HYDROGRAPH AT S620	97.	5.00	32.	8.	6.	0.44
+	2 COMBINED AT C613L	264.	5.30	84.	22.	16.	1.27

+	2 COMBINED AT	C613	1645.	6.17	715.	184.	132.	21.08
+	ROUTED TO	613614	1628.	6.30	703.	180.	129.	21.08
+	HYDROGRAPH AT	S621	89.	5.10	22.	5.	4.	0.92
+	2 COMBINED AT	C614	1621.	6.33	704.	180.	130.	22.00
+	ROUTED TO	614615	1594.	6.47	693.	176.	127.	22.00
+	HYDROGRAPH AT	S622	78.	5.13	22.	6.	4.	0.90
+	2 COMBINED AT	C615	1587.	6.50	694.	177.	127.	22.90
+	2 COMBINED AT	WEST-4	2177.	6.57	1105.	297.	214.	51.12
+	HYDROGRAPH AT	S700	63.	5.17	20.	5.	4.	0.61
+	HYDROGRAPH AT	S701	74.	5.17	28.	8.	5.	0.72
+	HYDROGRAPH AT	S702	26.	5.10	9.	2.	2.	0.26
+	HYDROGRAPH AT	S703	28.	5.00	8.	2.	1.	0.26
+	HYDROGRAPH AT	S704	67.	4.80	16.	4.	3.	0.41
+	ROUTED TO	704705	64.	5.23	16.	4.	3.	0.41
+	HYDROGRAPH AT	S705	88.	5.17	28.	7.	5.	0.75
+	2 COMBINED AT	C705	110.	5.23	34.	9.	6.	1.16
+	ROUTED TO	C705O	101.	5.47	34.	9.	6.	1.16
+	ROUTED TO	705OAF	100.	5.77	34.	9.	6.	1.16
+	HYDROGRAPH AT	S705AF	57.	4.67	12.	3.	2.	0.18
+	2 COMBINED AT	C705AF	109.	5.70	43.	11.	8.	1.34
+	5 COMBINED AT	WEST-5	123.	5.47	55.	14.	10.	3.19
+	HYDROGRAPH AT	S706	71.	5.13	22.	6.	4.	0.71
+	HYDROGRAPH AT	S707	69.	5.17	24.	6.	4.	0.64
+	HYDROGRAPH AT	S728	19.	5.20	7.	2.	1.	0.28
+	5 COMBINED AT	WEST	2199.	6.57	1134.	306.	220.	55.94
+	HYDROGRAPH AT	S708	219.	4.77	44.	11.	8.	0.71
+	HYDROGRAPH AT	S709	168.	4.67	32.	8.	6.	0.44

+	ROUTED TO C709O	136.	4.93	32.	8.	6.	0.44
+	ROUTED TO 709710	135.	5.00	32.	8.	6.	0.44
+	HYDROGRAPH AT S710	74.	4.30	9.	2.	2.	0.11
+	2 COMBINED AT C710I	149.	4.97	40.	10.	7.	0.55
+	ROUTED TO C710O	139.	5.17	40.	10.	7.	0.55
+	HYDROGRAPH AT S711	126.	4.27	12.	3.	2.	0.16
+	ROUTED TO C711O	113.	4.37	12.	3.	2.	0.16
+	ROUTED TO 711712	111.	4.43	12.	3.	2.	0.16
+	HYDROGRAPH AT S712	77.	4.10	5.	1.	1.	0.07
+	2 COMBINED AT C712I	126.	4.37	17.	4.	3.	0.23
+	ROUTED TO C712O	119.	4.47	17.	4.	3.	0.23
+	ROUTED TO 712714	117.	4.60	17.	4.	3.	0.23
+	HYDROGRAPH AT S713	92.	4.20	8.	2.	1.	0.11
+	ROUTED TO C713O	53.	4.43	8.	2.	1.	0.11
+	ROUTED TO 713714	52.	4.47	8.	2.	1.	0.11
+	HYDROGRAPH AT S714	29.	4.30	3.	1.	1.	0.06
+	3 COMBINED AT C714	182.	4.50	28.	7.	5.	0.39
+	HYDROGRAPH AT S715	84.	4.63	16.	4.	3.	0.22
+	HYDROGRAPH AT S716	255.	5.10	71.	18.	13.	1.13
+	ROUTED TO C716O	224.	5.40	71.	18.	13.	1.13
+	ROUTED TO 716717	223.	5.60	71.	18.	13.	1.13
+	HYDROGRAPH AT S717	231.	4.30	22.	5.	4.	0.29
+	2 COMBINED AT C717	223.	5.57	91.	23.	17.	1.41
+	ROUTED TO 717718	216.	6.07	90.	23.	16.	1.41
+	HYDROGRAPH AT S718	91.	5.20	34.	9.	6.	0.44
+	2 COMBINED AT C718	268.	5.97	119.	30.	22.	1.86
+	HYDROGRAPH AT S719	54.	4.67	14.	4.	3.	0.15

	6 COMBINED AT						
+		EAST-1	656.	4.87	230.	58.	42.	3.88
	HYDROGRAPH AT						
+		S720	118.	4.77	28.	7.	5.	0.37
	HYDROGRAPH AT						
+		S721	120.	4.50	15.	4.	3.	0.34
	ROUTED TO						
+		C721O	79.	4.77	15.	4.	3.	0.34
	ROUTED TO						
+		721722	77.	5.33	15.	4.	3.	0.34
	HYDROGRAPH AT						
+		S722	170.	5.17	51.	13.	9.	0.95
	2 COMBINED AT						
+		C722	216.	5.27	60.	15.	11.	1.29
	HYDROGRAPH AT						
+		S723	45.	4.33	6.	1.	1.	0.09
	HYDROGRAPH AT						
+		S724	330.	4.97	82.	20.	15.	1.16
	HYDROGRAPH AT						
+		S725	171.	5.20	55.	14.	10.	1.16
	5 COMBINED AT						
+		EAST-2	646.	5.13	195.	49.	35.	4.06
	HYDROGRAPH AT						
+		S726	100.	4.43	13.	3.	2.	0.33
	ROUTED TO						
+		726727	88.	4.90	13.	3.	2.	0.33
	HYDROGRAPH AT						
+		S727	68.	5.07	22.	6.	4.	0.38
	2 COMBINED AT						
+		C727	136.	4.93	32.	8.	6.	0.71
	4 COMBINED AT						
+		TOTAL	2423.	6.47	1359.	363.	262.	64.59

*** NORMAL END OF HEC-1 ***

Existing Condition 2-Year, 24-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*              JUN  1998               *                    *   HYDROLOGIC ENGINEERING CENTER      *
*           VERSION 4.1                *                    *         609 SECOND STREET            *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
* RUN DATE   09AUG01  TIME  15:13:47   *                    *          (916) 756-1104              *
*                                      *                    *                                      *
****************************************                    ****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: EX2-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the existing condition 2-year, 24-hour storm event. A companion model is also created for the existing condition 2-year, 6-hour storm event. Both models (2-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 2-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       1.70  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 1.69 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 1.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 1.60 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 1.54 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 1.46 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	47.	13.10	20.	7.	5.	0.57		
+	ROUTED TO	100102	47.	13.50	20.	7.	5.	0.57		
+	HYDROGRAPH AT	S101	51.	12.90	16.	5.	4.	0.63		
+	2 COMBINED AT	C102R	84.	13.30	36.	12.	9.	1.20		
+	HYDROGRAPH AT	S102	41.	13.13	18.	6.	5.	0.45		
+	ROUTED TO	101102	40.	13.53	18.	6.	5.	0.45		
+	HYDROGRAPH AT	S103	31.	13.13	12.	4.	3.	0.40		
+	2 COMBINED AT	C102L	67.	13.43	30.	10.	7.	0.84		

+	2 COMBINED AT	C102	148.	13.37	64.	22.	16.	2.05
+	ROUTED TO	102103	145.	13.80	64.	22.	16.	2.05
+	HYDROGRAPH AT	S104	75.	13.07	24.	8.	5.	0.90
+	2 COMBINED AT	C103R	188.	13.70	85.	29.	21.	2.95
+	HYDROGRAPH AT	S105	39.	13.13	15.	5.	4.	0.59
+	2 COMBINED AT	C103	215.	13.67	99.	33.	24.	3.54
+	ROUTED TO	103104	213.	14.03	99.	33.	24.	3.54
+	HYDROGRAPH AT	S106	28.	13.13	10.	3.	2.	0.57
+	2 COMBINED AT	C104	227.	14.00	107.	36.	26.	4.11
+	ROUTED TO	104105	225.	14.37	107.	36.	26.	4.11
+	HYDROGRAPH AT	S107	28.	13.13	9.	2.	2.	0.94
+	2 COMBINED AT	C105L	233.	14.33	112.	38.	27.	5.05
+	HYDROGRAPH AT	S200	127.	12.87	43.	15.	11.	0.96
+	ROUTED TO	200201	126.	12.97	43.	15.	11.	0.96
+	HYDROGRAPH AT	S201	46.	12.73	16.	6.	4.	0.35
+	2 COMBINED AT	C201	166.	12.93	58.	21.	15.	1.31
+	ROUTED TO	201203	165.	13.10	58.	21.	15.	1.31
+	HYDROGRAPH AT	S202	21.	12.43	6.	2.	1.	0.13
+	ROUTED TO	202203	21.	12.60	6.	2.	1.	0.13
+	HYDROGRAPH AT	S203	33.	13.17	16.	6.	4.	0.37
+	3 COMBINED AT	C203R	209.	13.07	79.	28.	21.	1.81
+	HYDROGRAPH AT	S204	95.	13.07	38.	14.	10.	0.95
+	2 COMBINED AT	C203	301.	13.07	116.	41.	30.	2.76
+	ROUTED TO	203204	300.	13.13	116.	41.	30.	2.76
+	HYDROGRAPH AT	S205	28.	13.10	12.	4.	3.	0.41
+	2 COMBINED AT	C204	326.	13.13	128.	45.	33.	3.17
+	ROUTED TO	204205	323.	13.30	128.	45.	33.	3.17

+	HYDROGRAPH AT S206	72.	13.13	31.	11.	8.	0.85
+	2 COMBINED AT C205L	389.	13.30	157.	56.	41.	4.03
+	HYDROGRAPH AT S207	96.	13.10	41.	15.	11.	0.96
+	2 COMBINED AT C205	477.	13.27	196.	70.	51.	4.98
+	ROUTED TO 205206	466.	13.77	196.	70.	51.	4.98
+	HYDROGRAPH AT S208	110.	13.10	41.	14.	10.	1.10
+	2 COMBINED AT C206	533.	13.73	230.	82.	60.	6.09
+	ROUTED TO 206207	531.	13.87	230.	82.	60.	6.09
+	HYDROGRAPH AT S209	47.	13.07	16.	5.	4.	0.65
+	2 COMBINED AT C207R	554.	13.83	243.	86.	63.	6.74
+	HYDROGRAPH AT S210	18.	13.10	5.	1.	1.	0.48
+	2 COMBINED AT C207	559.	13.83	246.	87.	64.	7.22
+	ROUTED TO 207105	556.	14.00	246.	87.	64.	7.22
+	HYDROGRAPH AT S211	22.	13.10	7.	2.	1.	0.49
+	2 COMBINED AT C105R	563.	14.00	250.	88.	64.	7.70
+	2 COMBINED AT C105	729.	14.07	340.	119.	87.	12.75
+	HYDROGRAPH AT S300	48.	13.10	20.	7.	5.	0.62
+	HYDROGRAPH AT S301	111.	13.03	44.	16.	11.	0.99
+	2 COMBINED AT C300	157.	13.07	64.	23.	16.	1.61
+	ROUTED TO 300301	155.	13.33	64.	23.	16.	1.61
+	HYDROGRAPH AT S302	41.	13.03	15.	5.	4.	0.47
+	2 COMBINED AT C301	190.	13.30	78.	28.	20.	2.07
+	ROUTED TO 301302	187.	13.70	78.	28.	20.	2.07
+	HYDROGRAPH AT S303	32.	13.10	11.	4.	3.	0.71
+	2 COMBINED AT C302	208.	13.67	88.	31.	23.	2.78
+	ROUTED TO 302303	205.	14.00	88.	31.	23.	2.78
+	HYDROGRAPH AT S304	33.	13.13	11.	3.	2.	0.82

+	2 COMBINED AT C303	222.	13.97	97.	34.	25.	3.60
+	2 COMBINED AT WEST-1	908.	14.07	420.	148.	108.	16.36
+	HYDROGRAPH AT S400	105.	13.07	33.	10.	7.	1.05
+	ROUTED TO C400O	96.	13.33	33.	10.	7.	1.05
+	ROUTED TO 400401	92.	13.87	33.	10.	7.	1.05
+	HYDROGRAPH AT S401	31.	13.10	10.	3.	2.	0.65
+	2 COMBINED AT C401	108.	13.83	42.	13.	9.	1.69
+	ROUTED TO 401402	106.	14.33	42.	13.	9.	1.69
+	HYDROGRAPH AT S402	34.	13.10	10.	3.	2.	0.74
+	2 COMBINED AT C402	115.	14.30	50.	15.	11.	2.43
+	ROUTED TO 402403	112.	14.90	50.	15.	11.	2.43
+	HYDROGRAPH AT S403	63.	13.07	19.	5.	3.	0.56
+	2 COMBINED AT C403	126.	14.87	67.	20.	14.	2.99
+	ROUTED TO 403404	125.	15.03	66.	20.	14.	2.99
+	HYDROGRAPH AT S404	38.	12.50	5.	1.	1.	0.26
+	2 COMBINED AT C404	125.	15.03	71.	21.	15.	3.26
+	2 COMBINED AT WEST-2	965.	14.10	468.	162.	119.	19.61
+	HYDROGRAPH AT S500	109.	13.10	46.	17.	12.	1.05
+	ROUTED TO 500501	108.	13.33	46.	17.	12.	1.05
+	HYDROGRAPH AT S501	47.	13.10	19.	7.	5.	0.61
+	2 COMBINED AT C501	151.	13.30	64.	23.	17.	1.67
+	ROUTED TO 501502	146.	13.47	61.	20.	14.	1.67
+	HYDROGRAPH AT S502	24.	12.93	8.	3.	2.	0.40
+	2 COMBINED AT C502L	163.	13.43	68.	22.	16.	2.07
+	HYDROGRAPH AT S503	97.	13.07	32.	10.	8.	0.99
+	2 COMBINED AT C502I	241.	13.37	98.	32.	23.	3.07
+	ROUTED TO C502O	241.	13.40	98.	32.	23.	3.07

+	ROUTED TO 502505	217.	14.17	89.	24.	17.	3.07
+	HYDROGRAPH AT S504	1.	13.20	0.	0.	0.	0.33
+	2 COMBINED AT C505L	217.	14.17	89.	24.	17.	3.39
+	HYDROGRAPH AT S505	14.	12.37	3.	1.	1.	0.14
+	ROUTED TO C503O	13.	12.47	3.	1.	1.	0.14
+	ROUTED TO 503505	11.	13.27	2.	1.	0.	0.14
+	HYDROGRAPH AT S506	14.	12.60	3.	1.	1.	0.15
+	ROUTED TO C504O	14.	12.60	3.	1.	1.	0.15
+	ROUTED TO 504505	13.	13.27	3.	1.	1.	0.15
+	HYDROGRAPH AT S507	24.	13.13	7.	2.	1.	0.67
+	3 COMBINED AT C505R	47.	13.20	12.	3.	2.	0.96
+	2 COMBINED AT C505	233.	14.13	98.	27.	19.	4.35
+	ROUTED TO 505509	208.	14.77	78.	19.	14.	4.35
+	HYDROGRAPH AT S508	7.	13.17	2.	1.	0.	0.29
+	2 COMBINED AT C509L	210.	14.77	79.	20.	14.	4.65
+	HYDROGRAPH AT S509	26.	12.40	6.	2.	1.	0.17
+	ROUTED TO C506O	24.	12.47	6.	2.	1.	0.17
+	ROUTED TO 506508	23.	12.80	6.	2.	1.	0.17
+	HYDROGRAPH AT S510	13.	12.87	4.	1.	1.	0.13
+	2 COMBINED AT C508R	36.	12.80	9.	3.	2.	0.30
+	HYDROGRAPH AT S511	48.	12.60	13.	4.	3.	0.38
+	ROUTED TO C507O	44.	12.80	13.	4.	3.	0.38
+	ROUTED TO 507508	42.	13.17	12.	4.	3.	0.38
+	HYDROGRAPH AT S512	21.	13.07	6.	2.	1.	0.21
+	2 COMBINED AT C508L	62.	13.13	19.	6.	4.	0.60
+	2 COMBINED AT C508	93.	13.00	28.	9.	7.	0.90
+	ROUTED TO 508509	86.	13.70	26.	9.	6.	0.90

+	HYDROGRAPH AT S513	35.	12.73	8.	2.	1.	0.78
+	2 COMBINED AT C509R	96.	13.67	32.	11.	8.	1.67
+	2 COMBINED AT C509	240.	14.70	105.	29.	21.	6.32
+	ROUTED TO 509510	239.	14.80	104.	29.	21.	6.32
+	HYDROGRAPH AT S514	63.	13.10	20.	5.	4.	0.65
+	2 COMBINED AT C510	253.	14.80	120.	33.	24.	6.97
+	ROUTED TO 510511	249.	15.20	119.	33.	24.	6.97
+	HYDROGRAPH AT S515	168.	13.03	43.	11.	8.	1.10
+	2 COMBINED AT C511	263.	15.13	152.	42.	30.	8.07
+	ROUTED TO 511512	258.	15.60	149.	42.	30.	8.07
+	HYDROGRAPH AT S516	8.	13.17	2.	1.	0.	0.54
+	2 COMBINED AT C512	258.	15.60	149.	42.	31.	8.61
+	2 COMBINED AT WEST-3	1064.	14.10	575.	189.	141.	28.22
+	HYDROGRAPH AT S600	147.	13.03	56.	20.	14.	2.02
+	ROUTED TO 600601	146.	13.17	56.	20.	14.	2.02
+	HYDROGRAPH AT S601	185.	12.73	56.	19.	14.	0.90
+	2 COMBINED AT C601	293.	12.97	109.	38.	28.	2.92
+	ROUTED TO 601602	291.	13.17	109.	38.	28.	2.92
+	HYDROGRAPH AT S603	174.	12.50	39.	13.	10.	0.67
+	2 COMBINED AT C602L	369.	13.00	147.	51.	37.	3.58
+	HYDROGRAPH AT S602	211.	13.07	83.	30.	21.	1.88
+	2 COMBINED AT C602	568.	13.03	226.	80.	58.	5.47
+	ROUTED TO 602603	519.	13.27	182.	46.	33.	5.47
+	HYDROGRAPH AT S606	76.	12.87	30.	11.	8.	0.66
+	2 COMBINED AT C603L	579.	13.23	209.	56.	41.	6.13
+	HYDROGRAPH AT S605	117.	13.07	48.	17.	12.	1.09
+	HYDROGRAPH AT S604	288.	13.07	116.	41.	30.	2.66

+	3 COMBINED AT	C603	934.	13.17	358.	110.	80.	9.87
+	ROUTED TO	603604	875.	13.50	310.	78.	56.	9.87
+	HYDROGRAPH AT	S609	37.	13.13	18.	7.	5.	0.56
+	2 COMBINED AT	C604R	905.	13.50	326.	84.	61.	10.43
+	HYDROGRAPH AT	S607	88.	13.10	39.	14.	10.	0.82
+	2 COMBINED AT	C604	971.	13.47	359.	96.	70.	11.25
+	ROUTED TO	604605	970.	13.53	359.	96.	70.	11.25
+	HYDROGRAPH AT	S608	95.	12.70	28.	9.	7.	0.51
+	2 COMBINED AT	C605	1010.	13.50	383.	105.	76.	11.76
+	ROUTED TO	605606	998.	13.67	376.	99.	71.	11.76
+	HYDROGRAPH AT	S610	73.	13.13	32.	11.	8.	0.60
+	2 COMBINED AT	C606L	1050.	13.63	404.	109.	79.	12.36
+	HYDROGRAPH AT	S612	96.	13.10	40.	14.	10.	0.81
+	2 COMBINED AT	C606	1115.	13.63	437.	121.	87.	13.17
+	ROUTED TO	606608	1111.	13.67	435.	118.	85.	13.17
+	HYDROGRAPH AT	S611	85.	12.67	26.	9.	7.	0.57
+	ROUTED TO	607608	80.	13.33	26.	9.	7.	0.57
+	HYDROGRAPH AT	S613	216.	13.03	80.	28.	20.	1.80
+	3 COMBINED AT	C608	1308.	13.60	525.	151.	109.	15.53
+	ROUTED TO	608609	1288.	13.77	516.	142.	103.	15.53
+	HYDROGRAPH AT	S614	114.	13.07	47.	17.	12.	1.08
+	2 COMBINED AT	C609	1359.	13.77	556.	157.	113.	16.61
+	ROUTED TO	609611	1321.	14.07	528.	137.	99.	16.61
+	HYDROGRAPH AT	S617	64.	13.07	23.	8.	6.	0.68
+	2 COMBINED AT	C611R	1346.	14.03	545.	143.	103.	17.29
+	HYDROGRAPH AT	S615	209.	13.07	80.	28.	20.	1.05
+	ROUTED TO	610611	205.	13.40	80.	28.	20.	1.05

+	HYDROGRAPH AT S616	37.	13.13	15.	5.	4.	0.50
+	2 COMBINED AT C611L	237.	13.40	94.	33.	24.	1.56
+	2 COMBINED AT C611	1495.	14.00	624.	172.	124.	18.85
+	ROUTED TO 611613	1482.	14.10	614.	162.	117.	18.85
+	HYDROGRAPH AT S618	84.	13.10	33.	11.	8.	0.96
+	2 COMBINED AT C613R	1518.	14.10	639.	171.	123.	19.81
+	HYDROGRAPH AT S619	175.	12.90	51.	17.	12.	0.83
+	ROUTED TO 612613	168.	13.43	51.	17.	12.	0.83
+	HYDROGRAPH AT S620	63.	12.97	25.	9.	6.	0.44
+	2 COMBINED AT C613L	220.	13.40	76.	25.	18.	1.27
+	2 COMBINED AT C613	1629.	14.07	701.	193.	139.	21.08
+	ROUTED TO 613614	1609.	14.23	689.	183.	132.	21.08
+	HYDROGRAPH AT S621	41.	13.07	11.	3.	2.	0.92
+	2 COMBINED AT C614	1612.	14.23	693.	184.	133.	22.00
+	ROUTED TO 614615	1577.	14.50	683.	178.	128.	22.00
+	HYDROGRAPH AT S622	37.	13.10	12.	3.	2.	0.90
+	2 COMBINED AT C615	1582.	14.50	687.	180.	130.	22.90
+	2 COMBINED AT WEST-4	2385.	14.47	1178.	345.	254.	51.12
+	HYDROGRAPH AT S700	28.	13.13	10.	3.	2.	0.61
+	HYDROGRAPH AT S701	44.	13.17	19.	6.	5.	0.72
+	HYDROGRAPH AT S702	10.	13.13	4.	1.	1.	0.26
+	HYDROGRAPH AT S703	8.	13.03	2.	1.	0.	0.26
+	HYDROGRAPH AT S704	26.	12.80	8.	3.	2.	0.41
+	ROUTED TO 704705	24.	13.70	8.	3.	2.	0.41
+	HYDROGRAPH AT S705	56.	13.10	19.	6.	4.	0.75
+	2 COMBINED AT C705	69.	13.43	27.	8.	6.	1.16
+	ROUTED TO C7050	69.	13.50	27.	8.	6.	1.16

+	ROUTED TO 7050AF	68.	13.87	27.	8.	6.	1.16
+	HYDROGRAPH AT S705AF	48.	12.57	10.	2.	2.	0.18
+	2 COMBINED AT C705AF	79.	13.70	36.	10.	8.	1.34
+	5 COMBINED AT WEST-5	147.	13.40	67.	20.	15.	3.19
+	HYDROGRAPH AT S706	37.	13.13	13.	4.	3.	0.71
+	HYDROGRAPH AT S707	40.	13.13	15.	5.	3.	0.64
+	HYDROGRAPH AT S728	6.	13.17	2.	1.	0.	0.28
+	5 COMBINED AT WEST	2443.	14.47	1224.	361.	265.	55.94
+	HYDROGRAPH AT S708	194.	12.63	36.	9.	7.	0.71
+	HYDROGRAPH AT S709	142.	12.57	28.	7.	5.	0.44
+	ROUTED TO C709O	118.	12.80	28.	7.	5.	0.44
+	ROUTED TO 709710	117.	12.90	28.	7.	5.	0.44
+	HYDROGRAPH AT S710	52.	12.27	7.	2.	1.	0.11
+	2 COMBINED AT C710I	133.	12.87	35.	9.	6.	0.55
+	ROUTED TO C710O	124.	13.03	34.	9.	6.	0.55
+	HYDROGRAPH AT S711	87.	12.23	10.	3.	2.	0.16
+	ROUTED TO C711O	83.	12.30	10.	3.	2.	0.16
+	ROUTED TO 711712	82.	12.37	10.	3.	2.	0.16
+	HYDROGRAPH AT S712	43.	12.10	4.	1.	1.	0.07
+	2 COMBINED AT C712I	107.	12.17	14.	4.	3.	0.23
+	ROUTED TO C712O	97.	12.37	14.	4.	3.	0.23
+	ROUTED TO 712714	95.	12.50	14.	4.	3.	0.23
+	HYDROGRAPH AT S713	58.	12.20	7.	2.	1.	0.11
+	ROUTED TO C713O	39.	12.37	7.	2.	1.	0.11
+	ROUTED TO 713714	38.	12.43	7.	2.	1.	0.11
+	HYDROGRAPH AT S714	19.	12.27	2.	1.	0.	0.06
+	3 COMBINED AT C714	146.	12.43	23.	6.	4.	0.39

+	HYDROGRAPH AT S715	71.	12.50	14.	3.	2.	0.22
+	HYDROGRAPH AT S716	259.	12.87	64.	16.	12.	1.13
+	ROUTED TO C716O	223.	13.13	64.	16.	12.	1.13
+	ROUTED TO 716717	221.	13.30	64.	16.	12.	1.13
+	HYDROGRAPH AT S717	160.	12.23	19.	5.	3.	0.29
+	2 COMBINED AT C717	226.	13.27	82.	21.	15.	1.41
+	ROUTED TO 717718	221.	13.77	82.	20.	15.	1.41
+	HYDROGRAPH AT S718	73.	13.13	29.	8.	6.	0.44
+	2 COMBINED AT C718	279.	13.67	110.	28.	20.	1.86
+	HYDROGRAPH AT S719	43.	12.60	14.	4.	3.	0.15
+	6 COMBINED AT EAST-1	706.	12.67	224.	57.	41.	3.88
+	HYDROGRAPH AT S720	99.	12.63	24.	6.	4.	0.37
+	HYDROGRAPH AT S721	81.	12.43	10.	3.	2.	0.34
+	ROUTED TO C721O	59.	12.63	10.	3.	2.	0.34
+	ROUTED TO 721722	55.	13.20	10.	3.	2.	0.34
+	HYDROGRAPH AT S722	161.	12.97	45.	11.	8.	0.95
+	2 COMBINED AT C722	209.	13.07	55.	14.	10.	1.29
+	HYDROGRAPH AT S723	34.	12.30	5.	1.	1.	0.09
+	HYDROGRAPH AT S724	330.	12.73	74.	18.	13.	1.16
+	HYDROGRAPH AT S725	158.	13.07	50.	13.	9.	1.16
+	5 COMBINED AT EAST-2	718.	12.90	200.	50.	36.	4.06
+	HYDROGRAPH AT S726	46.	12.40	7.	2.	1.	0.33
+	ROUTED TO 726727	41.	12.87	7.	2.	1.	0.33
+	HYDROGRAPH AT S727	58.	12.87	18.	5.	3.	0.38
+	2 COMBINED AT C727	99.	12.87	25.	7.	5.	0.71
+	4 COMBINED AT TOTAL	2715.	14.43	1541.	445.	325.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 100-Year, 6-Hour HEC-1 Model Output

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1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998           *
*            VERSION 4.1            *
*                                   *
*  RUN DATE   09AUG01  TIME  14:06:41  *
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*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID     N. Peoria Area Drainage Master Plan                  File: FU100-6.IH1
  2           ID        For Maricopa County FCD 99-45                 Original:05-04-00     MCG
  3           ID        By Stantec Consulting, Inc. P82000146          Revised:05-02-01     MMZ
  4           ID
  5           ID     The N. Peoria ADMP study limits consists of several small tributary
  6           ID     watersheds to the Agua Fria River.  This model is for the future
  7           ID     condition 100-year, 6-hour storm event.  A companion model is also created
  8           ID     for the future condition 100-year, 24-hour storm event.  Both models
  9           ID     100-year, 6- and 24-hour) should be referenced for the determination of
 10           ID     storm event produces the highest peak discharge.
 11           ID
 12           ID     Modeling of the watersheds is performed using the following:
 13           ID        100-year, 6-hour rainfall with FCDMC design rainfall distributions
 14           ID        Green & Ampt Loss Rate Method
 15           ID        NMIN = 2 minutes
 16           ID        Clark Unit Hydrograph
 17           ID        Modified Puls channel storage routing
 18           ID
 19           ID     Watershed delineation performed using USGS 7.5 Minute Series Quadrangles
              *
              *DIAGRAM
              *
 20           IT       2                    1000
 21           IO       5
 22           IN      15
              *
              *       Depth-area reduction factors taken from Table 2.2 of FCDMC Drainage
              *       Design Manual
              *       6-hr rainfall distributions per Table 2.4 and Figure 2.17 of the Manual
              *
 23           JD    3.35    0.01
 24           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
 25           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
 26           PC   0.962   0.972   0.983   0.991   1.000
 27           JD    3.33    0.50
 28           JD    3.28    2.80
 29           PC   0.000   0.009   0.016   0.025   0.034   0.042   0.051   0.059   0.067   0.076
 30           PC   0.087   0.100   0.120   0.163   0.252   0.451   0.694   0.837   0.900   0.938
 31           PC   0.950   0.963   0.975   0.988   1.000
 32           JD    3.09    16.0
 33           PC   0.000   0.015   0.020   0.030   0.048   0.063   0.076   0.090   0.105   0.119
 34           PC   0.135   0.152   0.175   0.222   0.304   0.472   0.670   0.796   0.868   0.912
 35           PC   0.946   0.960   0.973   0.987   1.000
 36           JD    2.71    90.0
 37           PC   0.000   0.021   0.035   0.051   0.071   0.087   0.105   0.125   0.143   0.160
```

```
 38          PC   0.179   0.201   0.232   0.281   0.364   0.500   0.658   0.773   0.841   0.888
 39          PC   0.927   0.945   0.964   0.982   1.000
             *
             *  ***************************************************************************
             *                 Begin Major Basin 100 (Unnamed Wash 1)
             *  ***************************************************************************
             *
1                                          HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 40          KK    S100
 41          KM   Sub-Basin   S100
 42          KM
 43          KM      The Clark Unit Hydrograph is used for this basin.
 44          KM          The Natural time-area relation is used for this basin.
 45          KM
 46          KM      Time of Concentration for this sub-basin is based on the following:
 47          KM          6-Hour Rainfall, Pattern No.  1.08
 48          KM          An rainfall areal reduction factor of 0.993
 49          KM
 50          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 51          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 52          KM   .44 .43 .43 .14 .11 .09 .05 .04 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
 53          KM
 54          KM          L=   1.811 miles, S=  149 feet/mile, Kb= .09
 55          KM
 56          BA   0.574
 57          LG    0.21    0.33    4.65    0.33   26.00
 58          UC   0.638   0.495
 59          UA       0       3       5       8      12      20      43      75      90      96
 60          UA     100
             *

 61          KK  100102
 62          KM        Normal depth route from S100 to C102R
 63          KM        Source: Field Reconnaissance
 64          RS       7    FLOW      -1
 65          RC     .05    .039     .06    6535   .0138
 66          RX    1000  1012.7  1037.5  1047.7    1060  1072.4  1087.8  1098.8
 67          RY   104.8   102.3   102.3   100.1     100   102.7   103.5   106.7
             *

 68          KK    S101
 69          KM   Sub-Basin   S101
 70          KM
 71          KM      The Clark Unit Hydrograph is used for this basin.
 72          KM          The Natural time-area relation is used for this basin.
 73          KM
 74          KM      Time of Concentration for this sub-basin is based on the following:
 75          KM          6-Hour Rainfall, Pattern No.  1.13
 76          KM          An rainfall areal reduction factor of 0.992
 77          KM
 78          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 79          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 80          KM   .42 .41 .41 .13 .10 .09 .05 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
 81          KM
 82          KM          L=   1.544 miles, S=  155 feet/mile, Kb= .08
 83          KM
 84          BA   0.631
 85          LG    0.26    0.37    5.30    0.25   15.00
 86          UC   0.521   0.330
 87          UA       0       3       5       8      12      20      43      75      90      96
 88          UA     100
             *
1                                          HEC-1 INPUT                                          PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 89          KK   C102R
 90          KM        Combine routed hydrograph from S100 w/runoff from S101
 91          HC       2
             *

 92          KK    S102
 93          KM   Sub-Basin   S102
 94          KM
 95          KM      The Clark Unit Hydrograph is used for this basin.
 96          KM          The Urban time-area relation is used for this basin.
```

```
 97          KM
 98          KM      Time of Concentration for this sub-basin is based on the following:
 99          KM          6-Hour Rainfall, Pattern No.  1.00
100          KM          An rainfall areal reduction factor of 0.994
101          KM
102          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
103          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
104          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
105          KM
106          KM          L=   1.487 miles, S=  108 feet/mile, Kb= .07
107          KM
108          BA   0.449
109          LG    0.22    0.30    4.45    0.38   32.00
110          UC   0.521   0.389
111          UA       0       5      16      30      65      77      84      90      94      97
112          UA     100
             *

113          KK  101102
114          KM        Normal depth route from S102 to C102
115          KM        Source: Field Reconnaissance
116          RS       5    FLOW      -1
117          RC    .045     .04    .045    7254  0.0138
118          RX     100     106     114     120     134     143     155     164
119          RY     110     107     103     100     100     103     107     110
             *

120          KK    S103
121          KM   Sub-Basin   S103
122          KM
123          KM      The Clark Unit Hydrograph is used for this basin.
124          KM          The Natural time-area relation is used for this basin.
125          KM
126          KM      Time of Concentration for this sub-basin is based on the following:
127          KM          6-Hour Rainfall, Pattern No.  1.00
128          KM          An rainfall areal reduction factor of 0.995
129          KM
130          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
131          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
132          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
133          KM
134          KM          L=   1.321 miles, S=   76 feet/mile, Kb= .09
135          KM
136          BA   0.395
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

137          LG    0.24    0.38    5.60    0.22   17.00
138          UC   0.679   0.511
139          UA       0       3       5       8      12      20      43      75      90      96
140          UA     100
             *

141          KK   C102L
142          KM        Combine routed hydrgraph from S102 with runoff from S103
143          HC       2
             *

144          KK    C102
145          KM        Combine hydrgraphs from C102L and C102R
146          HC       2
             *

147          KK  102103
148          KM        Normal depth route from C102 to C103R
149          KM        Source: Field Reconnaissance
150          RS       7    FLOW      -1
151          RC     .05    .039     .06    8068  0.0124
152          RX    1000    1029  1057.9    1072  1089.6  1099.4  1109.9  1173.1
153          RY     106   103.9   101.8   100.3     100   102.2   103.3   110.0
             *

154          KK    S104
155          KM   Sub-Basin   S104
156          KM
157          KM      The Clark Unit Hydrograph is used for this basin.
158          KM          The Natural time-area relation is used for this basin.
159          KM
160          KM      Time of Concentration for this sub-basin is based on the following:
161          KM          6-Hour Rainfall, Pattern No.  1.34
```

```
162          KM          An rainfall areal reduction factor of 0.988
163          KM
164          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
165          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
166          KM   .38 .38 .37 .15 .13 .12 .07 .07 .07 .02 .02 .02 .01 .01 .01 .01 .01 .01
167          KM
168          KM          L=   1.624 miles, S=  111 feet/mile, Kb= .08
169          KM
170          BA   0.900
171          LG    0.21    0.35    5.60    0.22   23.00
172          UC   0.629   0.346
173          UA       0       3       5       8      12      20      43      75      90      96
174          UA     100
             *

175          KK   C103R
176          KM        Combine routed hydrograph from 102103 w/runoff from S104
177          HC       2
             *
1                                          HEC-1 INPUT                                          PAGE  5

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

178          KK    S105
179          KM   Sub-Basin   S105
180          KM
181          KM      The Clark Unit Hydrograph is used for this basin.
182          KM          The Urban time-area relation is used for this basin.
183          KM
184          KM      Time of Concentration for this sub-basin is based on the following:
185          KM          6-Hour Rainfall, Pattern No.  1.10
186          KM          An rainfall areal reduction factor of 0.992
187          KM
188          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
189          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
190          KM   .44 .44 .43 .15 .12 .11 .05 .05 .05 .02 .02 .02 .01 .01 .01 .01 .01 .01
191          KM
192          KM          L=   1.976 miles, S=   96 feet/mile, Kb= .07
193          KM
194          BA   0.594
195          LG    0.24    0.31    5.60    0.23   23.00
196          UC   0.671   0.551
197          UA       0       5      16      30      65      77      84      90      94      97
198          UA     100
             *

199          KK    C103
200          KM        Combine hydrograph from C103R w/runoff from S105
201          HC       2
             *

202          KK  103104
203          KM        Normal depth route from C103 to C104
204          KM        Source: Field Reconnaissance
205          RS       4    FLOW      -1
206          RC    .053    .053    .053    8625  0.0162
207          RX   998.5  1001.5    1003    1011    1033    1047  1050.6  1067.2
208          RY   108.4   106.4   105.4     100   100.5   104.4   105.4   110.0
             *

209          KK    S106
210          KM   Sub-Basin   S106
211          KM
212          KM      The Clark Unit Hydrograph is used for this basin.
213          KM          The Urban time-area relation is used for this basin.
214          KM
215          KM      Time of Concentration for this sub-basin is based on the following:
216          KM          6-Hour Rainfall, Pattern No.  1.07
217          KM          An rainfall areal reduction factor of 0.993
218          KM
219          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
220          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
221          KM   .44 .43 .43 .14 .10 .09 .04 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
222          KM
223          KM          L=   1.770 miles, S=  158 feet/mile, Kb= .07
224          KM
225          BA   0.567
1                                          HEC-1 INPUT                                          PAGE  6

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
226          LG    0.27    0.28    5.20    0.26   11.00
227          UC   0.504   0.377
228          UA       0       5      16      30      65      77      84      90      94      97
229          UA     100
             *

230          KK    C104
231          KM        Combine routed hydrograph 103104 w/runoff from S106
232          HC       2
             *

233          KK  104105
234          KM        Normal depth route from C104 to C105
235          KM        Source: Field Reconnaissance
236          RS       6    FLOW      -1
237          RC    .053    .053    .053    6956  0.0115
238          RX    1000  1002.3  1004.6  1019.3  1041.1  1069.4  1111.7  1128.8
239          RY     108   107.5     107   100.2     100   103.4   102.3   107.3
             *

240          KK    S107
241          KM   Sub-Basin   S107
242          KM
243          KM      The Clark Unit Hydrograph is used for this basin.
244          KM          The Natural time-area relation is used for this basin.
245          KM
246          KM      Time of Concentration for this sub-basin is based on the following:
247          KM          6-Hour Rainfall, Pattern No.  1.36
248          KM          An rainfall areal reduction factor of 0.988
249          KM
250          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
251          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
252          KM   .36 .36 .35 .14 .11 .10 .06 .06 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
253          KM
254          KM          L=   2.593 miles, S=  204 feet/mile, Kb= .06
255          KM
256          BA   0.936
257          LG    0.25    0.28    4.90    0.29    3.00
258          UC   0.571   0.442
259          UA       0       3       5       8      12      20      43      75      90      96
260          UA     100
             *

261          KK   C105L
262          KM        Combine routed hydrograph from 104105 w/runoff from S107
263          HC       2
             *
             *  ***************************************************************************
             *                 Begin Major Basin 200 (Unnamed Wash 2)
             *  ***************************************************************************
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

264          KK    S200
265          KM   Sub-Basin   S200
266          KM
267          KM      The Clark Unit Hydrograph is used for this basin.
268          KM          The Natural time-area relation is used for this basin.
269          KM
270          KM      Time of Concentration for this sub-basin is based on the following:
271          KM          6-Hour Rainfall, Pattern No.  1.38
272          KM          An rainfall areal reduction factor of 0.988
273          KM
274          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
275          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
276          KM   .36 .35 .35 .14 .11 .10 .06 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
277          KM
278          KM          L=   1.665 miles, S=  192 feet/mile, Kb= .10
279          KM
280          BA   0.959
281          LG    0.25    0.35    4.25    0.44   35.00
282          UC   0.621   0.336
283          UA       0       3       5       8      12      20      43      75      90      96
284          UA     100
             *

285          KK  200201
```

```
286          KM        Normal depth route from hydrograph S200 to C201
287          KM        Source: Field Reconnaissance
288          RS       1    FLOW      -1
289          RC     .05      .03      .05     3952  0.0228
290          RX    1000     1001     1002     1005    1026    1032    1034    1036
291          RY     105      104      103      100     100     103     104     105
             *

292          KK    S201
293          KM   Sub-Basin   S201
294          KM
295          KM      The Clark Unit Hydrograph is used for this basin.
296          KM          The Natural time-area relation is used for this basin.
297          KM
298          KM      Time of Concentration for this sub-basin is based on the following:
299          KM          6-Hour Rainfall, Pattern No.  1.00
300          KM          An rainfall areal reduction factor of 0.995
301          KM
302          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
303          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
304          KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
305          KM
306          KM          L=   1.182 miles, S=  195 feet/mile, Kb= .11
307          KM
308          BA   0.350
309          LG    0.25     0.35     4.25     0.44    35.00
310          UC   0.483    0.343
311          UA       0        3        5        8       12       20       43       75       90       96
312          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

313          KK    C201
314          KM        Combine routed hydrograph 200201 w/runoff from S201
315          HC       2
             *

316          KK  201203
317          KM        Normal depth route from C201 to C203R
318          KM        Source: Field Reconnaissance
319          RS       2    FLOW      -1
320          RC    .055     .039     .055     3233  0.0155
321          RX    1000   1008.4   1057.5   1066.3  1098.4  1102.8    1105  1107.6
322          RY     105    101.1      102    100.3     100     102     103   104.2
             *

323          KK    S202
324          KM   Sub-Basin   S202
325          KM
326          KM      The Clark Unit Hydrograph is used for this basin.
327          KM          The Natural time-area relation is used for this basin.
328          KM
329          KM      Time of Concentration for this sub-basin is based on the following:
330          KM          6-Hour Rainfall, Pattern No.  1.00
331          KM          An rainfall areal reduction factor of 0.998
332          KM
333          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
334          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
335          KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
336          KM
337          KM          L=   0.689 miles, S=  271 feet/mile, Kb= .12
338          KM
339          BA   0.127
340          LG    0.25     0.35     4.25     0.44    35.00
341          UC   0.308    0.241
342          UA       0        3        5        8       12       20       43       75       90       96
343          UA     100
             *

344          KK  202203
345          KM        Normal depth route from S202 to C203R
346          KM         Source: Field Reconnaissance
347          RS       3    FLOW      -1
348          RC     .05      .03      .05     2353   .0170
349          RX    1000   1008.4   1057.5   1066.3  1098.4  1102.8    1105  1107.6
350          RY   103.6    101.1      102    100.3     100     102    103.   104.2
             *
```

```
351          KK    S203
352          KM   Sub-Basin   S203
353          KM
354          KM      The Clark Unit Hydrograph is used for this basin.
355          KM          The Urban time-area relation is used for this basin.
356          KM
357          KM      Time of Concentration for this sub-basin is based on the following:
358          KM          6-Hour Rainfall, Pattern No.  1.00
1                                        HEC-1 INPUT                                                    PAGE  9

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

359          KM          An rainfall areal reduction factor of 0.995
360          KM
361          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
362          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
363          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
364          KM
365          KM          L=   1.683 miles, S=  154 feet/mile, Kb= .09
366          KM
367          BA   0.373
368          LG    0.28    0.29    4.25    0.43   37.00
369          UC   0.588   0.545
370          UA       0       5      16      30      65      77      84      90      94      97
371          UA     100
             *

372          KK   C203R
373          KM        Combine routed hydrographs 201203 and 202203 with runoff from S203
374          HC       3
             *

375          KK    S204
376          KM   Sub-Basin   S204
377          KM
378          KM      The Clark Unit Hydrograph is used for this basin.
379          KM          The Natural time-area relation is used for this basin.
380          KM
381          KM      Time of Concentration for this sub-basin is based on the following:
382          KM          6-Hour Rainfall, Pattern No.  1.37
383          KM          An rainfall areal reduction factor of 0.988
384          KM
385          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
386          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
387          KM   .36 .35 .35 .14 .11 .09 .06 .06 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
388          KM
389          KM          L=   1.959 miles, S=  174 feet/mile, Kb= .10
390          KM
391          BA   0.951
392          LG    0.25    0.35    4.25    0.44   32.00
393          UC   0.729   0.459
394          UA       0       3       5       8      12      20      43      75      90      96
395          UA     100
             *

396          KK    C203
397          KM        Combine hydrograph from C203R with runoff from S204
398          HC       2
             *

399          KK  203204
400          KM        Normal depth route from C203 to C204
401          KM        Source: Field Reconnaissance
402          RS       1    FLOW      -1
403          RC    .055    .039    .055    1325  0.0151
404          RX   989.2  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1120.2
405          RY     110   101.1     102   100.3     100     102     103   110.0
             *
1                                        HEC-1 INPUT                                                    PAGE 10

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

406          KK    S205
407          KM   Sub-Basin   S205
408          KM
409          KM      The Clark Unit Hydrograph is used for this basin.
410          KM          The Natural time-area relation is used for this basin.
411          KM
412          KM      Time of Concentration for this sub-basin is based on the following:
413          KM          6-Hour Rainfall, Pattern No.  1.00
```

```
414          KM          An rainfall areal reduction factor of 0.995
415          KM
416          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
417          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
418          KM   .46 .46 .46 .14 .11 .10 .04 .04 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
419          KM
420          KM          L=   1.485 miles, S=  175 feet/mile, Kb= .07
421          KM
422          BA   0.413
423          LG    0.21    0.31    4.60    0.34   34.00
424          UC   0.421   0.322
425          UA       0       3       5       8      12      20      43      75      90      96
426          UA     100
             *

427          KK    C204
428          KM        Combine routed hydrograph 203204 w/runoff from S205
429          HC       2
             *

430          KK  204205
431          KM        Normal depth route from C204 to C205L
432          KM        Source: Field Reconnaissance
433          RS       4    FLOW      -1
434          RC     .05    .039     .05    5007  0.0140
435          RX    1000  1010.6  1053.2  1064.9  1094.7  1103.1  1105.9  1113.8
436          RY   105.6   102.5   103.3   100.4     100     103     104   106.8
             *

437          KK    S206
438          KM   Sub-Basin   S206
439          KM
440          KM      The Clark Unit Hydrograph is used for this basin.
441          KM          The Urban time-area relation is used for this basin.
442          KM
443          KM      Time of Concentration for this sub-basin is based on the following:
444          KM          6-Hour Rainfall, Pattern No.  1.31
445          KM          An rainfall areal reduction factor of 0.989
446          KM
447          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
448          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
449          KM   .39 .38 .38 .15 .12 .11 .07 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
450          KM
451          KM          L=   2.296 miles, S=  118 feet/mile, Kb= .08
452          KM
453          BA   0.853
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

454          LG    0.29    0.28    4.65    0.33   30.00
455          UC   0.783   0.601
456          UA       0       5      16      30      65      77      84      90      94      97
457          UA     100
             *

458          KK   C205L
459          KM        Combine routed hydrograph 204205 w/runoff from S206
460          HC       2
             *

461          KK    S207
462          KM   Sub-Basin   S207
463          KM
464          KM      The Clark Unit Hydrograph is used for this basin.
465          KM          The Natural time-area relation is used for this basin.
466          KM
467          KM      Time of Concentration for this sub-basin is based on the following:
468          KM          6-Hour Rainfall, Pattern No.  1.38
469          KM          An rainfall areal reduction factor of 0.988
470          KM
471          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
472          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
473          KM   .36 .36 .36 .14 .12 .11 .07 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
474          KM
475          KM          L=   2.315 miles, S=  117 feet/mile, Kb= .08
476          KM
477          BA   0.957
478          LG    0.27    0.32    4.35    0.41   35.00
479          UC   0.813   0.590
480          UA       0       3       5       8      12      20      43      75      90      96
```

```
481          UA     100
             *

482          KK    C205
483          KM        Combine hydrograph from C205L w/runoff from S207
484          HC       2
             *

485          KK  205206
486          KM        Normal depth route from C205 to C206
487          KM        Source: Field Reconnaissance
488          RS      10    FLOW      -1
489          RC     .05    .039     .05   11893  0.0063
490          RX    1000  1002.5    1005  1019.1  1052.5  1070.5  1120.8  1146.9
491          RY   110.1   107.6   105.1     100   100.2   104.6   103.7   109.5
             *

492          KK    S208
493          KM   Sub-Basin   S208
494          KM
495          KM      The Clark Unit Hydrograph is used for this basin.
496          KM          The Natural time-area relation is used for this basin.
497          KM
498          KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

499          KM          6-Hour Rainfall, Pattern No.  1.46
500          KM          An rainfall areal reduction factor of 0.986
501          KM
502          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
503          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
504          KM   .35 .35 .35 .16 .14 .13 .08 .08 .08 .03 .03 .03 .01 .01 .01 .01 .01 .01
505          KM
506          KM          L=   2.205 miles, S=   93 feet/mile, Kb= .10
507          KM
508          BA   1.103
509          LG    0.25    0.32    5.30    0.25   29.00
510          UC   1.008   0.665
511          UA       0       3       5       8      12      20      43      75      90      96
512          UA     100
             *

513          KK    C206
514          KM        Combine routed hydrograph 205206 w/runoff from S208
515          HC       2
             *

516          KK  206207
517          KM        Normal depth route from C206 to C207R
518          KM        Source: Field Reconnaissance
519          RS       2    FLOW      -1
520          RC    .055    .039    .055    4972  0.0312
521          RX    1000  1007.4  1014.8  1022.2  1057.6  1068.1  1088.2  1094.2
522          RY     106     104     102     100   100.2   102.2   102.9   105.9
             *

523          KK    S209
524          KM   Sub-Basin   S209
525          KM
526          KM      The Clark Unit Hydrograph is used for this basin.
527          KM          The Natural time-area relation is used for this basin.
528          KM
529          KM      Time of Concentration for this sub-basin is based on the following:
530          KM          6-Hour Rainfall, Pattern No.  1.15
531          KM          An rainfall areal reduction factor of 0.992
532          KM
533          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
534          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
535          KM   .42 .41 .41 .14 .10 .09 .05 .05 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
536          KM
537          KM          L=   1.358 miles, S=  133 feet/mile, Kb= .10
538          KM
539          BA   0.650
540          LG    0.23    0.34    5.00    0.28   16.00
541          UC   0.604   0.345
542          UA       0       3       5       8      12      20      43      75      90      96
543          UA     100
             *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 544          KK   C207R
 545          KM       Combine routed hydrograph 206207 w/runoff from S209
 546          HC       2
              *

 547          KK    S210
 548          KM   Sub-Basin   S210
 549          KM
 550          KM      The Clark Unit Hydrograph is used for this basin.
 551          KM          The Urban time-area relation is used for this basin.
 552          KM
 553          KM      Time of Concentration for this sub-basin is based on the following:
 554          KM          6-Hour Rainfall, Pattern No.  1.00
 555          KM          An rainfall areal reduction factor of 0.994
 556          KM
 557          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 558          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 559          KM   .45 .44 .44 .13 .09 .08 .03 .03 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
 560          KM
 561          KM          L=   1.274 miles, S=  181 feet/mile, Kb= .09
 562          KM
 563          BA   0.481
 564          LG    0.22    0.31    5.00    0.28    4.00
 565          UC   0.458   0.287
 566          UA      0       5      16      30      65      77      84      90      94      97
 567          UA    100
              *

 568          KK    C207
 569          KM       Combine hydrograph from C207R w/runoff from S210
 570          HC       2
              *

 571          KK  207105
 572          KM       Normal depth route from C207 to C105
 573          KM       Source: Field Reconnaissance
 574          RS       2    FLOW      -1
 575          RC    .055    .039    .055    7176  0.0167
 576          RX    1000    1003    1006    1009  1038.5  1041.5  1047.5  1053.5
 577          RY     109     106     103     100     100     102     106     110
              *

 578          KK    S211
 579          KM   Sub-Basin   S211
 580          KM
 581          KM      The Clark Unit Hydrograph is used for this basin.
 582          KM          The Urban time-area relation is used for this basin.
 583          KM
 584          KM      Time of Concentration for this sub-basin is based on the following:
 585          KM          6-Hour Rainfall, Pattern No.  1.00
 586          KM          An rainfall areal reduction factor of 0.994
 587          KM
 588          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 589          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 590          KM   .45 .45 .44 .13 .10 .08 .04 .03 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
 591          KM
 592          KM          L=   1.359 miles, S=  162 feet/mile, Kb= .09
 593          KM
 594          BA   0.488
 595          LG    0.25    0.30    5.20    0.26    7.00
 596          UC   0.496   0.327
 597          UA      0       5      16      30      65      77      84      90      94      97
 598          UA    100
              *

 599          KK   C105R
 600          KM       Combine routed hydrograph 207105 w/runoff from S211
 601          HC       2
              *

 602          KK    C105
 603          KM       Combine hydrographs from C105L and C105R
 604          HC       2
```

```
                 *
                 *  ****************************************************************************
                 *                 Begin Major Basin 300 (Unnamed Wash 3)
                 *  ****************************************************************************
                 *

605              KK    S300
606              KM   Sub-Basin   S300
607              KM
608              KM      The Clark Unit Hydrograph is used for this basin.
609              KM          The Urban time-area relation is used for this basin.
610              KM
611              KM      Time of Concentration for this sub-basin is based on the following:
612              KM          6-Hour Rainfall, Pattern No.  1.12
613              KM          An rainfall areal reduction factor of 0.992
614              KM
615              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
616              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
617              KM   .43 .42 .42 .14 .11 .10 .05 .05 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
618              KM
619              KM          L=   1.776 miles, S=  129 feet/mile, Kb= .04
620              KM
621              BA   0.615
622              LG    0.28    0.28    4.55    0.37   32.00
623              UC   0.375   0.260
624              UA       0       5      16      30      65      77      84      90      94      97
625              UA     100
                 *

626              KK    S301
627              KM   Sub-Basin   S301
628              KM
629              KM      The Clark Unit Hydrograph is used for this basin.
630              KM          The Urban time-area relation is used for this basin.
631              KM
632              KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

633              KM          6-Hour Rainfall, Pattern No.  1.40
634              KM          An rainfall areal reduction factor of 0.987
635              KM
636              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
637              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
638              KM   .36 .36 .36 .15 .13 .12 .07 .07 .07 .04 .04 .04 .02 .02 .02 .01 .01 .01
639              KM
640              KM          L=   2.001 miles, S=  190 feet/mile, Kb= .04
641              KM
642              BA   0.994
643              LG    0.29    0.26    4.25    0.45   42.00
644              UC   0.367   0.212
645              UA       0       5      16      30      65      77      84      90      94      97
646              UA     100
                 *

647              KK    C300
648              KM        Combine runoff from S300 and S301
649              HC       2
                 *

650              KK  300301
651              KM        Normal depth route from C300 to C301
652              KM        Source: Field Reconnaissance
653              RS       2    FLOW      -1
654              RC    .051    .044    .051    5117  0.0137
655              RX    1000    1001    1002    1010    1047    1059  1060.5    1062
656              RY     110     109     108     100     100     108     109     110
                 *

657              KK    S302
658              KM   Sub-Basin   S302
659              KM
660              KM      The Clark Unit Hydrograph is used for this basin.
661              KM          The Natural time-area relation is used for this basin.
662              KM
663              KM      Time of Concentration for this sub-basin is based on the following:
664              KM          6-Hour Rainfall, Pattern No.  1.00
665              KM          An rainfall areal reduction factor of 0.994
666              KM
667              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

```
668          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
669          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
670          KM
671          KM          L=   1.095 miles, S=  137 feet/mile, Kb= .09
672          KM
673          BA   0.465
674          LG    0.26    0.31    4.55    0.36   29.00
675          UC   0.458   0.259
676          UA       0       3       5       8      12      20      43      75      90      96
677          UA     100
             *
1                                                HEC-1 INPUT                                                PAGE 16

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

678          KK    C301
679          KM        Combine routed hydrograph 300301 w/runoff from S302
680          HC       2
             *

681          KK  301302
682          KM        Normal depth route from C301 to C302
683          KM        Source: Field Reconnaissance
684          RS      10    FLOW      -1
685          RC    .051    .039    .051    8124  0.0086
686          RX    1000    1004  1200.3  1213.6  1240.6  1249.9  1344.4  1369.6
687          RY   110.6   108.6   103.5   100.2     100   104.2   107.4   110.4
             *

688          KK    S303
689          KM   Sub-Basin   S303
690          KM
691          KM      The Clark Unit Hydrograph is used for this basin.
692          KM          The Natural time-area relation is used for this basin.
693          KM
694          KM      Time of Concentration for this sub-basin is based on the following:
695          KM          6-Hour Rainfall, Pattern No.  1.20
696          KM          An rainfall areal reduction factor of 0.991
697          KM
698          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
699          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
700          KM   .39 .39 .38 .13 .09 .08 .04 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
701          KM
702          KM          L=   1.539 miles, S=  188 feet/mile, Kb= .10
703          KM
704          BA   0.708
705          LG    0.24    0.32    4.60    0.35   11.00
706          UC   0.588   0.352
707          UA       0       3       5       8      12      20      43      75      90      96
708          UA     100
             *

709          KK    C302
710          KM        Combine routed hydrograph 301302 w/runoff from S303
711          HC       2
             *

712          KK  302303
713          KM        Normal depth route from C302 to C303
714          KM        Source: Field Reconniassance
715          RS       4    FLOW      -1
716          RC    .055    .048    .055    7304  0.0192
717          RX  995.97  1009.4  1017.8  1026.5  1067.3  1068.7  1071.5 1077.82
718          RY   107.0     104     102     100     101     102     104   107.0
             *
1                                                HEC-1 INPUT                                                PAGE 17

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

719          KK    S304
720          KM   Sub-Basin   S304
721          KM
722          KM      The Clark Unit Hydrograph is used for this basin.
723          KM          The Urban time-area relation is used for this basin.
724          KM
725          KM      Time of Concentration for this sub-basin is based on the following:
726          KM          6-Hour Rainfall, Pattern No.  1.29
727          KM          An rainfall areal reduction factor of 0.989
728          KM
```

```
729          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
730          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
731          KM   .38 .38 .37 .14 .11 .10 .06 .05 .05 .01 .01 .01 .00 .00 .00 .00 .00 .00
732          KM
733          KM          L=   2.314 miles, S=  186 feet/mile, Kb= .06
734          KM
735          BA   0.823
736          LG    0.25    0.29    5.10    0.27    7.00
737          UC   0.533   0.403
738          UA       0       5      16      30      65      77      84      90      94      97
739          UA     100
             *

740          KK    C303
741          KM        Combine routed hydrograph 302303 w/runoff from S304
742          HC       2
             *

743          KK  WEST-1
744          KM        Dummy combine of major basins 100, 200 and 300
745          HC       2
             *
             *  ****************************************************************************
             *                 Begin Major Basin 400 (Caterpillar Tanks Wash)
             *  ****************************************************************************
             *

746          KK    S400
747          KM   Sub-Basin   S400
748          KM
749          KM      The Clark Unit Hydrograph is used for this basin.
750          KM          The Natural time-area relation is used for this basin.
751          KM
752          KM      Time of Concentration for this sub-basin is based on the following:
753          KM          6-Hour Rainfall, Pattern No.  1.43
754          KM          An rainfall areal reduction factor of 0.987
755          KM
756          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
757          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
758          KM   .37 .37 .36 .17 .15 .14 .09 .08 .08 .04 .03 .03 .02 .02 .01 .01 .01 .01
759          KM
760          KM          L=   1.864 miles, S=  110 feet/mile, Kb= .04
761          KM
762          BA   1.048
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

763          LG    0.24    0.30    5.40    0.22   36.00
764          UC   0.429   0.232
765          UA       0       3       5       8      12      20      43      75      90      96
766          UA     100
             *

767          KK   C4000
768          KM        Storage routing at crossing structure no. 78 (see Plate 5)
769          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
770          RS       1    STOR       0
771          SQ       0      62     200     400     540     625     750
772          SE    1508    1511    1514    1520    1526    1532    1540
773          SV       0     5.2    18.6    40.7    71.7   115.5   178.1   266.3
774          SE    1508    1516    1520    1524    1528    1532    1536    1540
             *

775          KK  400401
776          KM        Normal depth route from S400 to C401
777          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
778          RS       8    FLOW      -1
779          RC    .045    .040    .045    7424  0.0101
780          RX  9729.2  9772.7  9849.9   10000 10007.8 10090.6 10147.3 10185.4
781          RY  1509.6  1508.8  1500.2  1475.5  1475.3  1495.3    1496  1497.5
             *

782          KK    S401
783          KM   Sub-Basin   S401
784          KM
785          KM      The Clark Unit Hydrograph is used for this basin.
786          KM          The Urban time-area relation is used for this basin.
787          KM
788          KM      Time of Concentration for this sub-basin is based on the following:
789          KM          6-Hour Rainfall, Pattern No.  1.15
```

```
790          KM          An rainfall areal reduction factor of 0.992
791          KM
792          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
793          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
794          KM   .42 .42 .41 .14 .11 .10 .05 .05 .05 .01 .01 .01 .00 .00 .00 .00 .00 .00
795          KM
796          KM          L=   1.349 miles, S=   74 feet/mile, Kb= .04
797          KM
798          BA   0.646
799          LG    0.29    0.27    5.10    0.26   13.00
800          UC   0.396   0.216
801          UA       0       5      16      30      65      77      84      90      94      97
802          UA     100
             *

803          KK    C401
804          KM        Combine routed hydrograph 400401 w/runoff from S401
805          HC       2
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

806          KK  401402
807          KM       Normal depth route from C401 to C402
808          KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09
809          RS      10    FLOW      -1
810          RC    .045    .043    .045    8029  0.0112
811          RX  9581.3  9756.6  9997.5   10000 10022.2 10086.4 10119.5 10362.5
812          RY  1455.4  1419.3  1413.3  1410.9  1409.8  1414.4    1419  1428.6
             *

813          KK    S402
814          KM   Sub-Basin   S402
815          KM
816          KM      The Clark Unit Hydrograph is used for this basin.
817          KM          The Urban time-area relation is used for this basin.
818          KM
819          KM      Time of Concentration for this sub-basin is based on the following:
820          KM          6-Hour Rainfall, Pattern No.  1.23
821          KM          An rainfall areal reduction factor of 0.990
822          KM
823          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
824          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
825          KM   .42 .41 .41 .16 .14 .13 .07 .07 .07 .03 .03 .03 .01 .01 .01 .01 .01 .01
826          KM
827          KM          L=   1.468 miles, S=   75 feet/mile, Kb= .03
828          KM
829          BA   0.740
830          LG    0.25    0.28    5.60    0.22   33.00
831          UC   0.342   0.181
832          UA       0       5      16      30      65      77      84      90      94      97
833          UA     100
             *

834          KK    C402
835          KM        Combine routed hydrograph 401402 w/runoff from S402
836          HC       2
             *

837          KK  402403
838          KM       Normal depth route from C402 to C403
839          KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09
840          RS      10    FLOW      -1
841          RC    .045    .043    .045    6138  0.0049
842          RX   9267.  9571.2  9916.2  9988.7  9997.4 10095.3 10157.8   10641
843          RY  1395.9  1388.7  1383.7    1355    1355  1361.4  1359.6    1378
844          RL                    0.03  1355.0
             *

845          KK    S403
846          KM   Sub-Basin   S403
847          KM
848          KM      The Clark Unit Hydrograph is used for this basin.
849          KM          The Urban time-area relation is used for this basin.
850          KM
851          KM      Time of Concentration for this sub-basin is based on the following:
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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852          KM          6-Hour Rainfall, Pattern No.  1.06
853          KM          An rainfall areal reduction factor of 0.993
854          KM
855          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
856          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
857          KM   .48 .47 .47 .18 .15 .15 .08 .08 .07 .06 .06 .06 .01 .01 .01 .01 .01 .01
858          KM
859          KM          L=   1.638 miles, S=   52 feet/mile, Kb= .02
860          KM
861          BA   0.559
862          LG    0.23    0.16    8.00    0.09   37.00
863          UC   0.300   0.201
864          UA       0       5      16      30      65      77      84      90      94      97
865          UA     100
             *

866          KK    C403
867          KM        Combine routed hydrograph 402403 w/runoff from S403
868          HC       2
             *

869          KK  403404
870          KM        Normal depth route from C403 to C404
871          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
872          RS       3   FLOW      -1
873          RC    .045    .045    .045    4256   .0164
874          RX  9506.5  9551.7  9955.5    9995 10007.4 10060.9 10227.2 10315.3
875          RY  1300.9  1282.3  1282.7  1276.7  1276.5  1283.5  1283.3  1302.1
876          RL                    0.03  1276.5
             *

877          KK    S404
878          KM   Sub-Basin   S404
879          KM
880          KM      The Clark Unit Hydrograph is used for this basin.
881          KM          The Natural time-area relation is used for this basin.
882          KM
883          KM      Time of Concentration for this sub-basin is based on the following:
884          KM          6-Hour Rainfall, Pattern No.  1.00
885          KM          An rainfall areal reduction factor of 0.997
886          KM
887          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
888          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
889          KM   .47 .46 .46 .15 .12 .11 .05 .05 .04 .02 .01 .01 .00 .00 .00 .00 .00 .00
890          KM
891          KM          L=   0.773 miles, S=  181 feet/mile, Kb= .09
892          KM
893          BA   0.263
894          LG    0.26    0.33    6.60    0.14    8.00
895          UC   0.313   0.177
896          UA       0       3       5       8      12      20      43      75      90      96
897          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

898          KK    C404
899          KM        Combine routed hydrograph C403 w/runoff S404
900          HC       2
             *

901          KK  WEST-2
902          KM        Dummy combine of major basins 100, 200, 300 and 400
903          HC       2
             *
             *  ******************************************************************************
             *                Begin Major Basin 500 (Twin Buttes Wash)
             *  ******************************************************************************
             *

904          KK    S500
905          KM   Sub-Basin   S500
906          KM
907          KM      The Clark Unit Hydrograph is used for this basin.
908          KM          The Urban time-area relation is used for this basin.
909          KM
910          KM      Time of Concentration for this sub-basin is based on the following:
911          KM          6-Hour Rainfall, Pattern No.  1.43
```

```
912          KM          An rainfall areal reduction factor of 0.987
913          KM
914          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
915          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
916          KM   .35 .35 .35 .15 .13 .12 .07 .07 .07 .04 .04 .04 .02 .02 .02 .01 .01 .01
917          KM
918          KM          L=   2.399 miles, S=  117 feet/mile, Kb= .06
919          KM
920          BA   1.054
921          LG    0.28    0.29    4.25    0.43   39.00
922          UC   0.675   0.467
923          UA       0       5      16      30      65      77      84      90      94      97
924          UA     100
             *

925          KK  500501
926          KM        Normal depth route from S500 to C501
927          KM        Source: Field Reconnaissance
928          RS       5    FLOW      -1
929          RC    0.05   0.035    0.05    5972  0.0134
930          RX    1000    1004    1032    1047    1069 1072.75  1075.9  1081.9
931          RY   105.7   101.7    99.6    96.8    97.1    99.6   101.7   105.7
             *

932          KK    S501
933          KM   Sub-Basin   S501
934          KM
935          KM      The Clark Unit Hydrograph is used for this basin.
936          KM          The Urban time-area relation is used for this basin.
937          KM
938          KM      Time of Concentration for this sub-basin is based on the following:
939          KM          6-Hour Rainfall, Pattern No.  1.12
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

940          KM          An rainfall areal reduction factor of 0.992
941          KM
942          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
943          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
944          KM   .43 .42 .42 .14 .10 .09 .05 .04 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
945          KM
946          KM          L=   1.486 miles, S=  135 feet/mile, Kb= .06
947          KM
948          BA   0.614
949          LG    0.27    0.29    4.45    0.38   27.00
950          UC   0.438   0.268
951          UA       0       5      16      30      65      77      84      90      94      97
952          UA     100
             *

953          KK    C501
954          KM        Combine routed hydrograph 500501 w/runoff from S501
955          HC       2
             *

956          KK  501502
957          KM        Normal depth route from C501 to C502L
958          KM        Source: Field Reconniassance
959          RS       2    FLOW      -1
960          RC    0.05   0.035    0.05    5021  0.0159
961          RX    1000    1001    1002    1006    1035    1039    1040    1041
962          RY     106     105     104     100     100     104     105     106
963          RL                    0.94   100.0
             *

964          KK    S502
965          KM   Sub-Basin   S502
966          KM
967          KM      The Clark Unit Hydrograph is used for this basin.
968          KM          The Natural time-area relation is used for this basin.
969          KM
970          KM      Time of Concentration for this sub-basin is based on the following:
971          KM          6-Hour Rainfall, Pattern No.  1.00
972          KM          An rainfall areal reduction factor of 0.995
973          KM
974          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
975          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
976          KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
977          KM
978          KM          L=   1.053 miles, S=  209 feet/mile, Kb= .11
```

```
 979          KM
 980          BA   0.403
 981          LG    0.27    0.30    4.50    0.36   22.00
 982          UC   0.424   0.250
 983          UA       0       3       5       8      12      20      43      75      90      96
 984          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 23

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 985          KK   C502L
 986          KM        Combine routed hydrograph 501502 w/runoff from S502
 987          HC       2
              *

 988          KK    S503
 989          KM   Sub-Basin   S503
 990          KM
 991          KM      The Clark Unit Hydrograph is used for this basin.
 992          KM          The Urban time-area relation is used for this basin.
 993          KM
 994          KM      Time of Concentration for this sub-basin is based on the following:
 995          KM          6-Hour Rainfall, Pattern No.  1.40
 996          KM          An rainfall areal reduction factor of 0.987
 997          KM
 998          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 999          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1000          KM   .37 .36 .36 .15 .13 .12 .07 .07 .07 .03 .03 .03 .01 .01 .01 .01 .01 .01
1001          KM
1002          KM          L=   1.891 miles, S=  116 feet/mile, Kb= .06
1003          KM
1004          BA   0.994
1005          LG    0.27    0.28    4.65    0.33   31.00
1006          UC   0.567   0.329
1007          UA       0       5      16      30      65      77      84      90      94      97
1008          UA     100
              *

1009          KK   C502I
1010          KM        Combine hydrograph from C502L w/runoff from S503
1011          HC       2
              *

1012          KK   C502O
1013          KM        Storage routing at crossing structure no. 81
1014          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1015          RS       1    STOR       0
1016          SQ       0     248     800    1600    2160    2500    2900    3200
1017          SE    1500    1503    1506    1512    1518    1524    1530    1536
1018          SV       0    2.37    9.23   20.95   37.67  122.58   212.7  516.24
1019          SE    1500    1508    1512    1516    1520    1528    1532    1540
              *

1020          KK  502505
1021          KM        Normal depth route from C502 to C505L
1022          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1023          RS       7    FLOW      -1
1024          RC    .046     .04    .046    8775  0.0091
1025          RX  9875.7  9921.8  9941.2  9962.7 10048.7 10088.3 10258.2 10339.9
1026          RY  1488.4  1476.5  1472.2    1469  1470.4  1480.9  1485.4  1497.1
1027          RL                    0.94    1469
              *
1                                          HEC-1 INPUT                                          PAGE 24

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1028          KK    S504
1029          KM   Sub-Basin   S504
1030          KM
1031          KM      The Clark Unit Hydrograph is used for this basin.
1032          KM          The Urban time-area relation is used for this basin.
1033          KM
1034          KM      Time of Concentration for this sub-basin is based on the following:
1035          KM          6-Hour Rainfall, Pattern No.  1.00
1036          KM          An rainfall areal reduction factor of 0.996
1037          KM
1038          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1039          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```

```
1040          KM   .46 .46 .45 .14 .11 .10 .04 .04 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
1041          KM
1042          KM          L=   1.571 miles, S=   64 feet/mile, Kb= .04
1043          KM
1044          BA   0.326
1045          LG    0.24    0.25    4.40    0.39   33.00
1046          UC   0.450   0.415
1047          UA       0       5      16      30      65      77      84      90      94      97
1048          UA     100
              *

1049          KK   C505L
1050          KM        Combine routed hydrograph 502505 w/runoff from S504
1051          HC       2
              *

1052          KK    S505
1053          KM   Sub-Basin   S505
1054          KM
1055          KM      The Clark Unit Hydrograph is used for this basin.
1056          KM          The Natural time-area relation is used for this basin.
1057          KM
1058          KM      Time of Concentration for this sub-basin is based on the following:
1059          KM          6-Hour Rainfall, Pattern No.  1.00
1060          KM          An rainfall areal reduction factor of 0.998
1061          KM
1062          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1063          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1064          KM   .45 .44 .44 .13 .09 .08 .03 .03 .03 .02 .02 .02 .00 .00 .00 .00 .00 .00
1065          KM
1066          KM          L=   0.472 miles, S=  365 feet/mile, Kb= .14
1067          KM
1068          BA   0.143
1069          LG    0.24    0.33    4.40    0.37   20.00
1070          UC   0.238   0.125
1071          UA       0       3       5       8      12      20      43      75      90      96
1072          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1073          KK   C503O
1074          KM        Storage routing at crossing structure no. 94
1075          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1076          RS       1    STOR       0
1077          SQ       0     7.5      22      45      71      93     110
1078          SE    1519  1520.25 1521.5    1524    1529    1534    1540
1079          SV       0    0.61    2.78    8.03   18.24
1080          SE    1519    1528    1532    1536    1540
              *

1081          KK  503505
1082          KM        Normal depth route from S505 to C505
1083          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1084          RS      15    FLOW      -1
1085          RC    .045    .047    .043    9136   .0115
1086          RX    9715  9892.4    9965  9996.6   10000 10044.9 10077.4 10088.5
1087          RY  1504.8  1497.4  1487.9  1471.1  1471.6  1487.4  1484.4  1483.1
1088          RL                    0.63  1471.1
              *

1089          KK    S506
1090          KM   Sub-Basin   S506
1091          KM
1092          KM      The Clark Unit Hydrograph is used for this basin.
1093          KM          The Natural time-area relation is used for this basin.
1094          KM
1095          KM      Time of Concentration for this sub-basin is based on the following:
1096          KM          6-Hour Rainfall, Pattern No.  1.00
1097          KM          An rainfall areal reduction factor of 0.998
1098          KM
1099          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1100          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1101          KM   .47 .47 .47 .16 .12 .11 .05 .05 .05 .03 .02 .02 .01 .01 .01 .01 .01 .01
1102          KM
1103          KM          L=   0.726 miles, S=  307 feet/mile, Kb= .10
1104          KM
1105          BA   0.151
1106          LG    0.23    0.32    5.70    0.19   27.00
```

```
1107          UC   0.258   0.187
1108          UA       0       3       5       8      12      20      43      75      90      96
1109          UA     100
              *

1110          KK   C504O
1111          KM        Storage routing at crossing structure no. 93
1112          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1113          RS       1    STOR       0
1114          SQ       0     7.5      22      52      72      90     103     115
1115          SE  1513.9  1515.2  1516.4  1520.2  1524.2  1528.2  1532.2    1540
1116          SV       0     0.1    0.18    1.89    5.34   11.99   24.05    43.4
1117          SE  1513.9  1517.8    1520    1524    1528    1532    1536    1540
              *
1                                          HEC-1 INPUT                                          PAGE 26

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1118          KK  504505
1119          KM        Normal depth route from S506 to C505
1120          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1121          RS      12    FLOW      -1
1122          RC    .045    .043    .044    7754  0.0129
1123          RX  9785.2  9855.2  9914.4  9959.2 10013.6 10041.2 10119.8 10183.2
1124          RY    1501  1493.8  1487.5    1473  1468.9  1480.7  1487.9  1494.5
              *

1125          KK    S507
1126          KM   Sub-Basin   S507
1127          KM
1128          KM      The Clark Unit Hydrograph is used for this basin.
1129          KM          The Urban time-area relation is used for this basin.
1130          KM
1131          KM      Time of Concentration for this sub-basin is based on the following:
1132          KM          6-Hour Rainfall, Pattern No.  1.17
1133          KM          An rainfall areal reduction factor of 0.991
1134          KM
1135          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1136          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1137          KM   .42 .42 .42 .15 .12 .11 .06 .06 .05 .02 .01 .01 .00 .00 .00 .00 .00 .00
1138          KM
1139          KM          L=   1.467 miles, S=   68 feet/mile, Kb= .03
1140          KM
1141          BA   0.666
1142          LG    0.28    0.25    5.70    0.21   12.00
1143          UC   0.350   0.198
1144          UA       0       5      16      30      65      77      84      90      94      97
1145          UA     100
              *

1146          KK   C505R
1147          KM        Combine routed hydrographs 503505 and 504505 w/runoff from S507
1148          HC       3
              *

1149          KK    C505
1150          KM        Combine hydrographs from C505L and C505R
1151          HC       2
              *

1152          KK  505509
1153          KM        Normal depth route from C505 to C509L
1154          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1155          RS       8    FLOW      -1
1156          RC    .046    .047    .036    6213  0.0064
1157          RX  9136.7  9456.9  9928.8   10000 10150.9 10209.7   10414 10505.9
1158          RY  1419.5  1401.9    1395    1390  1390.3  1398.3  1395.1  1398.3
1159          RL                    0.94  1390.0
              *
1                                          HEC-1 INPUT                                          PAGE 27

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1160          KK    S508
1161          KM   Sub-Basin   S508
1162          KM
1163          KM      The Clark Unit Hydrograph is used for this basin.
1164          KM          The Urban time-area relation is used for this basin.
1165          KM
```

```
1166          KM      Time of Concentration for this sub-basin is based on the following:
1167          KM          6-Hour Rainfall, Pattern No.  1.00
1168          KM          An rainfall areal reduction factor of 0.996
1169          KM
1170          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1171          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1172          KM   .47 .46 .46 .15 .11 .10 .05 .05 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
1173          KM
1174          KM          L=   1.082 miles, S=   92 feet/mile, Kb= .03
1175          KM
1176          BA   0.295
1177          LG    0.28    0.26    5.30    0.25   22.00
1178          UC   0.246   0.166
1179          UA       0       5      16      30      65      77      84      90      94      97
1180          UA     100
              *

1181          KK   C509L
1182          KM        Combine routed hydrograph 505509 w/runoff from S508
1183          HC       2
              *

1184          KK    S509
1185          KM   Sub-Basin   S509
1186          KM
1187          KM      The Clark Unit Hydrograph is used for this basin.
1188          KM          The Urban time-area relation is used for this basin.
1189          KM
1190          KM      Time of Concentration for this sub-basin is based on the following:
1191          KM          6-Hour Rainfall, Pattern No.  1.00
1192          KM          An rainfall areal reduction factor of 0.998
1193          KM
1194          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1195          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1196          KM   .47 .46 .46 .15 .11 .10 .05 .05 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
1197          KM
1198          KM          L=   0.721 miles, S=  304 feet/mile, Kb= .05
1199          KM
1200          BA   0.170
1201          LG    0.28    0.26    4.65    0.33   33.00
1202          UC   0.179   0.116
1203          UA       0       5      16      30      65      77      84      90      94      97
1204          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1205          KK   C506O
1206          KM        Storage routing at crossing structure no. 84
1207          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1208          RS       1    STOR       0
1209          SQ       0     7.5      22      45      71      93     110
1210          SE    1519 1520.25  1521.5    1524    1529    1534    1540
1211          SV       0     .77    4.36   15.19   35.89
1212          SE    1519    1528    1532    1536    1540
              *

1213          KK  506508
1214          KM        Normal depth route from S506 to C508
1215          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1216          RS       6    FLOW      -1
1217          RC    .045    .045    .035    4023   .0149
1218          RX  9717.6  9800.2  9981.4   10000 10010.3 10036.3 10068.8 10227.2
1219          RY  1512.9  1510.9  1508.9    1502    1499  1505.7  1511.5  1512.3
              *

1220          KK    S510
1221          KM   Sub-Basin   S510
1222          KM
1223          KM      The Clark Unit Hydrograph is used for this basin.
1224          KM          The Urban time-area relation is used for this basin.
1225          KM
1226          KM      Time of Concentration for this sub-basin is based on the following:
1227          KM          6-Hour Rainfall, Pattern No.  1.00
1228          KM          An rainfall areal reduction factor of 0.998
1229          KM
1230          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1231          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1232          KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .06 .06 .06 .01 .01 .01 .01 .01 .01
```

```
1233          KM
1234          KM          L=   0.803 miles, S=   75 feet/mile, Kb= .04
1235          KM
1236          BA   0.127
1237          LG    0.24    0.15    7.30    0.11   44.00
1238          UC   0.258   0.224
1239          UA       0       5      16      30      65      77      84      90      94      97
1240          UA     100
              *

1241          KK   C508R
1242          KM        Combine routed hydrograph 506508 w/runoff from S510
1243          HC       2
              *

1244          KK    S511
1245          KM   Sub-Basin   S511
1246          KM
1247          KM      The Clark Unit Hydrograph is used for this basin.
1248          KM          The Urban time-area relation is used for this basin.
1249          KM
1250          KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1251          KM          6-Hour Rainfall, Pattern No.  1.00
1252          KM          An rainfall areal reduction factor of 0.995
1253          KM
1254          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1255          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1256          KM   .47 .47 .46 .15 .12 .11 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1257          KM
1258          KM          L=   1.319 miles, S=  270 feet/mile, Kb= .05
1259          KM
1260          BA   0.385
1261          LG    0.29    0.28    5.70    0.22   29.00
1262          UC   0.254   0.174
1263          UA       0       5      16      30      65      77      84      90      94      97
1264          UA     100
              *

1265          KK   C507O
1266          KM        Storage routing at crossing structure no. 82
1267          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1268          RS *     1    STOR       0
1269          SQ       0     7.5      22      45      71      93     108     115
1270          SE    1516 1517.25  1518.5    1521    1526    1531    1536    1540
1271          SV       0     .75    4.47   19.99   60.85  133.63
1272          SE    1520    1524    1528    1532    1536    1540
              *

1273          KK  507508
1274          KM        Normal depth route from S511 to C508
1275          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1276          RS       9    FLOW      -1
1277          RC    .045    .045    .035    5400   .0111
1278          RX  9723.2  9781.7   9912.  9989.1   10000 10022.9 10089.7 10209.7
1279          RY  1491.1  1490.1  1489.9  1476.5  1477.1  1483.3  1486.2  1492.1
1280          RL                    0.39  1476.5
              *

1281          KK    S512
1282          KM   Sub-Basin   S512
1283          KM
1284          KM      The Clark Unit Hydrograph is used for this basin.
1285          KM          The Urban time-area relation is used for this basin.
1286          KM
1287          KM      Time of Concentration for this sub-basin is based on the following:
1288          KM          6-Hour Rainfall, Pattern No.  1.00
1289          KM          An rainfall areal reduction factor of 0.997
1290          KM
1291          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1292          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1293          KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
1294          KM
1295          KM          L=   0.974 miles, S=   62 feet/mile, Kb= .04
1296          KM
1297          BA   0.214
1298          LG    0.19    0.15    8.00    0.08   48.00
1299          UC   0.313   0.240
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1300          UA       0       5      16      30      65      77      84      90      94      97
1301          UA     100
              *

1302          KK   C508L
1303          KM        Combine routed hydrograph 507508 w/runoff from S512
1304          HC       2
              *

1305          KK    C508
1306          KM        Combine hydrographs from C508L and C508R
1307          HC       2
              *

1308          KK  508509
1309          KM        Normal depth route from C508 to C509
1310          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1311          RS      12    FLOW      -1
1312          RC    .045    .041    .045   10349  0.0077
1313          RX  9573.3  9869.3    9973  9985.2   10000   10053 10231.6 10511.6
1314          RY  1439.9  1425.1  1424.7  1422.1  1419.1  1425.1  1437.1  1444.5
1315          RL                    0.94  1419.1
              *

1316          KK    S513
1317          KM   Sub-Basin   S513
1318          KM
1319          KM      The Clark Unit Hydrograph is used for this basin.
1320          KM          The Urban time-area relation is used for this basin.
1321          KM
1322          KM      Time of Concentration for this sub-basin is based on the following:
1323          KM          6-Hour Rainfall, Pattern No.  1.26
1324          KM          An rainfall areal reduction factor of 0.990
1325          KM
1326          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1327          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1328          KM   .40 .40 .39 .15 .12 .12 .06 .06 .06 .02 .02 .02 .01 .01 .01 .01 .01 .01
1329          KM
1330          KM          L=   2.301 miles, S=   52 feet/mile, Kb= .02
1331          KM
1332          BA   0.778
1333          LG    0.28    0.25    5.40    0.25   19.00
1334          UC   0.408   0.308
1335          UA       0       5      16      30      65      77      84      90      94      97
1336          UA     100
              *

1337          KK   C509R
1338          KM        Combine routed hydrograph 508509 w/runoff from S513
1339          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1340          KK    C509
1341          KM        Combine hydrographs from C509L and C509R
1342          HC       2
              *

1343          KK  509510
1344          KM        Normal depth route from C509 to C510
1345          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1346          RS       2    FLOW      -1
1347          RC    .046    .043    .045    1958   .0102
1348          RX  9605.5  9805.1  9911.8   10000 10026.3 10119.6 10293.4 10613.5
1349          RY  1374.6  1369.2  1370.3  1365.5  1365.6  1379.6  1383.9  1390.1
1350          RL                    0.38  1365.5
              *

1351          KK    S514
1352          KM   Sub-Basin   S514
1353          KM
1354          KM      The Clark Unit Hydrograph is used for this basin.
1355          KM          The Urban time-area relation is used for this basin.
1356          KM
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1357          KM      Time of Concentration for this sub-basin is based on the following:
1358          KM          6-Hour Rainfall, Pattern No.  1.15
1359          KM          An rainfall areal reduction factor of 0.992
1360          KM
1361          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1362          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1363          KM   .45 .45 .45 .18 .15 .15 .08 .08 .08 .06 .06 .05 .01 .01 .01 .01 .01 .01
1364          KM
1365          KM          L=   2.147 miles, S=   65 feet/mile, Kb= .02
1366          KM
1367          BA   0.650
1368          LG    0.24    0.16    7.60    0.10   31.00
1369          UC   0.338   0.261
1370          UA       0       5      16      30      65      77      84      90      94      97
1371          UA     100
              *

1372          KK    C510
1373          KM        Combine routed hydrograph 509510 w/runoff from S514
1374          HC       2
              *

1375          KK  510511
1376          KM        Normal depth route from C510 to C511
1377          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1378          RS      10    FLOW      -1
1379          RC    .046    .044    .046    6722  0.0067
1380          RX  9361.9  9781.7  9944.4  9985.6   10000 10040.8   10420 11470.9
1381          RY  1382.6  1375.5  1364.2  1355.1  1355.4  1360.8  1363.1  1381.1
1382          RL                    0.38  1355.1
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1383          KK    S515
1384          KM   Sub-Basin   S515
1385          KM
1386          KM      The Clark Unit Hydrograph is used for this basin.
1387          KM          The Urban time-area relation is used for this basin.
1388          KM
1389          KM      Time of Concentration for this sub-basin is based on the following:
1390          KM          6-Hour Rainfall, Pattern No.  1.46
1391          KM          An rainfall areal reduction factor of 0.986
1392          KM
1393          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1394          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1395          KM   .38 .38 .38 .19 .17 .17 .11 .10 .10 .07 .07 .07 .03 .03 .03 .02 .02 .02
1396          KM
1397          KM          L=   1.948 miles, S=   54 feet/mile, Kb= .02
1398          KM
1399          BA   1.102
1400          LG    0.25    0.16    8.80    0.06   29.00
1401          UC   0.363   0.193
1402          UA       0       5      16      30      65      77      84      90      94      97
1403          UA     100
              *

1404          KK    C511
1405          KM        Combine routed hydrograph 510511 w/runoff from S515
1406          HC       2
              *

1407          KK  511512
1408          KM        Normal depth route from C511 to C512
1409          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1410          RS       9    FLOW      -1
1411          RC    .046    .044    .046    9226  0.0081
1412          RX  9565.4  9665.5  9852.4   10000 10019.5 10074.2 10242.6   10760
1413          RY  1305.6  1305.6  1303.1  1297.8  1296.9  1336.3  1339.9  1336.5
1414          RL                    0.40  1296.9
              *

1415          KK    S516
1416          KM   Sub-Basin   S516
1417          KM
1418          KM      The Clark Unit Hydrograph is used for this basin.
1419          KM          The Urban time-area relation is used for this basin.
1420          KM
1421          KM      Time of Concentration for this sub-basin is based on the following:
```

```
1422          KM          6-Hour Rainfall, Pattern No.  1.04
1423          KM          An rainfall areal reduction factor of 0.993
1424          KM
1425          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1426          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1427          KM   .47 .46 .46 .16 .13 .12 .06 .06 .06 .04 .04 .04 .01 .01 .01 .01 .01 .01
1428          KM
1429          KM          L=   1.747 miles, S=   66 feet/mile, Kb= .03
1430          KM
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1431          BA   0.540
1432          LG    0.22    0.27    4.80    0.29   47.00
1433          UC   0.383   0.283
1434          UA       0       5      16      30      65      77      84      90      94      97
1435          UA     100
              *

1436          KK    C512
1437          KM        Combine routed hydrograph 511512 w/runoff from S516
1438          HC       2
              *

1439          KK  WEST-3
1440          KM        Dummy combine of major basins S100, S200, S300, S400 and S500
1441          HC       2
              *
              *  ******************************************************************************
              *                Begin Major Basin 600 (Morgan City Wash)
              *  ******************************************************************************
              *

1442          KK    S600
1443          KM   Sub-Basin   S600
1444          KM
1445          KM      The Clark Unit Hydrograph is used for this basin.
1446          KM          The Natural time-area relation is used for this basin.
1447          KM
1448          KM      Time of Concentration for this sub-basin is based on the following:
1449          KM          6-Hour Rainfall, Pattern No.  1.81
1450          KM          An rainfall areal reduction factor of 0.980
1451          KM
1452          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1453          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1454          KM   .24 .24 .23 .13 .12 .10 .08 .08 .08 .02 .02 .02 .01 .01 .01 .01 .01 .01
1455          KM
1456          KM          L=   2.796 miles, S=  271 feet/mile, Kb= .09
1457          KM
1458          BA   2.018
1459          LG    0.25    0.35    4.00    0.49   22.00
1460          UC   0.796   0.438
1461          UA       0       3       5       8      12      20      43      75      90      96
1462          UA     100
              *

1463          KK  600601
1464          KM        Normal depth route from S600 to C601
1465          KM        Source: Morgan City Wash FDS, FCD 89-15
1466          RS       2    FLOW      -1
1467          RC    0.05   0.035    0.05    3463   .0332
1468          RX     100     110     135     200     220     260     275     290
1469          RY    2516    2512    2504    2500    2510    2520    2530    2540
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1470          KK    S601
1471          KM   Sub-Basin   S601
1472          KM
1473          KM      The Clark Unit Hydrograph is used for this basin.
1474          KM          The Natural time-area relation is used for this basin.
1475          KM
1476          KM      Time of Concentration for this sub-basin is based on the following:
1477          KM          6-Hour Rainfall, Pattern No.  1.34
1478          KM          An rainfall areal reduction factor of 0.988
1479          KM
1480          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

```
1481          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1482          KM   .39 .39 .38 .17 .14 .13 .08 .08 .08 .04 .04 .04 .02 .02 .02 .01 .01 .01
1483          KM
1484          KM          L=   1.840 miles, S=  232 feet/mile, Kb= .10
1485          KM
1486          BA   0.901
1487          LG    0.25    0.39    5.70    0.21   44.00
1488          UC   0.575   0.346
1489          UA       0       3       5       8      12      20      43      75      90      96
1490          UA     100
              *

1491          KK    C601
1492          KM        Combine routed hydrograph from S600 w/runoff from S601
1493          HC       2
              *

1494          KK  601602
1495          KM        Normal depth route from S601 to C602
1496          KM        Source: Morgan City Wash FDS, FCD 89-15
1497          RS       3    FLOW      -1
1498          RC    0.05   0.035    0.05    6017   .0266
1499          RX     100     130     140     155     245     255     270     340
1500          RY    2380    2360    2356    2352    2352    2356    2360    2380
              *

1501          KK    S603
1502          KM   Sub-Basin   S603
1503          KM
1504          KM      The Clark Unit Hydrograph is used for this basin.
1505          KM          The Natural time-area relation is used for this basin.
1506          KM
1507          KM      Time of Concentration for this sub-basin is based on the following:
1508          KM          6-Hour Rainfall, Pattern No.  1.17
1509          KM          An rainfall areal reduction factor of 0.991
1510          KM
1511          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1512          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1513          KM   .43 .43 .43 .16 .13 .12 .07 .07 .06 .04 .04 .04 .01 .01 .01 .01 .01 .01
1514          KM
1515          KM          L=   1.377 miles, S=  326 feet/mile, Kb= .10
1516          KM
1517          BA   0.665
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1518          LG    0.25    0.39    5.80    0.20   41.00
1519          UC   0.400   0.218
1520          UA       0       3       5       8      12      20      43      75      90      96
1521          UA     100
              *

1522          KK   C602L
1523          KM        Combine routed hydrogaph 601602 w/runoff from S603
1524          HC       2
              *

1525          KK    S602
1526          KM   Sub-Basin   S602
1527          KM
1528          KM      The Clark Unit Hydrograph is used for this basin.
1529          KM          The Natural time-area relation is used for this basin.
1530          KM
1531          KM      Time of Concentration for this sub-basin is based on the following:
1532          KM          6-Hour Rainfall, Pattern No.  1.77
1533          KM          An rainfall areal reduction factor of 0.981
1534          KM
1535          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1536          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1537          KM   .27 .26 .26 .15 .14 .13 .09 .09 .09 .03 .03 .03 .02 .02 .02 .02 .01 .01
1538          KM
1539          KM          L=   3.035 miles, S=  258 feet/mile, Kb= .09
1540          KM
1541          BA   1.883
1542          LG    0.25    0.35    4.35    0.41   35.00
1543          UC   0.800   0.489
1544          UA       0       3       5       8      12      20      43      75      90      96
1545          UA     100
              *
```

```
1546          KK    C602
1547          KM        Combine hydrograph at C602L w/runoff from S602
1548          HC       2
              *

1549          KK  602603
1550          KM        Normal depth route from C602 to C603L
1551          KM        Source: Morgan City Wash FDS, FCD 89-15
1552          RS       7    FLOW      -1
1553          RC    0.05   0.035    0.05    7614   .0171
1554          RX    1000    1020    1045    1065    1322    1340    1372    1405
1555          RY    2228    2224    2220    2212    2212    2220    2240    2260
1556          RL                    0.96  2212.0
              *

1557          KK    S606
1558          KM   Sub-Basin   S606
1559          KM
1560          KM      The Clark Unit Hydrograph is used for this basin.
1561          KM          The Natural time-area relation is used for this basin.
1562          KM
1                                        HEC-1 INPUT                                                    PAGE 36

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1563          KM      Time of Concentration for this sub-basin is based on the following:
1564          KM          6-Hour Rainfall, Pattern No.  1.16
1565          KM          An rainfall areal reduction factor of 0.991
1566          KM
1567          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1568          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1569          KM   .42 .41 .41 .14 .11 .09 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1570          KM
1571          KM          L=   2.111 miles, S=  300 feet/mile, Kb= .10
1572          KM
1573          BA   0.660
1574          LG    0.26    0.35    4.50    0.37   35.00
1575          UC   0.575   0.461
1576          UA       0       3       5       8      12      20      43      75      90      96
1577          UA     100
              *

1578          KK   C603L
1579          KM        Combine routed hydrograph 602603 w/runoff from S606
1580          HC       2
              *

1581          KK    S605
1582          KM   Sub-Basin   S605
1583          KM
1584          KM      The Clark Unit Hydrograph is used for this basin.
1585          KM          The Natural time-area relation is used for this basin.
1586          KM
1587          KM      Time of Concentration for this sub-basin is based on the following:
1588          KM          6-Hour Rainfall, Pattern No.  1.45
1589          KM          An rainfall areal reduction factor of 0.986
1590          KM
1591          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1592          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1593          KM   .34 .34 .34 .14 .12 .11 .07 .07 .07 .03 .03 .03 .02 .02 .01 .01 .01 .01
1594          KM
1595          KM          L=   2.322 miles, S=  229 feet/mile, Kb= .10
1596          KM
1597          BA   1.085
1598          LG    0.25    0.35    4.35    0.41   35.00
1599          UC   0.725   0.485
1600          UA       0       3       5       8      12      20      43      75      90      96
1601          UA     100
              *

1602          KK    S604
1603          KM   Sub-Basin   S604
1604          KM
1605          KM      The Clark Unit Hydrograph is used for this basin.
1606          KM          The Natural time-area relation is used for this basin.
1607          KM
1608          KM      Time of Concentration for this sub-basin is based on the following:
1609          KM          6-Hour Rainfall, Pattern No.  1.97
1610          KM          An rainfall areal reduction factor of 0.976
1611          KM
1                                        HEC-1 INPUT                                                    PAGE 37
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1612          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1613          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1614          KM   .22 .22 .21 .16 .15 .14 .11 .10 .10 .03 .03 .03 .02 .02 .02 .02 .02 .02
1615          KM
1616          KM          L=   4.105 miles, S=  207 feet/mile, Kb= .09
1617          KM
1618          BA   2.656
1619          LG    0.25    0.35    4.35    0.41   35.00
1620          UC   1.121   0.745
1621          UA       0       3       5       8      12      20      43      75      90      96
1622          UA     100
              *

1623          KK    C603
1624          KM        Combine hydrograph from C603L w/runoff from  S605, and S604
1625          HC       3
              *

1626          KK  603604
1627          KM        Normal depth route from C603 to C604R
1628          KM        Source: Morgan City Wash FDS, FCD 89-15
1629          RS       4    FLOW      -1
1630          RC    0.05   0.035    0.05    7830   .0192
1631          RX    1000    1022    1038    1053    1328    1375    1410    1430
1632          RY    2108    2104    2100    2088    2088    2100    2108    2112
1633          RL    .               0.96  2088.0
              *

1634          KK    S609
1635          KM   Sub-Basin   S609
1636          KM
1637          KM      The Clark Unit Hydrograph is used for this basin.
1638          KM          The Natural time-area relation is used for this basin.
1639          KM
1640          KM      Time of Concentration for this sub-basin is based on the following:
1641          KM          6-Hour Rainfall, Pattern No.  1.07
1642          KM          An rainfall areal reduction factor of 0.993
1643          KM
1644          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1645          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1646          KM   .43 .42 .42 .12 .09 .07 .03 .03 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
1647          KM
1648          KM          L=   2.239 miles, S=  214 feet/mile, Kb= .09
1649          KM
1650          BA   0.560
1651          LG    0.28    0.32    4.10    0.47   28.00
1652          UC   0.654   0.613
1653          UA       0       3       5       8      12      20      43      75      90      96
1654          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1655          KK   C604R
1656          KM        Combine routed hydrograph 603604 w/runoff from S609
1657          HC       2
              *

1658          KK    S607
1659          KM   Sub-Basin   S607
1660          KM
1661          KM      The Clark Unit Hydrograph is used for this basin.
1662          KM          The Natural time-area relation is used for this basin.
1663          KM
1664          KM      Time of Concentration for this sub-basin is based on the following:
1665          KM          6-Hour Rainfall, Pattern No.  1.29
1666          KM          An rainfall areal reduction factor of 0.989
1667          KM
1668          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1669          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1670          KM   .40 .39 .39 .15 .13 .12 .07 .07 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
1671          KM
1672          KM          L=   2.567 miles, S=  257 feet/mile, Kb= .10
1673          KM
1674          BA   0.822
1675          LG    0.26    0.35    5.10    0.27   35.00
```

```
1676          UC   0.700   0.592
1677          UA       0       3       5       8      12      20      43      75      90      96
1678          UA     100
              *

1679          KK    C604
1680          KM        Combine hydrograph from C604R w/runoff from S607
1681          HC       2
              *

1682          KK  604605
1683          KM        Normal depth route from C604 to C605
1684          KM        Source: Morgan City Wash FDS, FCD 89-15
1685          RS       1    FLOW      -1
1686          RC    0.05   0.035    0.05    1543   .0065
1687          RX    1000    1080    1110    1125    1210    1292    1340    1375
1688          RY    2016    2112    2000    1984    1984    1992    2000    2008
              *

1689          KK    S608
1690          KM   Sub-Basin   S608
1691          KM
1692          KM      The Clark Unit Hydrograph is used for this basin.
1693          KM          The Natural time-area relation is used for this basin.
1694          KM
1695          KM      Time of Concentration for this sub-basin is based on the following:
1696          KM          6-Hour Rainfall, Pattern No.  1.01
1697          KM          An rainfall areal reduction factor of 0.993
1698          KM
1699          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1700          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1701          KM   .47 .46 .46 .16 .12 .11 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1702          KM
1703          KM          L=   1.398 miles, S=  230 feet/mile, Kb= .09
1704          KM
1705          BA   0.508
1706          LG    0.27    0.36    5.80    0.20   37.00
1707          UC   0.421   0.272
1708          UA       0       3       5       8      12      20      43      75      90      96
1709          UA     100
              *

1710          KK    C605
1711          KM        Combine routed hydrograph from 604605 w/runoff from S608
1712          HC       2
              *

1713          KK  605606
1714          KM        Normal depth route from C605 to C606L
1715          KM        Source: Morgan City Wash FDS, FCD 89-15
1716          RS       3    FLOW      -1
1717          RC    0.05   0.035    0.05    5520   .0199
1718          RX    1000    1052    1190    1248    1281    1340    1368    1395
1719          RY    1940    1928    1928    1924    1924    1928    1936    1940
1720          RL                    0.96  1924.0
              *

1721          KK    S610
1722          KM   Sub-Basin   S610
1723          KM
1724          KM      The Clark Unit Hydrograph is used for this basin.
1725          KM          The Urban time-area relation is used for this basin.
1726          KM
1727          KM      Time of Concentration for this sub-basin is based on the following:
1728          KM          6-Hour Rainfall, Pattern No.  1.11
1729          KM          An rainfall areal reduction factor of 0.992
1730          KM
1731          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1732          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1733          KM   .45 .44 .44 .16 .13 .12 .06 .06 .06 .04 .04 .03 .01 .01 .01 .01 .01 .01
1734          KM
1735          KM          L=   1.869 miles, S=  118 feet/mile, Kb= .06
1736          KM
1737          BA   0.603
1738          LG    0.28    0.30    5.10    0.27   40.00
1739          UC   0.521   0.395
1740          UA       0       5      16      30      65      77      84      90      94      97
```

```
1741          UA     100
              *

1742          KK   C606L
1743          KM        Combine routed hydrograph 605606 w/runoff from S610
1744          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1745          KK    S612
1746          KM   Sub-Basin   S612
1747          KM
1748          KM      The Clark Unit Hydrograph is used for this basin.
1749          KM          The Urban time-area relation is used for this basin.
1750          KM
1751          KM      Time of Concentration for this sub-basin is based on the following:
1752          KM          6-Hour Rainfall, Pattern No.  1.28
1753          KM          An rainfall areal reduction factor of 0.989
1754          KM
1755          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1756          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1757          KM   .41 .41 .41 .17 .15 .14 .08 .08 .08 .04 .03 .03 .01 .01 .01 .01 .01 .01
1758          KM
1759          KM          L=   2.531 miles, S=  230 feet/mile, Kb= .08
1760          KM
1761          BA   0.808
1762          LG    0.29    0.26    6.40    0.16   34.00
1763          UC   0.596   0.494
1764          UA       0       5      16      30      65      77      84      90      94      97
1765          UA     100
              *

1766          KK    C606
1767          KM        Combine hydrograph from C606L w/runoff from S612
1768          HC       2
              *

1769          KK  606608
1770          KM        Normal depth route from C606 to C608
1771          KM        Source: Morgan City Wash FDS, FCD 89-15
1772          RS       1    FLOW      -1
1773          RC    0.05   0.035    0.05    1141   .0175
1774          RX    1000    1034    1070    1150    1237    1280    1378    1420
1775          RY    1888    1880    1876    1868    1868    1876    1900    1920
1776          RL                    0.96  1868.0
              *

1777          KK    S611
1778          KM   Sub-Basin   S611
1779          KM
1780          KM      The Clark Unit Hydrograph is used for this basin.
1781          KM          The Natural time-area relation is used for this basin.
1782          KM
1783          KM      Time of Concentration for this sub-basin is based on the following:
1784          KM          6-Hour Rainfall, Pattern No.  1.07
1785          KM          An rainfall areal reduction factor of 0.993
1786          KM
1787          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1788          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1789          KM   .44 .43 .43 .13 .10 .08 .04 .04 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
1790          KM
1791          KM          L=   1.286 miles, S=  270 feet/mile, Kb= .12
1792          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1793          BA   0.569
1794          LG    0.25    0.35    4.35    0.41   35.00
1795          UC   0.479   0.276
1796          UA       0       3       5       8      12      20      43      75      90      96
1797          UA     100
              *

1798          KK  607608
1799          KM        Normal depth route from S611 to S613
1800          KM        Source: Field Reconnaissance
1801          RS       5    FLOW      -1
```

```
1802          RC    .075     .03     .075   11167  0.0242
1803          RX     100     106      114     120     168     172     232     292
1804          RY     110     107      103     100     100     104     107     110
              *

1805          KK    S613
1806          KM   Sub-Basin   S613
1807          KM
1808          KM      The Clark Unit Hydrograph is used for this basin.
1809          KM          The Natural time-area relation is used for this basin.
1810          KM
1811          KM      Time of Concentration for this sub-basin is based on the following:
1812          KM          6-Hour Rainfall, Pattern No.  1.74
1813          KM          An rainfall areal reduction factor of 0.982
1814          KM
1815          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1816          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1817          KM   .28 .28 .28 .16 .15 .14 .10 .10 .10 .03 .03 .03 .02 .02 .02 .02 .01 .01
1818          KM
1819          KM          L=   2.525 miles, S=  131 feet/mile, Kb= .09
1820          KM
1821          BA   1.797
1822          LG    0.28    0.29    4.55    0.35   36.00
1823          UC   0.913   0.502
1824          UA      0       3       5       8      12      20      43      75      90      96
1825          UA    100
              *

1826          KK   C608
1827          KM        Combine routed hydrograph 606608 and 607608 w/runoff from S613
1828          HC       3
              *

1829          KK  608609
1830          KM        Normal depth route from C608 to C609
1831          KM        Source: Morgan City Wash FDS, FCD 89-15
1832          RS       4    FLOW      -1
1833          RC    0.05   0.035    0.05    6518   .0123
1834          RX    1000    1031    1052    1090    1132    1290    1320    1360
1835          RY    1860    1848    1844    1836    1836    1844    1848    1860
1836          RL                    0.94  1836.0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1837          KK    S614
1838          KM   Sub-Basin   S614
1839          KM
1840          KM      The Clark Unit Hydrograph is used for this basin.
1841          KM          The Natural time-area relation is used for this basin.
1842          KM
1843          KM      Time of Concentration for this sub-basin is based on the following:
1844          KM          6-Hour Rainfall, Pattern No.  1.45
1845          KM          An rainfall areal reduction factor of 0.986
1846          KM
1847          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1848          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1849          KM   .35 .34 .34 .15 .12 .11 .07 .07 .07 .03 .03 .03 .02 .02 .01 .01 .01 .01
1850          KM
1851          KM          L=   2.285 miles, S=  149 feet/mile, Kb= .10
1852          KM
1853          BA   1.079
1854          LG    0.26    0.32    4.40    0.39   35.00
1855          UC   0.854   0.576
1856          UA      0       3       5       8      12      20      43      75      90      96
1857          UA    100
              *

1858          KK    C609
1859          KM        Combine routed hydrograph 608609 w/runoff from S614
1860          HC       2
              *

1861          KK  609611
1862          KM        Normal depth route from C609 to C611R
1863          KM        Source: Morgan City Wash FDS, FCD 89-15
1864          RS       6    FLOW      -1
1865          RC    0.05   0.035    0.05    6519   .0031
1866          RX    1000    1070    1145    1230    1410    1430    1550    1642
```

```
1867          RY    1732    1720    1716    1708    1708    1716    1720    1740
1868          RL                    0.94  1708.0
              *

1869          KK    S617
1870          KM   Sub-Basin   S617
1871          KM
1872          KM      The Clark Unit Hydrograph is used for this basin.
1873          KM          The Urban time-area relation is used for this basin.
1874          KM
1875          KM      Time of Concentration for this sub-basin is based on the following:
1876          KM          6-Hour Rainfall, Pattern No.  1.17
1877          KM          An rainfall areal reduction factor of 0.991
1878          KM
1879          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1880          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1881          KM   .42 .41 .41 .14 .11 .10 .05 .05 .05 .02 .02 .02 .01 .01 .01 .01 .01 .01
1882          KM
1883          KM          L=   1.368 miles, S=  154 feet/mile, Kb= .08
1884          KM
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1885          BA   0.675
1886          LG    0.26    0.31    4.80    0.31   24.00
1887          UC   0.479   0.263
1888          UA       0       5      16      30      65      77      84      90      94      97
1889          UA     100
              *

1890          KK   C611R
1891          KM        Combine routed hydrograph 609611 w/runoff from S617
1892          HC       2
              *

1893          KK    S615
1894          KM   Sub-Basin   S615
1895          KM
1896          KM      The Clark Unit Hydrograph is used for this basin.
1897          KM          The Natural time-area relation is used for this basin.
1898          KM
1899          KM      Time of Concentration for this sub-basin is based on the following:
1900          KM          6-Hour Rainfall, Pattern No.  1.43
1901          KM          An rainfall areal reduction factor of 0.987
1902          KM
1903          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1904          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1905          KM   .38 .38 .37 .18 .16 .15 .10 .09 .09 .05 .05 .05 .02 .02 .02 .02 .02 .02
1906          KM
1907          KM          L=   2.059 miles, S=  136 feet/mile, Kb= .12
1908          KM
1909          BA   1.055
1910          LG    0.25    0.39    6.20    0.17   55.00
1911          UC   0.867   0.546
1912          UA       0       3       5       8      12      20      43      75      90      96
1913          UA     100
              *

1914          KK  610611
1915          KM        Normal depth route from S615 to C611
1916          KM        Source: Morgan City Wash FDS, FCD 89-15
1917          RS       5    FLOW      -1
1918          RC    0.05   0.035    0.05    7981   .0100
1919          RX    1000    1028    1041    1078    1087    1092    1100    1108
1920          RY    1860    1840    1820    1800    1800    1820    1840    1860
              *

1921          KK    S616
1922          KM   Sub-Basin   S616
1923          KM
1924          KM      The Clark Unit Hydrograph is used for this basin.
1925          KM          The Natural time-area relation is used for this basin.
1926          KM
1927          KM      Time of Concentration for this sub-basin is based on the following:
1928          KM          6-Hour Rainfall, Pattern No.  1.01
1929          KM          An rainfall areal reduction factor of 0.993
1930          KM
1931          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1932          KM     5 '10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1933          KM   .46 .45 .45 .14 .10 .09 .04 .04 .04 .02 .02 .02 .00 .00 .00 .00 .00 .00
1934          KM
1935          KM          L=   1.738 miles, S=  213 feet/mile, Kb= .09
1936          KM
1937          BA   0.505
1938          LG    0.25    0.32    5.20    0.26   21.00
1939          UC   0.517   0.408
1940          UA       0       3       5       8      12      20      43      75      90      96
1941          UA     100
              *

1942          KK   C611L
1943          KM        Combine routed hydrograph 6110611 w/runoff frm S616
1944          HC       2
              *

1945          KK    C611
1946          KM        Combine hydrographs C611L and C611R
1947          HC       2
              *

1948          KK  611613
1949          KM        Normal depth route from C611 to C613
1950          KM        Source: Morgan City Wash FDS, FCD 89-15
1951          RS       2    FLOW      -1
1952          RC    0.05   0.035    0.05    4445   .0382
1953          RX    1000    1050    1080    1122    1210    1250    1305    1338
1954          RY    1644    1644    1628    1620    1620    1628    1660    1680
1955          RL                    0.94  1620.0
              *

1956          KK    S618
1957          KM   Sub-Basin   S618
1958          KM
1959          KM      The Clark Unit Hydrograph is used for this basin.
1960          KM          The Natural time-area relation is used for this basin.
1961          KM
1962          KM      Time of Concentration for this sub-basin is based on the following:
1963          KM          6-Hour Rainfall, Pattern No.  1.38
1964          KM          An rainfall areal reduction factor of 0.988
1965          KM
1966          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1967          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1968          KM   .37 .36 .36 .15 .12 .11 .07 .07 .06 .02 .02 .02 .01 .01 .01 .01 .01 .01
1969          KM
1970          KM          L=   2.364 miles, S=  199 feet/mile, Kb= .10
1971          KM
1972          BA   0.958
1973          LG    0.21    0.36    5.20    0.26   22.00
1974          UC   0.758   0.555
1975          UA       0       3       5       8      12      20      43      75      90      96
1976          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1977          KK   C613R
1978          KM        Combine routed hydrograph 611613 w/runoff from S618
1979          HC       2
              *

1980          KK    S619
1981          KM   Sub-Basin   S619
1982          KM
1983          KM      The Clark Unit Hydrograph is used for this basin.
1984          KM          The Natural time-area relation is used for this basin.
1985          KM
1986          KM      Time of Concentration for this sub-basin is based on the following:
1987          KM          6-Hour Rainfall, Pattern No.  1.29
1988          KM          An rainfall areal reduction factor of 0.989
1989          KM
1990          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1991          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1992          KM   .41 .40 .40 .17 .15 .14 .08 .08 .08 .04 .04 .04 .01 .01 .01 .01 .01 .01
1993          KM
1994          KM          L=   1.212 miles, S=   99 feet/mile, Kb= .12
```

```
1995        KM
1996        BA   0.827
1997        LG    0.27    0.36    6.80    0.14   39.00
1998        UC   0.688   0.317
1999        UA       0       3       5       8      12      20      43      75      90      96
2000        UA     100
            *

2001        KK  612613
2002        KM        Normal depth route from S619 to S620
2003        KM        Source: Morgan City Wash FDS, FCD 89-15
2004        RS       4    FLOW      -1
2005        RC    0.05   0.035    0.05    8752   .0331
2006        RX     100     103     106     110     180     184     187     190
2007        RY     110     107     104     100     100     104     107     110
            *

2008        KK    S620
2009        KM   Sub-Basin   S620
2010        KM
2011        KM      The Clark Unit Hydrograph is used for this basin.
2012        KM          The Natural time-area relation is used for this basin.
2013        KM
2014        KM      Time of Concentration for this sub-basin is based on the following:
2015        KM          6-Hour Rainfall, Pattern No.  1.00
2016        KM          An rainfall areal reduction factor of 0.994
2017        KM
2018        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2019        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2020        KM   .48 .47 .47 .16 .13 .12 .06 .06 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
2021        KM
2022        KM          L=   1.763 miles, S=  228 feet/mile, Kb= .13
2023        KM
2024        BA   0.444
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2025        LG    0.23    0.38    6.40    0.16   37.00
2026        UC   0.642   0.565
2027        UA       0       3       5       8      12      20      43      75      90      96
2028        UA     100
            *

2029        KK   C613L
2030        KM        Combine routed hydrograph 612613 w/runoff from S620
2031        HC       2
            *

2032        KK    C613
2033        KM        Combine hydrographs C613R and C613L
2034        HC       2
            *

2035        KK  613614
2036        KM        Normal depth route from C613 to C614
2037        KM        Source: Morgan City Wash FDS, FCD 89-15
2038        RS       2    FLOW      -1
2039        RC    0.05   0.035    0.05    5557   .0108
2040        RX    1000    1022    1050    1100    1180    1225    1260    1360
2041        RY    1640    1620    1580    1552    1552    1564    1576    1580
2042        RL                    0.94  1552.0
            *

2043        KK    S621
2044        KM   Sub-Basin   S621
2045        KM
2046        KM      The Clark Unit Hydrograph is used for this basin.
2047        KM          The Natural time-area relation is used for this basin.
2048        KM
2049        KM      Time of Concentration for this sub-basin is based on the following:
2050        KM          6-Hour Rainfall, Pattern No.  1.36
2051        KM          An rainfall areal reduction factor of 0.988
2052        KM
2053        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2054        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2055        KM   .36 .35 .35 .13 .11 .10 .05 .05 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
2056        KM
2057        KM          L=   1.470 miles, S=  170 feet/mile, Kb= .08
2058        KM
2059        BA   0.923
```

```
2060          LG    0.22    0.31    4.80    0.31    4.00
2061          UC   0.517   0.253
2062          UA       0       3       5       8      12      20      43      75      90      96
2063          UA     100
              *

2064          KK    C614
2065          KM        Combine routed hydrograph 613614 w/runoff from S621
2066          HC       2
              *
1                                          HEC-1 INPUT                                          PAGE 47

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2067          KK  614615
2068          KM        Normal depth route from C614 to C615
2069          KM        Source: Morgan City Wash FDS, FCD 89-15
2070          RS       3    FLOW      -1
2071          RC    0.05   0.035    0.05    7995   .0144
2072          RX    1000    1050    1088    1150    1195    1290    1340    1405
2073          RY    1496    1484    1476    1460    1460    1476    1484    1516
2074          RL                    0.94  1460.0
              *

2075          KK    S622
2076          KM   Sub-Basin   S622
2077          KM
2078          KM      The Clark Unit Hydrograph is used for this basin.
2079          KM          The Natural time-area relation is used for this basin.
2080          KM
2081          KM      Time of Concentration for this sub-basin is based on the following:
2082          KM          6-Hour Rainfall, Pattern No.  1.34
2083          KM          An rainfall areal reduction factor of 0.988
2084          KM
2085          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2086          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2087          KM   .36 .36 .35 .13 .10 .09 .05 .05 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
2088          KM
2089          KM          L=   2.004 miles, S=  152 feet/mile, Kb= .12
2090          KM
2091          BA   0.897
2092          LG    0.19    0.35    4.90    0.30    4.00
2093          UC   0.929   0.633
2094          UA       0       3       5       8      12      20      43      75      90      96
2095          UA     100
              *

2096          KK    C615
2097          KM        Combine routed hydrograph from 614615 w/runoff from S622
2098          HC       2
              *

2099          KK  WEST-4
2100          KM        Dummy combine for all major basins, west of the Agua Fria River
2101          HC       2
              *

2102          KK    S700
2103          KM   Sub-Basin   S700
2104          KM
2105          KM      The Clark Unit Hydrograph is used for this basin.
2106          KM          The Urban time-area relation is used for this basin.
2107          KM
2108          KM      Time of Concentration for this sub-basin is based on the following:
2109          KM          6-Hour Rainfall, Pattern No.  1.11
2110          KM          An rainfall areal reduction factor of 0.992
2111          KM
2112          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1                                          HEC-1 INPUT                                          PAGE 48

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2113          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2114          KM   .43 .42 .42 .14 .11 .10 .05 .05 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
2115          KM
2116          KM          L=   1.923 miles, S=  185 feet/mile, Kb= .04
2117          KM
2118          BA   0.610
2119          LG    0.28    0.26    5.10    0.27    9.00
2120          UC   0.342   0.251
```

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2121    UA      0       5      16      30      65      77      84      90      94      97
2122    UA    100
        *

2123    KK    S701
2124    KM   Sub-Basin   S701
2125    KM
2126    KM      The Clark Unit Hydrograph is used for this basin.
2127    KM          The Urban time-area relation is used for this basin.
2128    KM
2129    KM      Time of Concentration for this sub-basin is based on the following:
2130    KM          6-Hour Rainfall, Pattern No.  1.21
2131    KM          An rainfall areal reduction factor of 0.991
2132    KM
2133    KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2134    KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2135    KM   .41 .41 .40 .15 .12 .11 .06 .06 .06 .02 .02 .02 .01 .01 .01 .01 .01 .01
2136    KM
2137    KM          L=   2.821 miles, S=  136 feet/mile, Kb= .06
2138    KM
2139    BA   0.720
2140    LG    0.28    0.29    5.60    0.22   18.00
2141    UC   0.675   0.661
2142    UA      0       5      16      30      65      77      84      90      94      97
2143    UA    100
        *

2144    KK    S702
2145    KM   Sub-Basin   S702
2146    KM
2147    KM      The Clark Unit Hydrograph is used for this basin.
2148    KM          The Urban time-area relation is used for this basin.
2149    KM
2150    KM      Time of Concentration for this sub-basin is based on the following:
2151    KM          6-Hour Rainfall, Pattern No.  1.00
2152    KM          An rainfall areal reduction factor of 0.997
2153    KM
2154    KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2155    KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2156    KM   .47 .46 .46 .15 .12 .11 .05 .05 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
2157    KM
2158    KM          L=   1.395 miles, S=  215 feet/mile, Kb= .05
2159    KM
2160    BA   0.257
2161    LG    0.23    0.27    5.10    0.26   24.00
2162    UC   0.288   0.263
2163    UA      0       5      16      30      65      77      84      90      94      97
```



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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2164    UA    100
        *

2165    KK    S703
2166    KM   Sub-Basin   S703
2167    KM
2168    KM      The Clark Unit Hydrograph is used for this basin.
2169    KM          The Natural time-area relation is used for this basin.
2170    KM
2171    KM      Time of Concentration for this sub-basin is based on the following:
2172    KM          6-Hour Rainfall, Pattern No.  1.00
2173    KM          An rainfall areal reduction factor of 0.997
2174    KM
2175    KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2176    KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2177    KM   .45 .44 .44 .12 .09 .07 .03 .03 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
2178    KM
2179    KM          L=   1.126 miles, S=  204 feet/mile, Kb= .09
2180    KM
2181    BA   0.257
2182    LG    0.19    0.32    4.90    0.30    1.00
2183    UC   0.400   0.319
2184    UA      0       3       5       8      12      20      43      75      90      96
2185    UA    100
        *

2186    KK    S704
2187    KM   Sub-Basin   S704
2188    KM
2189    KM      The Clark Unit Hydrograph is used for this basin.
```

```
2190          KM          The Urban time-area relation is used for this basin.
2191          KM
2192          KM      Time of Concentration for this sub-basin is based on the following:
2193          KM          6-Hour Rainfall, Pattern No.  1.00
2194          KM          An rainfall areal reduction factor of 0.995
2195          KM
2196          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2197          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2198          KM   .45 .45 .44 .13 .10 .08 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
2199          KM
2200          KM          L=   1.266 miles, S=  300 feet/mile, Kb= .07
2201          KM
2202          BA   0.408
2203          LG    0.28    0.29    4.90    0.29   14.00
2204          UC   0.304   0.199
2205          UA       0       5      16      30      65      77      84      90      94      97
2206          UA     100
              *

2207          KK  704705
2208          KM        Normal depth route from S704 to C705
2209          KM        Source: Field reconnaissance
2210          RS       6    FLOW      -1
2211          RC    .035    .045    .025    7534   .0186
2212          RX     100     123   159.5   162.8   186.8   205.3   206.3   207.3
1                                          HEC-1 INPUT                                          PAGE 50

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2213          RY   108.5   102.7   101.3   100.2     100   108.3   109.3   110.3
              *

2214          KK    S705
2215          KM   Sub-Basin   S705
2216          KM
2217          KM      The Clark Unit Hydrograph is used for this basin.
2218          KM          The Urban time-area relation is used for this basin.
2219          KM
2220          KM      Time of Concentration for this sub-basin is based on the following:
2221          KM          6-Hour Rainfall, Pattern No.  1.24
2222          KM          An rainfall areal reduction factor of 0.990
2223          KM
2224          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2225          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2226          KM   .42 .42 .42 .17 .15 .14 .08 .08 .08 .05 .04 .03 .01 .01 .01 .01 .01 .01
2227          KM
2228          KM          L=   2.145 miles, S=  253 feet/mile, Kb= .04
2229          KM
2230          BA   0.754
2231          LG    0.25    0.21    6.40    0.16   33.00
2232          UC   0.321   0.227
2233          UA       0       5      16      30      65      77      84      90      94      97
2234          UA     100
              *

2235          KK    C705
2236          KM        Combine routed hydrograph 704705 w/runoff from S705
2237          HC       2
              *

2238          KK   C705O
2239          KM        Storage routing at crossing structure no. 63
2240          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2241          KM        Cooper Aerial Photography extended from Agua Fria FDS
2242          RS       1    STOR       0
2243          SQ       0     200     400     600     800    1000    1200    1400    1420    1800
2244          SQ    2000
2245          SE  1338.2 1342.26 1344.68 1347.93 1352.52 1359.03 1367.08 1376.59 1377.62    1400
2246          SE  1413.9
2247          SV       0    0.08    0.46    1.29    2.71    4.72    7.32   10.63   14.77   19.75
2248          SV   25.57   32.07   39.09   46.63   54.70   63.28   72.40   82.03   92.19  102.87
2249          SE  1338.2    1339    1340    1341    1342    1343    1344    1345    1346    1347
2250          SE    1348    1349    1350    1351    1352    1353    1354    1355    1356    1357
              *

2251          KK  705OAF
2252          KM        Normal depth route from C705O to C705AF
2253          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2254          RS       6    FLOW      -1
2255          RC    .045    .045    .045 2253.82   .0082
2256          RX     100  147.63  203.16  349.46  505.89  666.35  920.07 1239.80
```

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2257          RY    1324 1324.30    1324 1321.84 1321.64 1322.54    1324    1326
              *
1                                          HEC-1 INPUT                                                    PAGE 51

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2258          KK  S705AF
2259          KM   Sub-Basin S705AF
2260          KM
2261          KM      The Clark Unit Hydrograph is used for this basin.
2262          KM          The Natural time-area relation is used for this basin.
2263          KM
2264          KM      Time of Concentration for this sub-basin is based on the following:
2265          KM          6-Hour Rainfall, Pattern No.  1.00
2266          KM          An rainfall areal reduction factor of 0.998
2267          KM
2268          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2269          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2270          KM   .49 .49 .49 .18 .15 .14 .07 .07 .07 .06 .06 .05 .01 .01 .01 .01 .01 .00
2271          KM
2272          KM          L=   0.933 miles, S=   34 feet/mile, Kb= .05
2273          KM
2274          BA   0.183
2275          LG    0.31    0.22   10.10    0.03    0.00
2276          UC   0.454   0.384
2277          UA       0       3       5       8      12      20      43      75      90      96
2278          UA     100
              *

2279          KK  C705AF
2280          KM        Combine routed hydrograph 705OAF w/runoff from S705
2281          HC       2
              *

2282          KK  WEST-5
2283          KM        Dummy combine for minor basins, west of the Agua Fria River
2284          HC       5
              *

2285          KK    S706
2286          KM   Sub-Basin   S706
2287          KM
2288          KM      The Clark Unit Hydrograph is used for this basin.
2289          KM          The Urban time-area relation is used for this basin.
2290          KM
2291          KM      Time of Concentration for this sub-basin is based on the following:
2292          KM          6-Hour Rainfall, Pattern No.  1.21
2293          KM          An rainfall areal reduction factor of 0.991
2294          KM
2295          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2296          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2297          KM   .43 .42 .42 .17 .14 .13 .07 .07 .07 .04 .03 .03 .01 .01 .01 .01 .01 .01
2298          KM
2299          KM          L=   2.022 miles, S=  185 feet/mile, Kb= .03
2300          KM
2301          BA   0.713
2302          LG    0.26    0.25    5.70    0.21   37.00
2303          UC   0.288   0.198
2304          UA       0       5      16      30      65      77      84      90      94      97
2305          UA     100
              *
1                                          HEC-1 INPUT                                                    PAGE 52

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2306          KK    S707
2307          KM   Sub-Basin   S707
2308          KM
2309          KM      The Clark Unit Hydrograph is used for this basin.
2310          KM          The Urban time-area relation is used for this basin.
2311          KM
2312          KM      Time of Concentration for this sub-basin is based on the following:
2313          KM          6-Hour Rainfall, Pattern No.  1.14
2314          KM          An rainfall areal reduction factor of 0.992
2315          KM
2316          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2317          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2318          KM   .45 .45 .45 .18 .15 .15 .08 .08 .07 .06 .05 .05 .02 .02 .01 .01 .01 .01
2319          KM
```

```
2320          KM          L=   2.256 miles, S=  217 feet/mile, Kb= .03
2321          KM
2322          BA   0.638
2323          LG    0.21    0.23    6.20    0.17   51.00
2324          UC   0.279   0.222
2325          UA       0       5      16      30      65      77      84      90      94      97
2326          UA     100
              *

2327          KK    S728
2328          KM   Sub-Basin   S728
2329          KM
2330          KM      The Clark Unit Hydrograph is used for this basin.
2331          KM          The Urban time-area relation is used for this basin.
2332          KM
2333          KM      Time of Concentration for this sub-basin is based on the following:
2334          KM          6-Hour Rainfall, Pattern No.  1.00
2335          KM          An rainfall areal reduction factor of 0.996
2336          KM
2337          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2338          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2339          KM   .48 .48 .48 .17 .13 .13 .06 .06 .06 .04 .04 .04 .01 .01 .01 .01 .01 .01
2340          KM
2341          KM          L=   1.550 miles, S=   77 feet/mile, Kb= .04
2342          KM
2343          BA   0.276
2344          LG    0.21    0.30    5.20    0.22   46.00
2345          UC   0.396   0.391
2346          UA       0       5      16      30      65      77      84      90      94      97
2347          UA     100
              *

2348          KK    WEST
2349          KM        Dummy combine for all operations in the stack, west of the Agua Fria R.
2350          HC       5
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2351          KK    S708
2352          KM   Sub-Basin   S708
2353          KM
2354          KM      The Clark Unit Hydrograph is used for this basin.
2355          KM          The Urban time-area relation is used for this basin.
2356          KM
2357          KM      Time of Concentration for this sub-basin is based on the following:
2358          KM          6-Hour Rainfall, Pattern No.  1.20
2359          KM          An rainfall areal reduction factor of 0.991
2360          KM
2361          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2362          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2363          KM   .44 .44 .44 .18 .16 .15 .08 .08 .08 .06 .06 .05 .02 .02 .01 .01 .01 .01
2364          KM
2365          KM          L=   1.594 miles, S=  194 feet/mile, Kb= .04
2366          KM
2367          BA   0.706
2368          LG    0.29    0.16    9.70    0.05    7.00
2369          UC   0.288   0.164
2370          UA       0       5      16      30      65      77      84      90      94      97
2371          UA     100
              *

2372          KK    S709
2373          KM   Sub-Basin   S709
2374          KM
2375          KM      The Clark Unit Hydrograph is used for this basin.
2376          KM          The Urban time-area relation is used for this basin.
2377          KM
2378          KM      Time of Concentration for this sub-basin is based on the following:
2379          KM          6-Hour Rainfall, Pattern No.  1.00
2380          KM          An rainfall areal reduction factor of 0.994
2381          KM
2382          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2383          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2384          KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .02 .02 .01 .01 .01 .01
2385          KM
2386          KM          L=   1.417 miles, S=  155 feet/mile, Kb= .05
2387          KM
2388          BA   0.441
```

```
2389          LG   0.29    0.13   11.20    0.02    9.00
2390          UC  0.321   0.221
2391          UA      0       5      16      30      65      77      84      90      94      97
2392          UA    100
              *

2393          KK  C709O
2394          KM       Storage routing at crossing structure no. (South of 95)
2395          KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2396          KM       CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2397          KM       Detour, Jan 4, 1985
2398          RS      1    STOR       0
2399          SQ      0     120     240     360     480     600     720     840     903    1080
2400          SQ   1200
1                                          HEC-1 INPUT                                          PAGE 54

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2401          SE   1496 1500.80 1505.20 1512.68 1523.15 1525.11 1525.18 1525.23 1525.26 1525.33
2402          SE  1525.4
2403          SV    0.0    1.59    4.55    8.36   13.04   20.12   29.31   42.75   51.34   63.40
2404          SV  78.92   97.91
2405          SE   1496    1500    1504    1508    1512    1516    1520    1524    1528    1532
2406          SE   1536    1540
              *

2407          KK  709710
2408          KM       Normal depth route from S709 to C710
2409          KM       Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2410          RS      2    FLOW      -1
2411          RC    .05    .035     .05    2683   .0261
2412          RX    100     160     200     220     255     265     280     305
2413          RY   1448    1444    1440    1436    1436    1440    1444    1448
              *

2414          KK   S710
2415          KM  Sub-Basin   S710
2416          KM
2417          KM     Tc adjusted to 10 min/0.167 hr with revised R calculation.
2418          KM
2419          KM     The Clark Unit Hydrograph is used for this basin.
2420          KM         The Urban time-area relation is used for this basin.
2421          KM
2422          KM     Time of Concentration for this sub-basin is based on the following:
2423          KM         6-Hour Rainfall, Pattern No.  1.00
2424          KM         An rainfall areal reduction factor of 0.999
2425          KM
2426          KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2427          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2428          KM  .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .06 .01 .01 .01 .01 .01 .01
2429          KM
2430          KM         L=   0.633 miles, S=  198 feet/mile, Kb= .03
2431          KM
2432          BA  0.112
2433          LG   0.23    0.16   10.10    0.04   13.00
2434          UC  0.167   0.122
2435          UA      0       5      16      30      65      77      84      90      94      97
2436          UA    100
              *

2437          KK  C710I
2438          KM       Combine routed hydrograph 709710 w/runoff from S710
2439          HC      2
              *

2440          KK  C710O
2441          KM       Storage routing at crossing structure no. 58
2442          KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2443          KM       CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2444          KM       Detour, Jan 4, 1985
2445          RS      1    STOR       0
2446          SQ      0     120     240     360     480     600     720     840     960    1058
2447          SQ   1200
1                                          HEC-1 INPUT                                          PAGE 55

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2448          SE  1424.2 1428.52 1431.70 1436.37 1442.23 1442.33 1442.39 1442.45 1442.50 1442.54
2449          SE  1442.6
2450          SV    0.0    1.08    3.46    7.13   13.17   22.51
2451          SE   1424    1428    1432    1436    1440    1444
```

```
                 *
2452             KK    S711
2453             KM   Sub-Basin   S711
2454             KM
2455             KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2456             KM
2457             KM      The Clark Unit Hydrograph is used for this basin.
2458             KM          The Urban time-area relation is used for this basin.
2459             KM
2460             KM      Time of Concentration for this sub-basin is based on the following:
2461             KM          6-Hour Rainfall, Pattern No.  1.00
2462             KM          An rainfall areal reduction factor of 0.998
2463             KM
2464             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2465             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2466             KM   .50 .50 .50 .19 .16 .16 .08 .08 .07 .07 .07 .07 .02 .02 .02 .01 .01 .01
2467             KM
2468             KM          L=   0.520 miles, S=  154 feet/mile, Kb= .03
2469             KM
2470             BA   0.159
2471             LG    0.28    0.10   11.20    0.03   22.00
2472             UC   0.167   0.086
2473             UA       0       5      16      30      65      77      84      90      94      97
2474             UA     100
                 *

2475             KK   C711O
2476             KM        Storage routing at crossing structure no. 71
2477             KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2478             KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2479             KM        Detour, Jan 4, 1985
2480             RS       1    STOR       0
2481             SQ       0      60     120     180     240     300     360     420     480     483
2482             SQ     600
2483             SE  1496.1 1499.98 1504.58 1512.31 1524.39 1525.07 1525.12 1525.15 1525.19 1525.19
2484             SE  1525.2
2485             SV     0.0    0.20    0.59    3.79    7.98   16.27   27.64   42.75   63.25
2486             SE  1496.1    1500    1504    1508    1512    1516    1520    1524    1528
                 *

2487             KK  711712
2488             KM        Normal depth route from S711 to C712
2489             KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2490             RS       1    FLOW      -1
2491             RC     .05    .035     .05    1586   .0441
2492             RX     100     135     190     215     250     285     335     395
2493             RY    1488    1484    1480    1476    1476    1480    1484    1488
                 *
1                                                HEC-1 INPUT                                                PAGE 56

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2494             KK    S712
2495             KM   Sub-Basin   S712
2496             KM
2497             KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2498             KM
2499             KM      The Clark Unit Hydrograph is used for this basin.
2500             KM          The Urban time-area relation is used for this basin.
2501             KM
2502             KM      Time of Concentration for this sub-basin is based on the following:
2503             KM          6-Hour Rainfall, Pattern No.  1.00
2504             KM          An rainfall areal reduction factor of 0.999
2505             KM
2506             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2507             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2508             KM   .50 .50 .49 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2509             KM
2510             KM          L=   0.312 miles, S=  271 feet/mile, Kb= .03
2511             KM
2512             BA   0.068
2513             LG    0.27    0.13   10.10    0.04   19.00
2514             UC   0.167   0.092
2515             UA       0       5      16      30      65      77      84      90      94      97
2516             UA     100
                 *

2517             KK   C712I
2518             KM        Combine routed hydrograph 711712 w/runoff from S712
```

```
2519          HC       2
              *

2520          KK   C7120
2521          KM        Storage routing at crossing structure no. 60
2522          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2523          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2524          KM        Detour, Jan 4, 1985
2525          RS       1    STOR       0
2526          SQ       0      90     180     270     360     450     540     630     658     810
2527          SQ     900
2528          SE    1432 1435.56 1437.81 1440.49 1444.18 1449.19 1450.09 1450.14 1450.16 1450.24
2529          SE  1450.2
2530          SV     0.0    0.14    0.36    0.65    1.02    1.56    2.43    3.61    5.10
2531          SE    1432    1433    1434    1435    1436    1437    1438    1439    1440
              *

2532          KK  712714
2533          KM        Normal depth route from C712 to C714
2534          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2535          RS       2    FLOW      -1
2536          RC     .05    .035     .05    2032   .0172
2537          RX     100     325     355     370     415     435     450     515
2538          RY    1416    1412    1408    1404    1404    1408    1412    1408
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2539          KK    S713
2540          KM   Sub-Basin   S713
2541          KM
2542          KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2543          KM
2544          KM      The Clark Unit Hydrograph is used for this basin.
2545          KM          The Urban time-area relation is used for this basin.
2546          KM
2547          KM      Time of Concentration for this sub-basin is based on the following:
2548          KM          6-Hour Rainfall, Pattern No.  1.00
2549          KM          An rainfall areal reduction factor of 0.999
2550          KM
2551          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2552          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2553          KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2554          KM
2555          KM          L=   0.545 miles, S=  220 feet/mile, Kb= .03
2556          KM
2557          BA   0.107
2558          LG    0.20    0.18   10.10    0.03   12.00
2559          UC   0.167   0.111
2560          UA       0       5      16      30      65      77      84      90      94      97
2561          UA     100
              *

2562          KK   C7130
2563          KM        Storage routing at crossing structure no. 59
2564          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2565          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2566          KM        Detour, Jan 4, 1985
2567          RS       1    STOR       0
2568          SQ       0      60     120     180     240     300     326     420     480     540
2569          SQ     600
2570          SE    1420 1423.17 1425.30 1428.15 1432.22 1437.97 1438.04 1438.12 1438.15 1438.18
2571          SE  1438.2
2572          SV     0.0    2.35    5.72   10.11   15.52   26.19
2573          SE    1420    1424    1428    1432    1436    1440
              *

2574          KK  713714
2575          KM        Normal depth route from S713 to C714
2576          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2577          RS       1    FLOW      -1
2578          RC     .05    .035     .05     831   .0421
2579          RX     100     260     270     280     305     315     335     490
2580          RY    1416    1416    1412    1408    1408    1412    1416    1420
              *

2581          KK    S714
2582          KM   Sub-Basin   S714
2583          KM
```

```
2584          KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2585          KM
2586          KM      The Clark Unit Hydrograph is used for this basin.
1                                        HEC-1 INPUT                                                    PAGE 58

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2587          KM          The Urban time-area relation is used for this basin.
2588          KM
2589          KM      Time of Concentration for this sub-basin is based on the following:
2590          KM          6-Hour Rainfall, Pattern No.  1.00
2591          KM          An rainfall areal reduction factor of 0.999
2592          KM
2593          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2594          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2595          KM   .48 .48 .48 .17 .13 .12 .06 .06 .06 .04 .03 .00 .00 .00 .00 .00 .00 .00
2596          KM
2597          KM          L=   0.428 miles, S=  129 feet/mile, Kb= .04
2598          KM
2599          BA   0.060
2600          LG    0.35    0.29    8.40    0.06    0.00
2601          UC   0.167   0.128
2602          UA       0       5      16      30      65      77      84      90      94      97
2603          UA     100
              *

2604          KK    C714
2605          KM        Combine routed hydrographs 712714 and 713714 w/runoff from S714
2606          HC     .  3
              *

2607          KK    S715
2608          KM   Sub-Basin   S715
2609          KM
2610          KM      The Clark Unit Hydrograph is used for this basin.
2611          KM          The Urban time-area relation is used for this basin.
2612          KM
2613          KM      Time of Concentration for this sub-basin is based on the following:
2614          KM          6-Hour Rainfall, Pattern No.  1.00
2615          KM          An rainfall areal reduction factor of 0.997
2616          KM
2617          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2618          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2619          KM   .50 .49 .49 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2620          KM
2621          KM          L=   0.959 miles, S=   63 feet/mile, Kb= .05
2622          KM
2623          BA   0.220
2624          LG    0.31    0.17   11.20    0.02    4.00
2625          UC   0.358   0.271
2626          UA       0       5      16      30      65      77      84      90      94      97
2627          UA     100
              *

2628          KK    S716
2629          KM   Sub-Basin   S716
2630          KM
2631          KM      The Clark Unit Hydrograph is used for this basin.
2632          KM          The Urban time-area relation is used for this basin.
2633          KM
2634          KM      Time of Concentration for this sub-basin is based on the following:
2635          KM          6-Hour Rainfall, Pattern No.  1.47
1                                        HEC-1 INPUT                                                    PAGE 59

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2636          KM          An rainfall areal reduction factor of 0.986
2637          KM
2638          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2639          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2640          KM   .38 .38 .38 .20 .18 .18 .11 .11 .11 .08 .07 .07 .03 .03 .03 .02 .02 .02
2641          KM
2642          KM          L=   2.353 miles, S=   87 feet/mile, Kb= .03
2643          KM
2644          BA   1.128
2645          LG    0.26    0.14   10.10    0.04   23.00
2646          UC   0.438   0.274
2647          UA       0       5      16      30      65      77      84      90      94      97
2648          UA     100
              *
```

```
2649        KK   C7160
2650        KM        Storage routing at crossing structure no. 74
2651        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2652        KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2653        KM        Detour, Jan 4, 1985
2654        RS       1    STOR       0
2655        SQ       0     230     460     690     920    1150    1380    1610    1625    2070
2656        SQ    2300
2657        SE  1504.9 1509.94 1516.13 1526.53 1544.42 1592.19 1729.99 2074.29 2108.01 4241.67
2658        SE  6746.9
2659        SV       0    0.40    5.42   17.50   37.71   68.23  111.87
2660        SE  1504.9    1508    1512    1516    1520    1524    1528
            *

2661        KK  716717
2662        KM        Normal depth route from C7160 to C717
2663        KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2664        RS       4    FLOW      -1
2665        RC     .05    .035     .05    4232   .0177
2666        RX     100     115     150     165     195     285     370     425
2667        RY    1504    1500    1496    1492    1492    1496    1500    1504
            *

2668        KK    S717
2669        KM   Sub-Basin   S717
2670        KM
2671        KM      The Clark Unit Hydrograph is used for this basin.
2672        KM          The Natural time-area relation is used for this basin.
2673        KM
2674        KM      Time of Concentration for this sub-basin is based on the following:
2675        KM          6-Hour Rainfall, Pattern No.  1.00
2676        KM          An rainfall areal reduction factor of 0.996
2677        KM
2678        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2679        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2680        KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .02 .01 .01 .01 .01 .01
2681        KM
2682        KM          L=   0.727 miles, S=  131 feet/mile, Kb= .05
2683        KM
2684        BA   0.286
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2685        LG    0.26    0.15   11.20    0.02   10.00
2686        UC   0.229   0.114
2687        UA       0       3       5       8      12      20      43      75      90      96
2688        UA     100
            *

2689        KK    C717
2690        KM        Combine routed hydrograph 716717 w/runoff from S717
2691        HC       2
            *

2692        KK  717718
2693        KM        Normal depth route from C717 to C718
2694        KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2695        RS       8    FLOW      -1
2696        RC     .05    .045     .05    7146   .0105
2697        RX     100     235     275     325     420     455     465     530
2698        RY    1364    1360    1356    1352    1352    1356    1360    1380
2699        RL                    0.03  1352.0
            *

2700        KK    S718
2701        KM   Sub-Basin   S718
2702        KM
2703        KM      The Clark Unit Hydrograph is used for this basin.
2704        KM          The Natural time-area relation is used for this basin.
2705        KM
2706        KM      Time of Concentration for this sub-basin is based on the following:
2707        KM          6-Hour Rainfall, Pattern No.  1.00
2708        KM          An rainfall areal reduction factor of 0.994
2709        KM
2710        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2711        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2712        KM   .50 .50 .49 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2713        KM
2714        KM          L=   2.103 miles, S=   45 feet/mile, Kb= .05
2715        KM
```

```
2716          BA   0.442
2717          LG    0.27    0.15   11.20    0.02    6.00
2718          UC   0.692   0.709
2719          UA       0       3       5       8      12      20      43      75      90      96
2720          UA     100
              *

2721          KK    C718
2722          KM        Combine routed hydrograph 717718 w/runoff from S718
2723          HC       2
              *

2724          KK    S719
2725          KM   Sub-Basin   S719
2726          KM
2727          KM      The Clark Unit Hydrograph is used for this basin.
2728          KM          The Urban time-area relation is used for this basin.
2729          KM
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2730          KM      Time of Concentration for this sub-basin is based on the following:
2731          KM          6-Hour Rainfall, Pattern No.  1.00
2732          KM          An rainfall areal reduction factor of 0.998
2733          KM
2734          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2735          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2736          KM   .51 .50 .50 .20 .16 .16 .08 .08 .08 .08 .08 .08 .02 .02 .02 .02 .02 .02
2737          KM
2738          KM          L=   1.221 miles, S=   82 feet/mile, Kb= .04
2739          KM
2740          BA   0.154
2741          LG    0.31    0.07   12.40    0.01   12.00
2742          UC   0.321   0.357
2743          UA       0       5      16      30      65      77      84      90      94      97
2744          UA     100
              *

2745          KK  EAST-1
2746          KM       Dummy combine of minor subbasins east of the Agua Fria River
2747          HC       6
              *

2748          KK    S720
2749          KM   Sub-Basin   S720
2750          KM
2751          KM      The Clark Unit Hydrograph is used for this basin.
2752          KM          The Urban time-area relation is used for this basin.
2753          KM
2754          KM      Time of Concentration for this sub-basin is based on the following:
2755          KM          6-Hour Rainfall, Pattern No.  1.00
2756          KM          An rainfall areal reduction factor of 0.995
2757          KM
2758          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2759          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2760          KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .02 .01 .01 .01 .01 .01
2761          KM
2762          KM          L=   1.516 miles, S=   86 feet/mile, Kb= .03
2763          KM
2764          BA   0.370
2765          LG    0.28    0.11   11.20    0.03   19.00
2766          UC   0.300   0.239
2767          UA       0       5      16      30      65      77      84      90      94      97
2768          UA     100
              *

2769          KK    S721
2770          KM   Sub-Basin   S721
2771          KM
2772          KM      The Clark Unit Hydrograph is used for this basin.
2773          KM          The Urban time-area relation is used for this basin.
2774          KM
2775          KM      Time of Concentration for this sub-basin is based on the following:
2776          KM          6-Hour Rainfall, Pattern No.  1.00
2777          KM          An rainfall areal reduction factor of 0.996
2778          KM
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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2779    KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2780    KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2781    KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .06 .01 .01 .01 .01 .01 .01
2782    KM
2783    KM         L=   0.832 miles, S=  114 feet/mile, Kb= .03
2784    KM
2785    BA   0.335
2786    LG    0.21    0.15    7.30    0.11   50.00
2787    UC   0.196   0.098
2788    UA      0       5      16      30      65      77      84      90      94      97
2789    UA    100
        *

2790    KK   C7210
2791    KM       Storage routing at crossing structure no. 75
2792    KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2793    KM       CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2794    KM       Detour, Jan 4, 1985
2795    RS      1    STOR       0
2796    SQ      0     120     240     360     480     600     720     840     866    1080
2797    SQ   1200
2798    SE   1490 1494.74 1499.14 1506.62 1517.09 1534.17 1572.06 1662.33 1693.69 2254.60
2799    SE  2968.5
2800    SV      0    1.83    7.58   17.18   30.63   47.92   69.05   94.03  122.85  155.51
2801    SV  192.02
2802    SE   1490    1493    1496    1499    1502    1505    1508    1511    1514    1517
2803    SE   1520
        *

2804    KK  721722
2805    KM       Normal depth route from C7210 to C722
2806    KM       Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2807    RS      9    FLOW      -1
2808    RC    .05    .035     .05    8812   .0170
2809    RX    100     125     175     200     235     250     270     595
2810    RY   1420    1416    1412    1408    1408    1412    1420    1424
2811    RL                   0.03  1408.0
        *

2812    KK    S722
2813    KM   Sub-Basin   S722
2814    KM
2815    KM     The Clark Unit Hydrograph is used for this basin.
2816    KM         The Urban time-area relation is used for this basin.
2817    KM
2818    KM     Time of Concentration for this sub-basin is based on the following:
2819    KM         6-Hour Rainfall, Pattern No.  1.38
2820    KM         An rainfall areal reduction factor of 0.988
2821    KM
2822    KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2823    KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2824    KM   .40 .40 .40 .19 .17 .17 .10 .10 .10 .07 .07 .07 .03 .03 .03 .02 .02 .01
2825    KM
2826    KM         L=   2.334 miles, S=   79 feet/mile, Kb= .03
2827    KM
```



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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2828    BA   0.955
2829    LG    0.26    0.16    9.70    0.05   23.00
2830    UC   0.442   0.302
2831    UA      0       5      16      30      65      77      84      90      94      97
2832    UA    100
        *

2833    KK    C722
2834    KM       Combine routed hydrograph 721722 w/runoff from S722
2835    HC      2
        *

2836    KK    S723
2837    KM   Sub-Basin   S723
2838    KM
2839    KM     Tc adjusted to 10 min/0.167 hr with revised R calculation.
2840    KM
2841    KM     The Clark Unit Hydrograph is used for this basin.
2842    KM         The Urban time-area relation is used for this basin.
2843    KM
2844    KM     Time of Concentration for this sub-basin is based on the following:
2845    KM         6-Hour Rainfall, Pattern No.  1.00
```

```
2846        KM          An rainfall areal reduction factor of 0.999
2847        KM
2848        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2849        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2850        KM   .50 .50 .50 .19 .16 .16 .08 .08 .07 .07 .07 .07 .02 .01 .01 .01 .01 .01
2851        KM
2852        KM          L=   0.562 miles, S=  178 feet/mile, Kb= .04
2853        KM
2854        BA   0.085
2855        LG    0.22    0.17   10.10    0.03   28.00
2856        UC   0.167   0.130
2857        UA       0       5      16      30      65      77      84      90      94      97
2858        UA     100
            *

2859        KK    S724
2860        KM   Sub-Basin   S724
2861        KM
2862        KM      The Clark Unit Hydrograph is used for this basin.
2863        KM          The Urban time-area relation is used for this basin.
2864        KM
2865        KM      Time of Concentration for this sub-basin is based on the following:
2866        KM          6-Hour Rainfall, Pattern No.  1.49
2867        KM          An rainfall areal reduction factor of 0.986
2868        KM
2869        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2870        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2871        KM   .39 .38 .38 .20 .19 .19 .12 .12 .11 .09 .09 .09 .04 .04 .04 .03 .03 .03
2872        KM
2873        KM          L=   2.319 miles, S=   97 feet/mile, Kb= .03
2874        KM
2875        BA   1.156
2876        LG    0.18    0.11   11.20    0.02   45.00
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2877        UC   0.413   0.250
2878        UA       0       5      16      30      65      77      84      90      94      97
2879        UA     100
            *

2880        KK    S725
2881        KM   Sub-Basin   S725
2882        KM
2883        KM      The Clark Unit Hydrograph is used for this basin.
2884        KM          The Urban time-area relation is used for this basin.
2885        KM
2886        KM      Time of Concentration for this sub-basin is based on the following:
2887        KM          6-Hour Rainfall, Pattern No.  1.49
2888        KM          An rainfall areal reduction factor of 0.986
2889        KM
2890        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2891        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2892        KM   .38 .38 .38 .20 .18 .18 .11 .11 .11 .08 .08 .08 .04 .04 .04 .02 .02 .02
2893        KM
2894        KM          L=   3.038 miles, S=  71 feet/mile, Kb= .03
2895        KM
2896        BA   1.158
2897        LG    0.18    0.16    8.80    0.06   50.00
2898        UC   0.550   0.426
2899        UA       0       5      16      30      65      77      84      90      94      97
2900        UA     100
            *

2901        KK  EAST-2
2902        KM       Dummy combine of minor subbasins east of the Agua Fria River
2903        HC       5
            *

2904        KK    S726
2905        KM   Sub-Basin   S726
2906        KM
2907        KM      The Clark Unit Hydrograph is used for this basin.
2908        KM          The Urban time-area relation is used for this basin.
2909        KM
2910        KM      Time of Concentration for this sub-basin is based on the following:
2911        KM          6-Hour Rainfall, Pattern No.  1.00
2912        KM          An rainfall areal reduction factor of 0.996
2913        KM
2914        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

```
2915          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2916          KM   .47 .47 .47 .16 .12 .11 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
2917          KM
2918          KM          L=   1.036 miles, S=  295 feet/mile, Kb= .04
2919          KM
2920          BA   0.334
2921          LG    0.27    0.28    5.70    0.21   29.00
2922          UC   0.192   0.114
2923          UA       0       5      16      30      65      77      84      90      94      97
2924          UA     100
              *
1                                                HEC-1 INPUT                                          PAGE 65

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2925          KK  726727
2926          KM        Normal depth route from C726 to C727
2927          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2928          RS       4    FLOW      -1
2929          RC     .05    .035     .05    6228   .0185
2930          RX     100     120     145     170     225     240     250     265
2931          RY    1308    1304    1300    1296    1296    1300    1304    1308
              *

2932          KK    S727
2933          KM   Sub-Basin   S727
2934          KM
2935          KM      The Clark Unit Hydrograph is used for this basin.
2936          KM          The Urban time-area relation is used for this basin.
2937          KM
2938          KM      Time of Concentration for this sub-basin is based on the following:
2939          KM          6-Hour Rainfall, Pattern No.  1.00
2940          KM          An rainfall areal reduction factor of 0.995
2941          KM
2942          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2943          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2944          KM   .50 .50 .50 .19 .16 .16 .08 .08 .08 .08 .08 .07 .02 .02 .02 .01 .01 .01
2945          KM
2946          KM          L=   1.815 miles, S=   85 feet/mile, Kb= .04
2947          KM
2948          BA   0.375
2949          LG    0.18    0.16    9.70    0.05   54.00
2950          UC   0.408   0.386
2951          UA       0       5      16      30      65      77      84      90      94      97
2952          UA     100
              *

2953          KK    C727
2954          KM        Combine routed hydrograph 726727 w/runoff from S727
2955          HC       2
              *

2956          KK   TOTAL
2957          KM        Dummy combine of all operations
2958          HC       4
              *
2959          ZZ
1
          SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

   NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    40        S100
                 V
                 V
    61      100102
                 .
                 .
    68           .        S101
                 .           .
                 .           .
    89       C102R............
                 .
                 .
    92           .        S102
                 .           V
                 .           V
   113           .      101102
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                .           .
                .           .
120             .           .        S103
                .           .           .
                .           .           .
141             .       C102L............
                .           .
                .           .
144         C102............
                V
                V
147       102103
                .
                .
154             .        S104
                .           .
                .           .
175        C103R............
                .
                .
178             .        S105
                .           .
                .           .
199         C103............
                V
                V
202       103104
                .
                .
209             .        S106
                .           .
                .           .
230         C104............
                V
                V
233       104105
                .
                .
240             .        S107
                .           .
                .           .
261        C105L............
                .
                .
264             .        S200
                .           V
                .           V
285             .      200201
                .           .
                .           .
292             .           .        S201
                .           .           .
                .           .           .
313             .        C201............
                .           V
                .           V
316             .      201203
                .           .
                .           .
323             .           .        S202
                .           .           V
                .           .           V
344             .           .      202203
                .           .           .
                .           .           .
351             .           .           .        S203
                .           .           .           .
                .           .           .           .
372             .       C203R......................
                .           .
                .           .
375             .           .        S204
                .           .           .
                .           .           .
396             .        C203............
                .           V
                .           V
399             .      203204
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                .           .
406             .           .        S205
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                .          .          .
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427             .       C204...........
                .          V
                .          V
430             .     204205
                .          .
                .          .
437             .          .       S206
                .          .          .
                .          .          .
458             .      C205L...........
                .          .
                .          .
461             .          .       S207
                .          .          .
                .          .          .
482             .       C205...........
                .          V
                .          V
485             .     205206
                .          .
                .          .
492             .          .       S208
                .          .          .
                .          .          .
513             .       C206...........
                .          V
                .          V
516             .     206207
                .          .
                .          .
523             .          .       S209
                .          .          .
                .          .          .
544             .      C207R...........
                .          .
                .          .
547             .          .       S210
                .          .          .
                .          .          .
568             .       C207...........
                .          V
                .          V
571             .     207105
                .          .
                .          .
578             .          .       S211
                .          .          .
                .          .          .
599             .      C105R...........
                .          .
                .          .
602       C105...........
                .
                .
605             .       S300
                .          .
                .          .
626             .          .       S301
                .          .          .
                .          .          .
647             .       C300...........
                .          V
                .          V
650             .     300301
                .          .
                .          .
657             .          .       S302
                .          .          .
                .          .          .
678             .       C301...........
                .          V
                .          V
681             .     301302
                .          .
                .          .
688             .          .       S303
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709             .       C302...........
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                .          V
                .          V
712             .     302303
                .          .
                .          .
719             .          .        S304
                .          .           .
                .          .           .
740             .       C303............
                .          .
                .          .
743       WEST-1............
                .
                .
746             .       S400
                .          V
                .          V
767             .      C400O
                .          V
                .          V
775             .     400401
                .          .
                .          .
782             .          .        S401
                .          .           .
                .          .           .
803             .       C401............
                .          V
                .          V
806             .     401402
                .          .
                .          .
813             .          .        S402
                .          .           .
                .          .           .
834             .       C402............
                .          V
                .          V
837             .     402403
                .          .
                .          .
845             .          .        S403
                .          .           .
                .          .           .
866             .       C403............
                .          V
                .          V
869             .     403404
                .          .
                .          .
877             .          .        S404
                .          .           .
                .          .           .
898             .       C404............
                .          .
                .          .
901       WEST-2............
                .
                .
904             .       S500
                .          V
                .          V
925             .     500501
                .          .
                .          .
932             .          .        S501
                .          .           .
                .          .           .
953             .       C501............
                .          V
                .          V
956             .     501502
                .          .
                .          .
964             .          .        S502
                .          .           .
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985             .      C502L............
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                .          .
988             .          .        S503
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1009            .      C502I...........
                .          V
                .          V
1012            .      C5020
                .          V
                .          V
1020            .     502505
                .          .
                .          .
1028            .          .       S504
                .          .          .
                .          .          .
1049            .      C505L...........
                .          .
                .          .
1052            .          .       S505
                .          .          V
                .          .          V
1073            .          .      C5030
                .          .          V
                .          .          V
1081            .          .     503505
                .          .          .
                .          .          .
1089            .          .          .       S506
                .          .          .          V
                .          .          .          V
1110            .          .          .      C5040
                .          .          .          V
                .          .          .          V
1118            .          .          .     504505
                .          .          .          .
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1125            .          .          .          .       S507
                .          .          .          .          .
                .          .          .          .          .
1146            .          .      C505R......................
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1149            .       C505...........
                .          V
                .          V
1152            .     505509
                .          .
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1160            .          .       S508
                .          .          .
                .          .          .
1181            .      C509L...........
                .          .
                .          .
1184            .          .       S509
                .          .          V
                .          .          V
1205            .          .      C5060
                .          .          V
                .          .          V
1213            .          .     506508
                .          .          .
                .          .          .
1220            .          .          .       S510
                .          .          .          .
                .          .          .          .
1241            .          .      C508R...........
                .          .          .
                .          .          .
1244            .          .          .       S511
                .          .          .          V
                .          .          .          V
1265            .          .          .      C5070
                .          .          .          V
                .          .          .          V
1273            .          .          .     507508
                .          .          .          .
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1281            .          .          .          .       S512
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1302            .          .          .      C508L...........
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1305            .          .       C508...........
                .          .          V
                .          .          V
1308            .          .     508509
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1316            .          .          .       S513
                .          .          .          .
                .          .          .          .
1337            .          .     C509R...........
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                .          .          .
1340            .       C509...........
                .          V
                .          V
1343            .    509510
                .          .
                .          .
1351            .          .       S514
                .          .          .
                .          .          .
1372            .       C510...........
                .          V
                .          V
1375            .    510511
                .          .
                .          .
1383            .          .       S515
                .          .          .
                .          .          .
1404            .       C511...........
                .          V
                .          V
1407            .    511512
                .          .
                .          .
1415            .          .       S516
                .          .          .
                .          .          .
1436            .       C512...........
                .          .
                .          .
1439     WEST-3............
                .
                .
1442            .       S600
                .          V
                .          V
1463            .    600601
                .          .
                .          .
1470            .          .       S601
                .          .          .
                .          .          .
1491            .       C601...........
                .          V
                .          V
1494            .    601602
                .          .
                .          .
1501            .          .       S603
                .          .          .
                .          .          .
1522            .      C602L...........
                .          .
                .          .
1525            .          .       S602
                .          .          .
                .          .          .
1546            .       C602...........
                .          V
                .          V
1549            .    602603
                .          .
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1557            .          .       S606
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1578            .      C603L...........
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1581          .          .        S605
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1602          .          .          .        S604
              .          .          .          .
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1623          .      C603.......................
              .         V
              .         V
1626          .    603604
              .          .
              .          .
1634          .          .        S609
              .          .          .
              .          .          .
1655          .     C604R............
              .          .
              .          .
1658          .          .        S607
              .          .          .
              .          .          .
1679          .      C604............
              .         V
              .         V
1682          .    604605
              .          .
              .          .
1689          .          .        S608
              .          .          .
              .          .          .
1710          .      C605............
              .         V
              .         V
1713          .    605606
              .          .
              .          .
1721          .          .        S610
              .          .          .
              .          .          .
1742          .     C606L............
              .          .
              .          .
1745          .          .        S612
              .          .          .
              .          .          .
1766          .      C606............
              .         V
              .         V
1769          .    606608
              .          .
              .          .
1777          .          .        S611
              .          .          V
              .          .          V
1798          .          .     607608
              .          .          .
              .          .          .
1805          .          .          .        S613
              .          .          .          .
              .          .          .          .
1826          .      C608.......................
              .         V
              .         V
1829          .    608609
              .          .
              .          .
1837          .          .        S614
              .          .          .
              .          .          .
1858          .      C609............
              .         V
              .         V
1861          .    609611
              .          .
              .          .
1869          .          .        S617
              .          .          .
              .          .          .
1890          .     C611R............
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                .           .
1893            .           .        S615
                .           .           V
                .           .           V
1914            .           .      610611
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1921            .           .           .        S616
                .           .           .           .
                .           .           .           .
1942            .           .      C611L............
                .           .           .
                .           .           .
1945            .        C611............
                .           V
                .           V
1948            .      611613
                .           .
                .           .
1956            .           .        S618
                .           .           .
                .           .           .
1977            .       C613R............
                .           .
                .           .
1980            .           .        S619
                .           .           V
                .           .           V
2001            .           .      612613
                .           .           .
                .           .           .
2008            .           .           .        S620
                .           .           .           .
                .           .           .           .
2029            .           .      C613L............
                .           .           .
                .           .           .
2032            .        C613............
                .           V
                .           V
2035            .      613614
                .           .
                .           .
2043            .           .        S621
                .           .           .
                .           .           .
2064            .        C614............
                .           V
                .           V
2067            .      614615
                .           .
                .           .
2075            .           .        S622
                .           .           .
                .           .           .
2096            .        C615............
                .           .
                .           .
2099      WEST-4............
                .
                .
2102            .        S700
                .           .
                .           .
2123            .           .        S701
                .           .           .
                .           .           .
2144            .           .           .        S702
                .           .           .           .
                .           .           .           .
2165            .           .           .           .        S703
                .           .           .           .           .
                .           .           .           .           .
2186            .           .           .           .           .        S704
                .           .           .           .           .           V
                .           .           .           .           .           V
2207            .           .           .           .           .      704705
                .           .           .           .           .           .
                .           .           .           .           .           .
2214            .           .           .           .           .           .        S705
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2235            .         .         .         .         .       C705.........
                .         .         .         .         .          V
                .         .         .         .         .          V
2238            .         .         .         .         .       C705O
                .         .         .         .         .          V
                .         .         .         .         .          V
2251            .         .         .         .         .      705OAF
                .         .         .         .         .         .
                .         .         .         .         .         .
2258            .         .         .         .         .         .      S705AF
                .         .         .         .         .         .         .
                .         .         .         .         .         .         .
2279            .         .         .         .         .      C705AF.........
                .         .         .         .         .         .
                .         .         .         .         .         .
2282            .     WEST-5.........................................
                .         .
                .         .
2285            .         .       S706
                .         .         .
                .         .         .
2306            .         .         .       S707
                .         .         .         .
                .         .         .         .
2327            .         .         .         .       S728
                .         .         .         .         .
                .         .         .         .         .
2348        WEST.........................................
                .
                .
2351            .       S708
                .         .
                .         .
2372            .         .       S709
                .         .         V
                .         .         V
2393            .         .      C709O
                .         .         V
                .         .         V
2407            .         .     709710
                .         .         .
                .         .         .
2414            .         .         .       S710
                .         .         .         .
                .         .         .         .
2437            .         .      C710I........
                .         .         V
                .         .         V
2440            .         .      C710O
                .         .         .
                .         .         .
2452            .         .         .       S711
                .         .         .         V
                .         .         .         V
2475            .         .         .      C711O
                .         .         .         V
                .         .         .         V
2487            .         .         .    711712
                .         .         .         .
                .         .         .         .
2494            .         .         .         .       S712
                .         .         .         .         .
                .         .         .         .         .
2517            .         .         .      C712I........
                .         .         .         V
                .         .         .         V
2520            .         .         .      C712O
                .         .         .         V
                .         .         .         V
2532            .         .         .    712714
                .         .         .         .
                .         .         .         .
2539            .         .         .         .       S713
                .         .         .         .         V
                .         .         .         .         V
2562            .         .         .         .      C713O
                .         .         .         .         V
                .         .         .         .         V
2574            .         .         .         .    713714
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                 .         .         .         .         .
2581             .         .         .         .         .       S714
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2604             .         .         .       C714.......................
                 .         .         .         .
                 .         .         .         .
2607             .         .         .         .       S715
                 .         .         .         .         .
                 .         .         .         .         .
2628             .         .         .         .         .       S716
                 .         .         .         .         .         V
                 .         .         .         .         .         V
2649             .         .         .         .         .      C7160
                 .         .         .         .         .         V
                 .         .         .         .         .         V
2661             .         .         .         .         .     716717
                 .         .         .         .         .         .
                 .         .         .         .         .         .
2668             .         .         .         .         .         .         S717
                 .         .         .         .         .         .           .
                 .         .         .         .         .         .           .
2689             .         .         .         .         .       C717............
                 .         .         .         .         .         V
                 .         .         .         .         .         V
2692             .         .         .         .         .     717718
                 .         .         .         .         .         .
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2700             .         .         .         .         .         .         S718
                 .         .         .         .         .         .           .
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2721             .         .         .         .         .       C718............
                 .         .         .         .         .         .
                 .         .         .         .         .         .
2724             .         .         .         .         .         .         S719
                 .         .         .         .         .         .           .
                 .         .         .         .         .         .           .
2745             .     EAST-1.......................................................
                 .         .
                 .         .
2748             .         .       S720
                 .         .         .
                 .         .         .
2769             .         .         .       S721
                 .         .         .         V
                 .         .         .         V
2790             .         .         .      C7210
                 .         .         .         V
                 .         .         .         V
2804             .         .         .     721722
                 .         .         .         .
                 .         .         .         .
2812             .         .         .         .       S722
                 .         .         .         .         .
                 .         .         .         .         .
2833             .         .         .       C722............
                 .         .         .         .
                 .         .         .         .
2836             .         .         .         .       S723
                 .         .         .         .         .
                 .         .         .         .         .
2859             .         .         .         .         .       S724
                 .         .         .         .         .         .
                 .         .         .         .         .         .
2880             .         .         .         .         .         .         S725
                 .         .         .         .         .         .           .
                 .         .         .         .         .         .           .
2901             .         .     EAST-2...........................................
                 .         .         .
                 .         .         .
2904             .         .         .       S726
                 .         .         .         V
                 .         .         .         V
2925             .         .         .     726727
                 .         .         .         .
                 .         .         .         .
2932             .         .         .         .       S727
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2953             .         .         .       C727............
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 2956       TOTAL.....................................

 (***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************                    ****************************************
 *                                      *                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
 *              JUN   1998              *                    *   HYDROLOGIC ENGINEERING CENTER      *
 *            VERSION 4.1               *                    *         609 SECOND STREET            *
 *                                      *                    *      DAVIS, CALIFORNIA 95616         *
 *  RUN DATE   09AUG01  TIME  14:06:41  *                    *          (916) 756-1104              *
 *                                      *                    *                                      *
 ****************************************                    ****************************************
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                    N. Peoria Area Drainage Master Plan          File: FU100-6.IH1
                       For Maricopa County FCD 99-45           Original:05-04-00     MCG
                       By Stantec Consulting, Inc. P82000146    Revised:05-02-01     MMZ

                    The N. Peoria ADMP study limits consists of several small tributary
                    watersheds to the Agua Fria River.  This model is for the future
                    condition 100-year, 6-hour storm event.  A companion model is also created
                    for the future condition 100-year, 24-hour storm event.  Both models
                    100-year, 6- and 24-hour) should be referenced for the determination of
                    storm event produces the highest peak discharge.

                    Modeling of the watersheds is performed using the following:
                       100-year, 6-hour rainfall with FCDMC design rainfall distributions
                       Green & Ampt Loss Rate Method
                       NMIN = 2 minutes
                       Clark Unit Hydrograph
                       Modified Puls channel storage routing

                    Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

 21 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN           2  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1    0  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      2    0  ENDING DATE
                     NDTIME        0918  ENDING TIME
                      ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL    0.03 HOURS
                       TOTAL TIME BASE   33.30 HOURS

         ENGLISH UNITS
              DRAINAGE AREA          SQUARE MILES
              PRECIPITATION DEPTH    INCHES
              LENGTH, ELEVATION      FEET
              FLOW                   CUBIC FEET PER SECOND
              STORAGE VOLUME         ACRE-FEET
              SURFACE AREA           ACRES
              TEMPERATURE            DEGREES FAHRENHEIT

 23 JD          INDEX STORM NO. 1
                       STRM        3.35  PRECIPITATION DEPTH
                       TRDA        0.01  TRANSPOSITION DRAINAGE AREA

 24 PI            PRECIPITATION PATTERN
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                    0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                    0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                    0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

27 JD INDEX STORM NO. 2

STRM 3.33 PRECIPITATION DEPTH

TRDA 0.50 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

28 JD INDEX STORM NO. 3

STRM 3.28 PRECIPITATION DEPTH

TRDA 2.80 TRANSPOSITION DRAINAGE AREA

29 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

32 JD INDEX STORM NO. 4

STRM 3.09 PRECIPITATION DEPTH

TRDA 16.00 TRANSPOSITION DRAINAGE AREA

33 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 5

STRM 2.71 PRECIPITATION DEPTH

TRDA 90.00 TRANSPOSITION DRAINAGE AREA

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37 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
1
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	765.	4.43	124.	31.	23.	0.57		
+	ROUTED TO	100102	721.	4.67	124.	31.	23.	0.57		
+	HYDROGRAPH AT	S101	1034.	4.33	126.	31.	23.	0.63		
+	2 COMBINED AT	C102R	1209.	4.53	236.	60.	43.	1.20		
+	HYDROGRAPH AT	S102	701.	4.20	102.	26.	19.	0.45		
+	ROUTED TO	101102	665.	4.37	102.	26.	19.	0.45		
+	HYDROGRAPH AT	S103	521.	4.47	83.	21.	15.	0.40		
+	2 COMBINED AT	C102L	1061.	4.43	178.	45.	32.	0.84		
+	2 COMBINED AT	C102	1972.	4.50	393.	99.	71.	2.05		
+	ROUTED TO	102103	1932.	4.73	392.	99.	71.	2.05		
+	HYDROGRAPH AT	S104	1359.	4.40	194.	49.	35.	0.90		
+	2 COMBINED AT	C103R	2630.	4.63	557.	141.	102.	2.95		
+	HYDROGRAPH AT	S105	712.	4.30	131.	33.	24.	0.59		
+	2 COMBINED AT	C103	3017.	4.63	662.	168.	121.	3.54		
	ROUTED TO									

+	103104	2966.	4.77	661.	168.	121.	3.54
HYDROGRAPH AT +	S106	862.	4.20	114.	29.	21.	0.57
2 COMBINED AT +	C104	3190.	4.73	746.	189.	136.	4.11
ROUTED TO +	104105	3145.	4.93	745.	189.	136.	4.11
HYDROGRAPH AT +	S107	1153.	4.37	165.	41.	30.	0.94
2 COMBINED AT +	C105L	3500.	4.87	864.	219.	158.	5.05
HYDROGRAPH AT +	S200	1379.	4.40	204.	51.	37.	0.96
ROUTED TO +	200201	1344.	4.43	204.	51.	37.	0.96
HYDROGRAPH AT +	S201	603.	4.30	78.	20.	14.	0.35
2 COMBINED AT +	C201	1669.	4.43	272.	69.	49.	1.31
ROUTED TO +	201203	1629.	4.50	272.	69.	49.	1.31
HYDROGRAPH AT +	S202	274.	4.17	28.	7.	5.	0.13
ROUTED TO +	202203	263.	4.27	28.	7.	5.	0.13
HYDROGRAPH AT +	S203	468.	4.23	86.	22.	16.	0.37
3 COMBINED AT +	C203R	1965.	4.50	370.	94.	67.	1.81
HYDROGRAPH AT +	S204	1126.	4.50	196.	49.	36.	0.95
2 COMBINED AT +	C203	2648.	4.50	539.	136.	98.	2.76
ROUTED TO +	203204	2639.	4.53	539.	136.	98.	2.76
HYDROGRAPH AT +	S205	784.	4.27	97.	24.	18.	0.41
2 COMBINED AT +	C204	2980.	4.50	617.	156.	112.	3.17
ROUTED TO +	204205	2945.	4.63	617.	156.	112.	3.17
HYDROGRAPH AT +	S206	878.	4.37	187.	47.	34.	0.85
2 COMBINED AT +	C205L	3485.	4.60	770.	195.	140.	4.03
HYDROGRAPH AT +	S207	1007.	4.57	207.	52.	38.	0.96
2 COMBINED AT +	C205	4106.	4.60	936.	237.	171.	4.98
ROUTED TO +	205206	3979.	4.93	934.	237.	171.	4.98
HYDROGRAPH AT +	S208	1064.	4.73	242.	61.	44.	1.10
2 COMBINED AT							

+	C206	4633.	4.90	1127.	287.	207.	6.09
ROUTED TO +	206207	4600.	4.97	1126.	287.	207.	6.09
HYDROGRAPH AT +	S209	1011.	4.40	131.	33.	24.	0.65
2 COMBINED AT +	C207R	4789.	4.97	1217.	310.	223.	6.74
HYDROGRAPH AT +	S210	855.	4.17	90.	23.	16.	0.48
2 COMBINED AT +	C207	4821.	4.97	1274.	325.	234.	7.22
ROUTED TO +	207105	4760.	5.03	1272.	325.	234.	7.22
HYDROGRAPH AT +	S211	808.	4.17	95.	24.	17.	0.49
2 COMBINED AT +	C105R	4802.	5.03	1334.	340.	245.	7.70
2 COMBINED AT +	C105	7255.	5.00	2035.	519.	374.	12.75
HYDROGRAPH AT +	S300	1195.	4.13	139.	35.	25.	0.62
HYDROGRAPH AT +	S301	1883.	4.13	232.	58.	42.	0.99
2 COMBINED AT +	C300	2560.	4.13	355.	89.	64.	1.61
ROUTED TO +	300301	2441.	4.20	354.	89.	64.	1.61
HYDROGRAPH AT +	S302	936.	4.27	103.	26.	19.	0.47
2 COMBINED AT +	C301	2879.	4.23	441.	111.	80.	2.07
ROUTED TO +	301302	2702.	4.57	440.	111.	80.	2.07
HYDROGRAPH AT +	S303	1024.	4.37	130.	32.	23.	0.71
2 COMBINED AT +	C302	3129.	4.53	543.	137.	99.	2.78
ROUTED TO +	302303	3084.	4.67	542.	137.	99.	2.78
HYDROGRAPH AT +	S304	1080.	4.20	153.	38.	28.	0.82
2 COMBINED AT +	C303	3489.	4.63	660.	167.	120.	3.60
2 COMBINED AT +	WEST-1	8855.	4.93	2527.	646.	465.	16.36
HYDROGRAPH AT +	S400	1999.	4.27	253.	63.	46.	1.05
ROUTED TO +	C400O	557.	4.77	249.	63.	46.	1.05
ROUTED TO +	400401	555.	5.03	249.	63.	46.	1.05
HYDROGRAPH AT +	S401	1316.	4.13	131.	33.	24.	0.65
2 COMBINED AT							

+		C401	1243.	4.17	364.	92.	67.	1.69
	ROUTED TO							
+		401402	1176.	4.50	364.	92.	67.	1.69
	HYDROGRAPH AT							
+		S402	1696.	4.10	178.	45.	32.	0.74
	2 COMBINED AT							
+		C402	1830.	4.33	519.	133.	96.	2.43
	ROUTED TO							
+		402403	1751.	4.67	518.	132.	95.	2.43
	HYDROGRAPH AT							
+		S403	1440.	4.10	156.	39.	28.	0.56
	2 COMBINED AT							
+		C403	2055.	4.60	656.	168.	121.	2.99
	ROUTED TO							
+		403404	2037.	4.70	655.	168.	121.	2.99
	HYDROGRAPH AT							
+		S404	672.	4.17	56.	14.	10.	0.26
	2 COMBINED AT							
+		C404	2140.	4.63	700.	180.	129.	3.26
	2 COMBINED AT							
+		WEST-2	10001.	4.90	3040.	779.	562.	19.61
	HYDROGRAPH AT							
+		S500	1236.	4.27	237.	60.	43.	1.05
	ROUTED TO							
+		500501	1217.	4.43	236.	60.	43.	1.05
	HYDROGRAPH AT							
+		S501	1118.	4.17	132.	33.	24.	0.61
	2 COMBINED AT							
+		C501	1780.	4.33	351.	89.	64.	1.67
	ROUTED TO							
+		501502	1755.	4.40	347.	87.	63.	1.67
	HYDROGRAPH AT							
+		S502	819.	4.27	85.	21.	15.	0.40
	2 COMBINED AT							
+		C502L	2157.	4.37	416.	105.	76.	2.07
	HYDROGRAPH AT							
+		S503	1459.	4.20	220.	55.	40.	0.99
	2 COMBINED AT							
+		C502I	3055.	4.33	605.	153.	110.	3.07
	ROUTED TO							
+		C502O	2290.	4.67	605.	153.	110.	3.07
	ROUTED TO							
+		502505	2267.	4.90	592.	149.	107.	3.07
	HYDROGRAPH AT							
+		S504	513.	4.17	76.	19.	14.	0.33
	2 COMBINED AT							
+		C505L	2409.	4.77	652.	164.	119.	3.39
	HYDROGRAPH AT							
+		S505	395.	4.10	29.	7.	5.	0.14
	ROUTED TO							
+		C503O	98.	4.37	29.	7.	5.	0.14
	ROUTED TO							
+		503505	96.	4.87	28.	7.	5.	0.14
	HYDROGRAPH AT							

+	S506	394.	4.13	36.	9.	6.	0.15
ROUTED TO +	C504O	97.	4.50	36.	9.	6.	0.15
ROUTED TO +	504505	97.	4.87	36.	9.	6.	0.15
HYDROGRAPH AT +	S507	1460.	4.10	140.	35.	25.	0.67
3 COMBINED AT +	C505R	1351.	4.10	198.	50.	36.	0.96
2 COMBINED AT +	C505	2804.	4.57	811.	205.	148.	4.35
ROUTED TO +	505509	2748.	4.83	789.	198.	143.	4.35
HYDROGRAPH AT +	S508	786.	4.07	66.	17.	12.	0.29
2 COMBINED AT +	C509L	2777.	4.80	839.	211.	152.	4.65
HYDROGRAPH AT +	S509	520.	4.03	40.	10.	7.	0.17
ROUTED TO +	C506O	95.	4.33	40.	10.	7.	0.17
ROUTED TO +	506508	95.	4.53	40.	10.	7.	0.17
HYDROGRAPH AT +	S510	329.	4.07	36.	9.	7.	0.13
2 COMBINED AT +	C508R	403.	4.10	76.	19.	14.	0.30
HYDROGRAPH AT +	S511	1018.	4.07	91.	23.	16.	0.38
ROUTED TO +	C507O	100.	4.60	86.	23.	17.	0.38
ROUTED TO +	507508	99.	4.90	85.	23.	17.	0.38
HYDROGRAPH AT +	S512	536.	4.10	64.	16.	12.	0.21
2 COMBINED AT +	C508L	578.	4.10	141.	39.	28.	0.60
2 COMBINED AT +	C508	897.	4.10	210.	57.	41.	0.90
ROUTED TO +	508509	792.	4.50	206.	57.	41.	0.90
HYDROGRAPH AT +	S513	1317.	4.13	166.	42.	30.	0.78
2 COMBINED AT +	C509R	1486.	4.40	352.	96.	69.	1.67
2 COMBINED AT +	C509	3588.	4.70	1130.	291.	210.	6.32
ROUTED TO +	509510	3560.	4.77	1129.	291.	210.	6.32
HYDROGRAPH AT +	S514	1427.	4.10	175.	44.	32.	0.65
2 COMBINED AT +	C510	3865.	4.73	1271.	328.	237.	6.97
ROUTED TO							

+	510511	3797.	5.07	1268.	329.	237.	6.97
HYDROGRAPH AT							
+	S515	2390.	4.10	301.	75.	54.	1.10
2 COMBINED AT							
+	C511	3995.	5.00	1515.	394.	284.	8.07
ROUTED TO							
+	511512	3947.	5.30	1509.	393.	283.	8.07
HYDROGRAPH AT							
+	S516	1115.	4.13	142.	36.	26.	0.54
2 COMBINED AT							
+	C512	3997.	5.27	1609.	422.	304.	8.61
2 COMBINED AT							
+	WEST-3	12205.	4.93	4238.	1100.	793.	28.22
HYDROGRAPH AT							
+	S600	1843.	4.53	339.	85.	61.	2.02
ROUTED TO							
+	600601	1823.	4.60	339.	85.	61.	2.02
HYDROGRAPH AT							
+	S601	1460.	4.37	226.	57.	41.	0.90
2 COMBINED AT							
+	C601	2625.	4.57	538.	136.	98.	2.92
ROUTED TO							
+	601602	2597.	4.67	538.	136.	98.	2.92
HYDROGRAPH AT							
+	S603	1467.	4.23	166.	42.	30.	0.67
2 COMBINED AT							
+	C602L	3040.	4.57	678.	171.	123.	3.58
HYDROGRAPH AT							
+	S602	1882.	4.57	386.	97.	70.	1.88
2 COMBINED AT							
+	C602	4393.	4.57	1002.	253.	183.	5.47
ROUTED TO							
+	602603	4278.	4.80	958.	240.	173.	5.47
HYDROGRAPH AT							
+	S606	910.	4.37	148.	37.	27.	0.66
2 COMBINED AT							
+	C603L	4628.	4.77	1071.	269.	194.	6.13
HYDROGRAPH AT							
+	S605	1250.	4.50	231.	58.	42.	1.09
HYDROGRAPH AT							
+	S604	1924.	4.87	523.	134.	97.	2.66
3 COMBINED AT							
+	C603	6527.	4.77	1667.	423.	305.	9.87
ROUTED TO							
+	603604	6391.	4.90	1618.	407.	293.	9.87
HYDROGRAPH AT							
+	S609	622.	4.47	115.	29.	21.	0.56
2 COMBINED AT							
+	C604R	6593.	4.90	1694.	426.	307.	10.43
HYDROGRAPH AT							
+	S607	952.	4.50	189.	48.	34.	0.82
2 COMBINED AT							
+	C604	7002.	4.90	1834.	462.	333.	11.25
ROUTED TO							

+		604605	6972.	4.93	1834.	462.	333.	11.25
	HYDROGRAPH AT							
+		S608	1072.	4.27	126.	32.	23.	0.51
	2 COMBINED AT							
+		C605	7106.	4.93	1925.	486.	350.	11.76
	ROUTED TO							
+		605606	7024.	5.03	1915.	483.	348.	11.76
	HYDROGRAPH AT							
+		S610	952.	4.20	149.	37.	27.	0.60
	2 COMBINED AT							
+		C606L	7174.	5.03	2023.	511.	369.	12.36
	HYDROGRAPH AT							
+		S612	1082.	4.27	201.	51.	36.	0.81
	2 COMBINED AT							
+		C606	7469.	5.00	2176.	551.	397.	13.17
	ROUTED TO							
+		606608	7460.	5.03	2173.	550.	396.	13.17
	HYDROGRAPH AT							
+		S611	1068.	4.30	127.	32.	23.	0.57
	ROUTED TO							
+		607608	968.	4.47	127.	32.	23.	0.57
	HYDROGRAPH AT							
+		S613	1854.	4.63	392.	99.	71.	1.80
	3 COMBINED AT							
+		C608	8609.	4.97	2552.	648.	467.	15.53
	ROUTED TO							
+		608609	8540.	5.10	2539.	644.	464.	15.53
	HYDROGRAPH AT							
+		S614	1126.	4.60	234.	59.	43.	1.08
	2 COMBINED AT							
+		C609	8945.	5.07	2697.	685.	494.	16.61
	ROUTED TO							
+		609611	8842.	5.27	2666.	675.	487.	16.61
	HYDROGRAPH AT							
+		S617	1206.	4.17	144.	36.	26.	0.68
	2 COMBINED AT							
+		C611R	8839.	5.23	2749.	698.	503.	17.29
	HYDROGRAPH AT							
+		S615	1313.	4.60	286.	72.	52.	1.05
	ROUTED TO							
+		610611	1286.	4.77	285.	72.	52.	1.05
	HYDROGRAPH AT							
+		S616	803.	4.33	109.	27.	20.	0.50
	2 COMBINED AT							
+		C611L	1581.	4.70	382.	97.	70.	1.56
	2 COMBINED AT							
+		C611	9479.	5.20	3022.	770.	555.	18.85
	ROUTED TO							
+		611613	9458.	5.27	3011.	766.	552.	18.85
	HYDROGRAPH AT							
+		S618	1055.	4.53	198.	50.	36.	0.96
	2 COMBINED AT							
+		C613R	9676.	5.23	3128.	797.	574.	19.81
	HYDROGRAPH AT							

+		S619	1395.	4.43	209.	52.	38.	0.83
	ROUTED TO							
+		612613	1333.	4.57	209.	52.	38.	0.83
	HYDROGRAPH AT							
+		S620	613.	4.43	111.	28.	20.	0.44
	2 COMBINED AT							
+		C613L	1716.	4.57	312.	79.	57.	1.27
	2 COMBINED AT							
+		C613	10153.	5.20	3344.	853.	615.	21.08
	ROUTED TO							
+		613614	10104.	5.27	3332.	849.	612.	21.08
	HYDROGRAPH AT							
+		S621	1493.	4.30	159.	40.	29.	0.92
	2 COMBINED AT							
+		C614	10097.	5.27	3414.	870.	627.	22.00
	ROUTED TO							
+		614615	10005.	5.37	3394.	864.	623.	22.00
	HYDROGRAPH AT							
+		S622	806.	4.67	153.	38.	28.	0.90
	2 COMBINED AT							
+		C615	10136.	5.37	3463.	882.	636.	22.90
	2 COMBINED AT							
+		WEST-4	17806.	5.20	6787.	1755.	1265.	51.12
	HYDROGRAPH AT							
+		S700	1197.	4.10	120.	30.	22.	0.61
	HYDROGRAPH AT							
+		S701	740.	4.33	152.	38.	28.	0.72
	HYDROGRAPH AT							
+		S702	556.	4.10	59.	15.	11.	0.26
	HYDROGRAPH AT							
+		S703	451.	4.23	46.	12.	8.	0.26
	HYDROGRAPH AT							
+		S704	945.	4.10	83.	21.	15.	0.41
	ROUTED TO							
+		704705	820.	4.30	83.	21.	15.	0.41
	HYDROGRAPH AT							
+		S705	1657.	4.10	192.	48.	35.	0.75
	2 COMBINED AT							
+		C705	1852.	4.17	266.	67.	48.	1.16
	ROUTED TO							
+		C705O	782.	4.63	266.	67.	48.	1.16
	ROUTED TO							
+		705OAF	780.	4.83	266.	67.	48.	1.16
	HYDROGRAPH AT							
+		S705AF	351.	4.30	46.	12.	8.	0.18
	2 COMBINED AT							
+		C705AF	954.	4.53	309.	78.	56.	1.34
	5 COMBINED AT							
+		WEST-5	2571.	4.30	625.	157.	113.	3.19
	HYDROGRAPH AT							
+		S706	1656.	4.10	179.	45.	32.	0.71
	HYDROGRAPH AT							
+		S707	1524.	4.10	180.	45.	32.	0.64
	HYDROGRAPH AT							

+	S728	496.	4.17	74.	19.	13.	0.28
+ 5 COMBINED AT	WEST	18470.	5.17	7358.	1911.	1377.	55.94
+ HYDROGRAPH AT	S708	1828.	4.07	178.	45.	32.	0.71
+ HYDROGRAPH AT	S709	1142.	4.10	124.	31.	22.	0.44
+ ROUTED TO	C709O	436.	4.47	124.	31.	22.	0.44
+ ROUTED TO	709710	436.	4.53	124.	31.	22.	0.44
+ HYDROGRAPH AT	S710	369.	4.03	30.	8.	5.	0.11
+ 2 COMBINED AT	C710I	646.	4.07	154.	39.	28.	0.55
+ ROUTED TO	C710O	427.	4.80	154.	39.	28.	0.55
+ HYDROGRAPH AT	S711	565.	4.03	46.	12.	8.	0.16
+ ROUTED TO	C711O	183.	4.23	46.	12.	8.	0.16
+ ROUTED TO	711712	183.	4.27	46.	12.	8.	0.16
+ HYDROGRAPH AT	S712	238.	4.03	19.	5.	3.	0.07
+ 2 COMBINED AT	C712I	395.	4.03	65.	16.	12.	0.23
+ ROUTED TO	C712O	259.	4.23	65.	16.	12.	0.23
+ ROUTED TO	712714	258.	4.30	65.	16.	12.	0.23
+ HYDROGRAPH AT	S713	362.	4.03	29.	7.	5.	0.11
+ ROUTED TO	C713O	185.	4.17	29.	7.	5.	0.11
+ ROUTED TO	713714	185.	4.20	29.	7.	5.	0.11
+ HYDROGRAPH AT	S714	188.	4.03	13.	3.	2.	0.06
+ 3 COMBINED AT	C714	561.	4.07	108.	27.	19.	0.39
+ HYDROGRAPH AT	S715	510.	4.13	60.	15.	11.	0.22
+ HYDROGRAPH AT	S716	2132.	4.17	312.	78.	56.	1.13
+ ROUTED TO	C716O	654.	4.77	310.	78.	56.	1.13
+ ROUTED TO	716717	654.	4.90	309.	78.	56.	1.13
+ HYDROGRAPH AT	S717	936.	4.10	81.	20.	15.	0.29
+ 2 COMBINED AT	C717	1143.	4.13	388.	98.	70.	1.41
ROUTED TO							

+	717718	1047.	4.40	387.	98.	70.	1.41
HYDROGRAPH AT +	S718	586.	4.50	122.	31.	22.	0.44
2 COMBINED AT +	C718	1470.	4.43	506.	128.	92.	1.86
HYDROGRAPH AT +	S719	329.	4.13	47.	12.	8.	0.15
6 COMBINED AT +	EAST-1	3365.	4.33	1013.	255.	184.	3.88
HYDROGRAPH AT +	S720	935.	4.10	105.	26.	19.	0.37
HYDROGRAPH AT +	S721	1140.	4.03	99.	25.	18.	0.34
ROUTED TO +	C721O	277.	4.30	98.	25.	18.	0.34
ROUTED TO +	721722	274.	4.60	97.	25.	18.	0.34
HYDROGRAPH AT +	S722	1779.	4.17	257.	64.	46.	0.95
2 COMBINED AT +	C722	1776.	4.17	349.	88.	64.	1.29
HYDROGRAPH AT +	S723	279.	4.03	25.	6.	4.	0.09
HYDROGRAPH AT +	S724	2345.	4.13	363.	91.	66.	1.16
HYDROGRAPH AT +	S725	1780.	4.23	344.	87.	62.	1.16
5 COMBINED AT +	EAST-2	5282.	4.17	1145.	289.	208.	4.06
HYDROGRAPH AT +	S726	1036.	4.03	80.	20.	14.	0.33
ROUTED TO +	726727	899.	4.17	80.	20.	14.	0.33
HYDROGRAPH AT +	S727	736.	4.17	115.	29.	21.	0.38
2 COMBINED AT +	C727	1512.	4.17	193.	48.	35.	0.71
4 COMBINED AT +	TOTAL	20935.	5.07	8948.	2331.	1680.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 100-Year, 24-Hour HEC-1 Model Output

```
1*****************************************                    *****************************************
*                                         *                    *                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)     *                    *    U.S. ARMY CORPS OF ENGINEERS       *
*              JUN   1998                 *                    *    HYDROLOGIC ENGINEERING CENTER      *
*            VERSION 4.1                  *                    *          609 SECOND STREET            *
*                                         *                    *       DAVIS, CALIFORNIA 95616         *
*  RUN DATE   09AUG01  TIME  13:52:48     *                    *           (916) 756-1104              *
*                                         *                    *                                       *
*****************************************                    *****************************************

X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1                                          HEC-1 INPUT                                                PAGE  1

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID     N. Peoria Area Drainage Master Plan                    File: FU100-24.IH1
  2           ID        For Maricopa County FCD 99-45                  Original:05-04-00     MCG
  3           ID        By Stantec Consulting, Inc. P82000146           Revised:05-02-01     MMZ
  4           ID
  5           ID     The N. Peoria ADMP study limits consists of several small tributary
  6           ID     watersheds to the Agua Fria River.  This model is for the future
  7           ID     condition 100-year, 24-hour storm event.  A companion model is also created
  8           ID     for the future condition 100-year, 6-hour storm event.  Both models
  9           ID     100-year, 6- and 24-hour) should be referenced for the determination of
 10           ID     storm event produces the highest peak discharge.
 11           ID
 12           ID     Modeling of the watersheds is performed using the following:
 13           ID        100-year, 24-hour rainfall with FCDMC design rainfall distributions
 14           ID        Green & Ampt Loss Rate Method
 15           ID        NMIN = 2 minutes
 16           ID        Clark Unit Hydrograph
 17           ID        Modified Puls channel storage routing
 18           ID
 19           ID     Watershed delineation performed using USGS 7.5 Minute Series Quadrangles
              *
              *DIAGRAM
              *
              *
              *
 20           IT       2                    1000
 21           IO       5
 22           IN      15
              *
              *       Depth-area reduction factors taken from Table 2.2 of FCDMC Drainage
              *       Design Manual
              *       The following PC records are a 24-hour SCS Type II rainfall distribution
              *
 23           JD    4.20    0.01
 24           PC   0.000   0.002   0.005   0.008   0.011   0.013   0.016   0.019   0.022   0.025
 25           PC   0.028   0.032   0.035   0.038   0.041   0.044   0.048   0.053   0.056   0.060
 26           PC   0.063   0.067   0.071   0.075   0.080   0.084   0.089   0.093   0.098   0.103
 27           PC   0.109   0.114   0.120   0.127   0.133   0.140   0.147   0.155   0.163   0.172
 28           PC   0.181   0.192   0.204   0.220   0.235   0.259   0.283   0.473   0.663   0.699
 29           PC   0.735   0.754   0.772   0.785   0.799   0.810   0.820   0.829   0.838   0.846
 30           PC   0.854   0.861   0.868   0.874   0.880   0.885   0.891   0.900   0.902   0.910
 31           PC   0.912   0.920   0.921   0.926   0.929   0.930   0.937   0.941   0.945   0.950
 32           PC   0.952   0.957   0.959   0.962   0.965   0.970   0.972   0.973   0.978   0.981
 33           PC   0.984   0.987   0.989   0.992   0.995   0.998   1.000
 34           JD    4.18       1
 35           JD    4.07       5
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 36          JD    3.95       10
 37          JD    3.80       25
 38          JD    3.59       70
             *
             *  ***********************************************************************
             *                 Begin Major Basin 100 (Unnamed Wash 1)
             *  ***********************************************************************
             *
1                                          HEC-1 INPUT                                                    PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 39          KK    S100
 40          KM   Sub-Basin   S100
 41          KM
 42          KM      The Clark Unit Hydrograph is used for this basin.
 43          KM          The Natural time-area relation is used for this basin.
 44          KM
 45          KM      Time of Concentration for this sub-basin is based on the following:
 46          KM          An rainfall areal reduction factor of 1.000
 47          KM
 48          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 49          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 50          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
 51          KM
 52          KM          L=   1.811 miles, S=  149 feet/mile, Kb= .09
 53          KM
 54          BA   0.574
 55          LG    0.21     0.33     4.65     0.33    26.00
 56          UC   0.688    0.539
 57          UA       0        3        5        8       12       20       43       75       90       96
 58          UA     100
             *

 59          KK  100102
 60          KM        Normal depth route from S100 to C102R
 61          KM        Source: Field Reconnaissance
 62          RS       8    FLOW      -1
 63          RC     .05    .039     .06     6535    .0138
 64          RX    1000  1012.7  1037.5  1047.7     1060  1072.4  1087.8  1098.8
 65          RY   104.8   102.3   102.3   100.1      100   102.7   103.5   106.7
             *

 66          KK    S101
 67          KM   Sub-Basin   S101
 68          KM
 69          KM      The Clark Unit Hydrograph is used for this basin.
 70          KM          The Natural time-area relation is used for this basin.
 71          KM
 72          KM      Time of Concentration for this sub-basin is based on the following:
 73          KM          An rainfall areal reduction factor of 1.000
 74          KM
 75          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 76          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 77          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
 78          KM
 79          KM          L=   1.544 miles, S=  155 feet/mile, Kb= .08
 80          KM
 81          BA   0.631
 82          LG    0.26     0.37     5.30     0.25    15.00
 83          UC   0.542    0.345
 84          UA       0        3        5        8       12       20       43       75       90       96
 85          UA     100
             *
1                                          HEC-1 INPUT                                                    PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 86          KK   C102R
 87          KM        Combine routed hydrograph from S100 w/runoff from S101
 88          HC       2
             *

 89          KK    S102
 90          KM   Sub-Basin   S102
 91          KM
 92          KM      The Clark Unit Hydrograph is used for this basin.
 93          KM          The Urban time-area relation is used for this basin.
 94          KM
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 95          KM      Time of Concentration for this sub-basin is based on the following:
 96          KM          An rainfall areal reduction factor of 1.000
 97          KM
 98          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 99          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
100          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
101          KM
102          KM          L=   1.487 miles, S=  108 feet/mile, Kb= .07
103          KM
104          BA   0.449
105          LG    0.22    0.30    4.45    0.38   32.00
106          UC   0.558   0.420
107          UA       0       5      16      30      65      77      84      90      94      97
108          UA     100
             *

109          KK  101102
110          KM       Normal depth route from S102 to C102
111          KM       Source: Field Reconnaissance
112          RS       5    FLOW      -1
113          RC    .045     .04    .045    7254  0.0138
114          RX     100     106     114     120     134     143     155     164
115          RY     110     107     103     100     100     103     107     110
             *

116          KK    S103
117          KM   Sub-Basin   S103
118          KM
119          KM      The Clark Unit Hydrograph is used for this basin.
120          KM          The Natural time-area relation is used for this basin.
121          KM
122          KM      Time of Concentration for this sub-basin is based on the following:
123          KM          An rainfall areal reduction factor of 1.000
124          KM
125          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
126          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
127          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
128          KM
129          KM          L=   1.321 miles, S=   76 feet/mile, Kb= .09
130          KM
131          BA   0.395
132          LG    0.24    0.38    5.60    0.22   17.00
133          UC   0.742   0.563
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

134          UA       0       3       5       8      12      20      43      75      90      96
135          UA     100
             *

136          KK   C102L
137          KM       Combine routed hydrgraph from S102 with runoff from S103
138          HC       2
             *

139          KK    C102
140          KM       Combine hydrgraphs from C102L and C102R
141          HC       2
             *

142          KK  102103
143          KM       Normal depth route from C102 to C103R
144          KM       Source: Field Reconnaissance
145          RS       7    FLOW      -1
146          RC     .05    .039     .06    8068  0.0124
147          RX    1000    1029  1057.9    1072  1089.6  1099.4  1109.9  1173.1
148          RY     106   103.9   101.8   100.3     100   102.2   103.3   110.0
             *

149          KK    S104
150          KM   Sub-Basin   S104
151          KM
152          KM      The Clark Unit Hydrograph is used for this basin.
153          KM          The Natural time-area relation is used for this basin.
154          KM
155          KM      Time of Concentration for this sub-basin is based on the following:
156          KM          An rainfall areal reduction factor of 1.000
157          KM
158          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
159          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```

```
160          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01 .01
161          KM
162          KM          L=   1.624 miles, S=  111 feet/mile, Kb= .08
163          KM
164          BA   0.900
165          LG    0.21    0.35    5.60    0.22   23.00
166          UC   0.646   0.356
167          UA       0       3       5       8      12      20      43      75      90      96
168          UA     100
             *

169          KK   C103R
170          KM        Combine routed hydrograph from 102103 w/runoff from S104
171          HC       2
             *
1                                          HEC-1 INPUT                                          PAGE  5

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

172          KK    S105
173          KM   Sub-Basin   S105
174          KM
175          KM      The Clark Unit Hydrograph is used for this basin.
176          KM          The Urban time-area relation is used for this basin.
177          KM
178          KM      Time of Concentration for this sub-basin is based on the following:
179          KM          An rainfall areal reduction factor of 1.000
180          KM
181          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
182          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
183          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
184          KM
185          KM          L=   1.976 miles, S=   96 feet/mile, Kb= .07
186          KM
187          BA   0.594
188          LG    0.24    0.31    5.60    0.23   23.00
189          UC   0.721   0.597
190          UA       0       5      16      30      65      77      84      90      94      97
191          UA     100
             *

192          KK    C103
193          KM        Combine hydrograph from C103R w/runoff from S105
194          HC       2
             *

195          KK  103104
196          KM        Normal depth route from C103 to C104
197          KM        Source: Field Reconnaissance
198          RS       5    FLOW      -1
199          RC    .053    .053    .053    8625  0.0162
200          RX   998.5  1001.5    1003    1011    1033    1047  1050.6  1067.2
201          RY   108.4   106.4   105.4     100   100.5   104.4   105.4   110.0
             *

202          KK    S106
203          KM   Sub-Basin   S106
204          KM
205          KM      The Clark Unit Hydrograph is used for this basin.
206          KM          The Urban time-area relation is used for this basin.
207          KM
208          KM      Time of Concentration for this sub-basin is based on the following:
209          KM          An rainfall areal reduction factor of 1.000
210          KM
211          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
212          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
213          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
214          KM
215          KM          L=   1.770 miles, S=  158 feet/mile, Kb= .07
216          KM
217          BA   0.567
218          LG    0.27    0.28    5.20    0.26   11.00
219          UC   0.533   0.402
1                                          HEC-1 INPUT                                          PAGE  6

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

220          UA       0       5      16      30      65      77      84      90      94      97
221          UA     100
             *
```

```
222          KK    C104
223          KM        Combine routed hydrograph 103104 w/runoff from S106
224          HC       2
             *

225          KK  104105
226          KM        Normal depth route from C104 to C105
227          KM        Source: Field Reconnaissance
228          RS       5    FLOW      -1
229          RC    .053    .053    .053    6956  0.0115
230          RX    1000  1002.3  1004.6  1019.3  1041.1  1069.4  1111.7  1128.8
231          RY     108   107.5     107   100.2     100   103.4   102.3   107.3
             *

232          KK    S107
233          KM   Sub-Basin   S107
234          KM
235          KM      The Clark Unit Hydrograph is used for this basin.
236          KM         The Natural time-area relation is used for this basin.
237          KM
238          KM      Time of Concentration for this sub-basin is based on the following:
239          KM         An rainfall areal reduction factor of 1.000
240          KM
241          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
242          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
243          KM   .25 .25 .24 .24 .24 .24 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
244          KM
245          KM    .        L=   2.593 miles, S=  204 feet/mile, Kb= .06
246          KM
247          BA   0.936
248          LG    0.25    0.28    4.90    0.29    3.00
249          UC   0.571   0.442
250          UA       0       3       5       8      12      20      43      75      90      96
251          UA     100
             *

252          KK   C105L
253          KM        Combine routed hydrograph from 104105 w/runoff from S107
254          HC       2
             *
             *  ***********************************************************************
             *                Begin Major Basin 200 (Unnamed Wash 2)
             *  ***********************************************************************
             *

255          KK    S200
256          KM   Sub-Basin   S200
257          KM
258          KM      The Clark Unit Hydrograph is used for this basin.
259          KM         The Natural time-area relation is used for this basin.
260          KM
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

261          KM      Time of Concentration for this sub-basin is based on the following:
262          KM         An rainfall areal reduction factor of 1.000
263          KM
264          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
265          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
266          KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
267          KM
268          KM         L=   1.665 miles, S=  192 feet/mile, Kb= .10
269          KM
270          BA   0.959
271          LG    0.25    0.35    4.25    0.44   35.00
272          UC   0.629   0.341
273          UA       0       3       5       8      12      20      43      75      90      96
274          UA     100
             *

275          KK  200201
276          KM        Normal depth route from hydrograph S200 to C201
277          KM        Source: Field Reconnaissance
278          RS       1    FLOW      -1
279          RC     .05     .03     .05    3952  0.0228
280          RX    1000    1001    1002    1005    1026    1032    1034    1036
281          RY     105     104     103     100     100     103     104     105
             *
```

```
282          KK    S201
283          KM   Sub-Basin    S201
284          KM
285          KM      The Clark Unit Hydrograph is used for this basin.
286          KM          The Natural time-area relation is used for this basin.
287          KM
288          KM      Time of Concentration for this sub-basin is based on the following:
289          KM          An rainfall areal reduction factor of 1.000
290          KM
291          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
292          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
293          KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
294          KM
295          KM          L=   1.182 miles, S=  195 feet/mile, Kb= .11
296          KM
297          BA   0.350
298          LG    0.25     0.35     4.25     0.44    35.00
299          UC   0.517    0.370
300          UA       0        3        5        8       12       20       43       75       90       96
301          UA     100
             *

302          KK    C201
303          KM        Combine routed hydrograph 200201 w/runoff from S201
304          HC       2
             *
1                                          HEC-1 INPUT                                                PAGE  8

        LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

305          KK  201203
306          KM        Normal depth route from C201 to C203R
307          KM        Source: Field Reconnaissance
308          RS       3    FLOW      -1
309          RC    .055     .039     .055     3233  0.0155
310          RX    1000   1008.4   1057.5   1066.3  1098.4  1102.8    1105  1107.6
311          RY     105    101.1      102    100.3     100     102     103   104.2
             *

312          KK    S202
313          KM   Sub-Basin    S202
314          KM
315          KM      The Clark Unit Hydrograph is used for this basin.
316          KM          The Natural time-area relation is used for this basin.
317          KM
318          KM      Time of Concentration for this sub-basin is based on the following:
319          KM          An rainfall areal reduction factor of 1.000
320          KM
321          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
322          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
323          KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
324          KM
325          KM          L=   0.689 miles, S=  271 feet/mile, Kb= .12
326          KM
327          BA   0.127
328          LG    0.25     0.35     4.25     0.44    35.00
329          UC   0.367    0.292
330          UA       0        3        5        8       12       20       43       75       90       96
331          UA     100
             *

332          KK  202203
333          KM        Normal depth route from S202 to C203R
334          KM         Source: Field Reconnaissance
335          RS       2    FLOW      -1
336          RC     .05      .03      .05     2353    .0170
337          RX    1000   1008.4   1057.5   1066.3  1098.4  1102.8    1105  1107.6
338          RY   103.6    101.1      102    100.3     100     102    103.   104.2
             *

339          KK    S203
340          KM   Sub-Basin    S203
341          KM
342          KM      The Clark Unit Hydrograph is used for this basin.
343          KM          The Urban time-area relation is used for this basin.
344          KM
345          KM      Time of Concentration for this sub-basin is based on the following:
346          KM          An rainfall areal reduction factor of 1.000
347          KM
348          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```

```
 349          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 350          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
 351          KM
 352          KM          L=   1.683 miles, S=  154 feet/mile, Kb= .09
1                                        HEC-1 INPUT                                        PAGE  9

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 353          KM
 354          BA   0.373
 355          LG    0.28    0.29    4.25    0.43   37.00
 356          UC   0.633   0.593
 357          UA       0       5      16      30      65      77      84      90      94      97
 358          UA     100
              *

 359          KK   C203R
 360          KM        Combine routed hydrographs 201203 and 202203 with runoff from S203
 361          HC       3
              *

 362          KK    S204
 363          KM   Sub-Basin   S204
 364          KM
 365          KM      The Clark Unit Hydrograph is used for this basin.
 366          KM          The Natural time-area relation is used for this basin.
 367          KM
 368          KM      Time of Concentration for this sub-basin is based on the following:
 369          KM          An rainfall areal reduction factor of 1.000
 370          KM
 371          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 372          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 373          KM   .25 .24 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
 374          KM
 375          KM          L=   1.959 miles, S=  174 feet/mile, Kb= .10
 376          KM
 377          BA   0.951
 378          LG    0.25    0.35    4.25    0.44   32.00
 379          UC   0.750   0.474
 380          UA       0       3       5       8      12      20      43      75      90      96
 381          UA     100
              *

 382          KK    C203
 383          KM        Combine hydrograph from C203R with runoff from S204
 384          HC       2
              *

 385          KK  203204
 386          KM        Normal depth route from C203 to C204
 387          KM        Source: Field Reconnaissance
 388          RS       1    FLOW      -1
 389          RC    .055    .039    .055    1325  0.0151
 390          RX   989.2  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1120.2
 391          RY     110   101.1     102   100.3     100     102     103   110.0
              *

 392          KK    S205
 393          KM   Sub-Basin   S205
 394          KM
 395          KM      The Clark Unit Hydrograph is used for this basin.
 396          KM          The Natural time-area relation is used for this basin.
 397          KM
1                                        HEC-1 INPUT                                        PAGE 10

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          KM      Time of Concentration for this sub-basin is based on the following:
 399          KM          An rainfall areal reduction factor of 1.000
 400          KM
 401          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 402          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 403          KM   .26 .26 .26 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
 404          KM
 405          KM          L=   1.485 miles, S=  175 feet/mile, Kb= .07
 406          KM
 407          BA   0.413
 408          LG    0.21    0.31    4.60    0.34   34.00
 409          UC   0.458   0.354
 410          UA       0       3       5       8      12      20      43      75      90      96
 411          UA     100
```

```
                 *

412              KK    C204
413              KM        Combine routed hydrograph 203204 w/runoff from S205
414              HC       2
                 *

415              KK  204205
416              KM        Normal depth route from C204 to C205L
417              KM        Source: Field Reconnaissance
418              RS       3    FLOW      -1
419              RC     .05    .039     .05    5007  0.0140
420              RX    1000  1010.6  1053.2  1064.9  1094.7  1103.1  1105.9  1113.8
421              RY   105.6   102.5   103.3   100.4     100     103     104   106.8
                 *

422              KK    S206
423              KM   Sub-Basin   S206
424              KM
425              KM      The Clark Unit Hydrograph is used for this basin.
426              KM          The Urban time-area relation is used for this basin.
427              KM
428              KM      Time of Concentration for this sub-basin is based on the following:
429              KM          An rainfall areal reduction factor of 1.000
430              KM
431              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
432              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
433              KM   .26 .25 .25 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
434              KM
435              KM          L=   2.296 miles, S=  118 feet/mile, Kb= .08
436              KM
437              BA   0.853
438              LG    0.29    0.28    4.65    0.33   30.00
439              UC   0.829   0.640
440              UA       0       5      16      30      65      77      84      90      94      97
441              UA     100
                 *
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

442              KK   C205L
443              KM        Combine routed hydrograph 204205 w/runoff from S206
444              HC       2
                 *

445              KK    S207
446              KM   Sub-Basin   S207
447              KM
448              KM      The Clark Unit Hydrograph is used for this basin.
449              KM          The Natural time-area relation is used for this basin.
450              KM
451              KM      Time of Concentration for this sub-basin is based on the following:
452              KM          An rainfall areal reduction factor of 1.000
453              KM
454              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
455              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
456              KM   .25 .25 .25 .25 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
457              KM
458              KM          L=   2.315 miles, S=  117 feet/mile, Kb= .08
459              KM
460              BA   0.957
461              LG    0.27    0.32    4.35    0.41   35.00
462              UC   0.846   0.617
463              UA       0       3       5       8      12      20      43      75      90      96
464              UA     100
                 *

465              KK    C205
466              KM        Combine hydrograph from C205L w/runoff from S207
467              HC       2
                 *

468              KK  205206
469              KM        Normal depth route from C205 to C206
470              KM        Source: Field Reconnaissance
471              RS      10    FLOW      -1
472              RC     .05    .039     .05   11893  0.0063
473              RX    1000  1002.5    1005  1019.1  1052.5  1070.5  1120.8  1146.9
474              RY   110.1   107.6   105.1     100   100.2   104.6   103.7   109.5
```

```
                 *

475              KK    S208
476              KM   Sub-Basin   S208
477              KM
478              KM      The Clark Unit Hydrograph is used for this basin.
479              KM          The Natural time-area relation is used for this basin.
480              KM
481              KM      Time of Concentration for this sub-basin is based on the following:
482              KM          An rainfall areal reduction factor of 1.000
483              KM
484              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
485              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
486              KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
487              KM
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

488              KM          L=   2.205 miles, S=   93 feet/mile, Kb= .10
489              KM
490              BA   1.103
491              LG    0.25    0.32    5.30    0.25   29.00
492              UC   1.054   0.698
493              UA       0       3       5       8      12      20      43      75      90      96
494              UA     100
                 *

495              KK    C206
496              KM        Combine routed hydrograph 205206 w/runoff from S208
497              HC       2
                 *

498              KK  206207
499              KM        Normal depth route from C206 to C207R
500              KM        Source: Field Reconnaissance
501              RS       2    FLOW      -1
502              RC    .055    .039    .055    4972  0.0312
503              RX    1000  1007.4  1014.8  1022.2  1057.6  1068.1  1088.2  1094.2
504              RY     106     104     102     100   100.2   102.2   102.9   105.9
                 *

505              KK    S209
506              KM   Sub-Basin   S209
507              KM
508              KM      The Clark Unit Hydrograph is used for this basin.
509              KM          The Natural time-area relation is used for this basin.
510              KM
511              KM      Time of Concentration for this sub-basin is based on the following:
512              KM          An rainfall areal reduction factor of 1.000
513              KM
514              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
515              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
516              KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
517              KM
518              KM          L=   1.358 miles, S=  133 feet/mile, Kb= .10
519              KM
520              BA   0.650
521              LG    0.23    0.34    5.00    0.28   16.00
522              UC   0.638   0.367
523              UA       0       3       5       8      12      20      43      75      90      96
524              UA     100
                 *

525              KK   C207R
526              KM        Combine routed hydrograph 206207 w/runoff from S209
527              HC       2
                 *
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

528              KK    S210
529              KM   Sub-Basin   S210
530              KM
531              KM      The Clark Unit Hydrograph is used for this basin.
532              KM          The Urban time-area relation is used for this basin.
533              KM
534              KM      Time of Concentration for this sub-basin is based on the following:
535              KM          An rainfall areal reduction factor of 1.000
```

```
536          KM
537          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
538          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
539          KM   .25 .24 .24 .24 .24 .24 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
540          KM
541          KM          L=   1.274 miles, S=  181 feet/mile, Kb= .09
542          KM
543          BA   0.481
544          LG    0.22    0.31    5.00    0.28    4.00
545          UC   0.488   0.307
546          UA       0       5      16      30      65      77      84      90      94      97
547          UA     100
             *

548          KK    C207
549          KM        Combine hydrograph from C207R w/runoff from S210
550          HC       2
             *

551          KK  207105
552          KM        Normal depth route from C207 to C105
553          KM        Source: Field Reconnaissance
554          RS       3    FLOW      -1
555          RC    .055    .039    .055    7176  0.0167
556          RX    1000    1003    1006    1009  1038.5  1041.5  1047.5  1053.5
557          RY     109     106     103     100     100     102     106     110
             *

558          KK    S211
559          KM   Sub-Basin   S211
560          KM
561          KM      The Clark Unit Hydrograph is used for this basin.
562          KM          The Urban time-area relation is used for this basin.
563          KM
564          KM      Time of Concentration for this sub-basin is based on the following:
565          KM          An rainfall areal reduction factor of 1.000
566          KM
567          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
568          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
569          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
570          KM
571          KM          L=   1.359 miles, S=  162 feet/mile, Kb= .09
572          KM
573          BA   0.488
574          LG    0.25    0.30    5.20    0.26    7.00
575          UC   0.529   0.351
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

576          UA       0       5      16      30      65      77      84      90      94      97
577          UA     100
             *

578          KK   C105R
579          KM        Combine routed hydrograph 207105 w/runoff from S211
580          HC       2
             *

581          KK    C105
582          KM        Combine hydrographs from C105L and C105R
583          HC       2
             *
             *  ******************************************************************************
             *                Begin Major Basin 300 (Unnamed Wash 3)
             *  ******************************************************************************
             *

584          KK    S300
585          KM   Sub-Basin   S300
586          KM
587          KM      The Clark Unit Hydrograph is used for this basin.
588          KM          The Urban time-area relation is used for this basin.
589          KM
590          KM      Time of Concentration for this sub-basin is based on the following:
591          KM          An rainfall areal reduction factor of 1.000
592          KM
593          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
594          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
595          KM   .26 .25 .25 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
596          KM
```

```
597          KM          L=   1.776 miles, S=  129 feet/mile, Kb= .04
598          KM
599          BA   0.615
600          LG    0.28    0.28    4.55    0.37   32.00
601          UC   0.413   0.289
602          UA       0       5      16      30      65      77      84      90      94      97
603          UA     100
             *

604          KK    S301
605          KM   Sub-Basin   S301
606          KM
607          KM      The Clark Unit Hydrograph is used for this basin.
608          KM          The Urban time-area relation is used for this basin.
609          KM
610          KM      Time of Concentration for this sub-basin is based on the following:
611          KM          An rainfall areal reduction factor of 1.000
612          KM
613          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
614          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
615          KM   .26 .25 .25 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
616          KM
617          KM          L=   2.001 miles, S=  190 feet/mile, Kb= .04
618          KM
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

619          BA   0.994
620          LG    0.29    0.26    4.25    0.45   42.00
621          UC   0.388   0.226
622          UA       0       5      16      30      65      77      84      90      94      97
623          UA     100
             *

624          KK    C300
625          KM        Combine runoff from S300 and S301
626          HC       2
             *

627          KK  300301
628          KM        Normal depth route from C300 to C301
629          KM        Source: Field Reconnaissance
630          RS       2    FLOW      -1
631          RC    .051    .044    .051    5117  0.0137
632          RX    1000    1001    1002    1010    1047    1059  1060.5    1062
633          RY     110     109     108     100     100     108     109     110
             *

634          KK    S302
635          KM   Sub-Basin   S302
636          KM
637          KM      The Clark Unit Hydrograph is used for this basin.
638          KM          The Natural time-area relation is used for this basin.
639          KM
640          KM      Time of Concentration for this sub-basin is based on the following:
641          KM          An rainfall areal reduction factor of 1.000
642          KM
643          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
644          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
645          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
646          KM
647          KM          L=   1.095 miles, S=  137 feet/mile, Kb= .09
648          KM
649          BA   0.465
650          LG    0.26    0.31    4.55    0.36   29.00
651          UC   0.492   0.280
652          UA       0       3       5       8      12      20      43      75      90      96
653          UA     100
             *

654          KK    C301
655          KM        Combine routed hydrograph 300301 w/runoff from S302
656          HC       2
             *

657          KK  301302
658          KM        Normal depth route from C301 to C302
659          KM        Source: Field Reconnaissance
660          RS       9    FLOW      -1
661          RC    .051    .039    .051    8124  0.0086
```

```
662          RX    1000    1004  1200.3  1213.6  1240.6  1249.9  1344.4  1369.6
663          RY   110.6   108.6   103.5   100.2     100   104.2   107.4   110.4
             *
1                                          HEC-1 INPUT                                                    PAGE 16

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


664          KK    S303
665          KM   Sub-Basin   S303
666          KM
667          KM      The Clark Unit Hydrograph is used for this basin.
668          KM          The Natural time-area relation is used for this basin.
669          KM
670          KM      Time of Concentration for this sub-basin is based on the following:
671          KM          An rainfall areal reduction factor of 1.000
672          KM
673          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
674          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
675          KM   .24 .24 .24 .24 .23 .23 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
676          KM
677          KM          L=   1.539 miles, S=  188 feet/mile, Kb= .10
678          KM
679          BA   0.708
680          LG    0.24    0.32    4.60    0.35   11.00
681          UC   0.608   0.366
682          UA       0       3       5       8      12      20      43      75      90      96
683          UA     100
             *

684          KK    C302
685          KM        Combine routed hydrograph 301302 w/runoff from S303
686          HC       2
             *

687          KK  302303
688          KM        Normal depth route from C302 to C303
689          KM        Source: Field Reconniassance
690          RS       4    FLOW      -1
691          RC    .055    .048    .055    7304  0.0192
692          RX  995.97  1009.4  1017.8  1026.5  1067.3  1068.7  1071.5 1077.82
693          RY   107.0     104     102     100     101     102     104   107.0
             *

694          KK    S304
695          KM   Sub-Basin   S304
696          KM
697          KM      The Clark Unit Hydrograph is used for this basin.
698          KM          The Urban time-area relation is used for this basin.
699          KM
700          KM      Time of Concentration for this sub-basin is based on the following:
701          KM          An rainfall areal reduction factor of 1.000
702          KM
703          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
704          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
705          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
706          KM
707          KM          L=   2.314 miles, S=  186 feet/mile, Kb= .06
708          KM
709          BA   0.823
710          LG    0.25    0.29    5.10    0.27    7.00
711          UC   0.542   0.410
1                                          HEC-1 INPUT                                                    PAGE 17

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

712          UA       0       5      16      30      65      77      84      90      94      97
713          UA     100
             *

714          KK    C303
715          KM        Combine routed hydrograph 302303 w/runoff from S304
716          HC       2
             *

717          KK  WEST-1
718          KM        Dummy combine of major basins 100, 200 and 300
719          HC       2
             *
             *  ******************************************************************************
             *                Begin Major Basin 400 (Caterpillar Tanks Wash)
```

```
*  ****************************************************************************
*

KK    S400
KM   Sub-Basin   S400
KM
KM      The Clark Unit Hydrograph is used for this basin.
KM          The Natural time-area relation is used for this basin.
KM
KM      Time of Concentration for this sub-basin is based on the following:
KM          An rainfall areal reduction factor of 1.000
KM
KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
KM   .27 .27 .27 .27 .27 .26 .03 .03 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
KM
KM          L=   1.864 miles, S=  110 feet/mile, Kb= .04
KM
BA   1.048
LG    0.24    0.30    5.40    0.22   36.00
UC   0.438   0.237
UA       0       3       5       8      12      20      43      75      90      96
UA     100
*

KK   C400O
KM        Storage routing at crossing structure no. 78 (see Plate 5)
KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
RS       1    STOR       0
SQ       0      62     200     400     540     625     750
SE    1508    1511    1514    1520    1526    1532    1540
SV       0     5.2    18.6    40.7    71.7   115.5   178.1   266.3
SE    1508    1516    1520    1524    1528    1532    1536    1540
*
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  400401
KM        Normal depth route from S400 to C401
KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
RS      10    FLOW      -1
RC    .045    .040    .045    7424  0.0101
RX  9729.2  9772.7  9849.9   10000 10007.8 10090.6 10147.3 10185.4
RY  1509.6  1508.8  1500.2  1475.5  1475.3  1495.3    1496  1497.5
*

KK    S401
KM   Sub-Basin   S401
KM
KM      The Clark Unit Hydrograph is used for this basin.
KM          The Urban time-area relation is used for this basin.
KM
KM      Time of Concentration for this sub-basin is based on the following:
KM          An rainfall areal reduction factor of 1.000
KM
KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
KM
KM          L=   1.349 miles, S=   74 feet/mile, Kb= .04
KM
BA   0.646
LG    0.29    0.27    5.10    0.26   13.00
UC   0.429   0.236
UA       0       5      16      30      65      77      84      90      94      97
UA     100
*

KK    C401
KM        Combine routed hydrograph 400401 w/runoff from S401
HC       2
*

KK  401402
KM        Normal depth route from C401 to C402
KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
RS       9    FLOW      -1
RC    .045    .043    .045    8029  0.0112
RX  9581.3  9756.6  9997.5   10000 10022.2 10086.4 10119.5 10362.5
```

```
 784          RY  1455.4  1419.3  1413.3  1410.9  1409.8  1414.4    1419  1428.6
              *

 785          KK    S402
 786          KM   Sub-Basin   S402
 787          KM
 788          KM      The Clark Unit Hydrograph is used for this basin.
 789          KM          The Urban time-area relation is used for this basin.
 790          KM
 791          KM      Time of Concentration for this sub-basin is based on the following:
 792          KM          An rainfall areal reduction factor of 1.000
 793          KM
1                                          HEC-1 INPUT                                          PAGE 19

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 794          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 795          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 796          KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
 797          KM
 798          KM          L=   1.468 miles, S=   75 feet/mile, Kb= .03
 799          KM
 800          BA   0.740
 801          LG    0.25    0.28    5.60    0.22   33.00
 802          UC   0.375   0.201
 803          UA       0       5      16      30      65      77      84      90      94      97
 804          UA     100
              *

 805          KK    C402
 806          KM        Combine routed hydrograph 401402 w/runoff from S402
 807          HC       2
              *

 808          KK  402403
 809          KM        Normal depth route from C402 to C403
 810          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 811          RS      11    FLOW      -1
 812          RC    .045    .043    .045    6138  0.0049
 813          RX   9267.  9571.2  9916.2  9988.7  9997.4 10095.3 10157.8   10641
 814          RY  1395.9  1388.7  1383.7    1355    1355  1361.4  1359.6    1378
 815          RL                    0.03  1355.0
              *

 816          KK    S403
 817          KM   Sub-Basin   S403
 818          KM
 819          KM      The Clark Unit Hydrograph is used for this basin.
 820          KM          The Urban time-area relation is used for this basin.
 821          KM
 822          KM      Time of Concentration for this sub-basin is based on the following:
 823          KM          An rainfall areal reduction factor of 1.000
 824          KM
 825          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 826          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 827          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
 828          KM
 829          KM          L=   1.638 miles, S=   52 feet/mile, Kb= .02
 830          KM
 831          BA   0.559
 832          LG    0.23    0.16    8.00    0.09   37.00
 833          UC   0.350   0.239
 834          UA       0       5      16      30      65      77      84      90      94      97
 835          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 20

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 836          KK    C403
 837          KM        Combine routed hydrograph 402403 w/runoff from S403
 838          HC       2
              *

 839          KK  403404
 840          KM        Normal depth route from C403 to C404
 841          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 842          RS       3    FLOW      -1
 843          RC    .045    .045    .045    4256   .0164
 844          RX  9506.5  9551.7  9955.5    9995 10007.4 10060.9 10227.2 10315.3
```

```
845          RY  1300.9  1282.3  1282.7  1276.7  1276.5  1283.5  1283.3  1302.1
846          RL                   0.03  1276.5
             *

847          KK    S404
848          KM   Sub-Basin   S404
849          KM
850          KM      The Clark Unit Hydrograph is used for this basin.
851          KM          The Natural time-area relation is used for this basin.
852          KM
853          KM      Time of Concentration for this sub-basin is based on the following:
854          KM          An rainfall areal reduction factor of 1.000
855          KM
856          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
857          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
858          KM   .27 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .00 .00 .00 .00 .00 .00
859          KM
860          KM          L=   0.773 miles, S=  181 feet/mile, Kb= .09
861          KM
862          BA   0.263
863          LG    0.26    0.33    6.60    0.14    8.00
864          UC   0.371   0.214
865          UA       0       3       5       8      12      20      43      75      90      96
866          UA     100
             *

867          KK    C404
868          KM        Combine routed hydrograph C403 w/runoff S404
869          HC       2
             *

870          KK  WEST-2
871          KM        Dummy combine of major basins 100, 200, 300 and 400
872          HC       2
             *
             *  ******************************************************************************
             *                 Begin Major Basin 500 (Twin Buttes Wash)
             *  ******************************************************************************
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

873          KK    S500
874          KM   Sub-Basin   S500
875          KM
876          KM      The Clark Unit Hydrograph is used for this basin.
877          KM          The Urban time-area relation is used for this basin.
878          KM
879          KM      Time of Concentration for this sub-basin is based on the following:
880          KM          An rainfall areal reduction factor of 1.000
881          KM
882          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
883          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
884          KM   .26 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
885          KM
886          KM          L=   2.399 miles, S=  117 feet/mile, Kb= .06
887          KM
888          BA   1.054
889          LG    0.28    0.29    4.25    0.43   39.00
890          UC   0.688   0.477
891          UA       0       5      16      30      65      77      84      90      94      97
892          UA     100
             *

893          KK  500501
894          KM        Normal depth route from S500 to C501
895          KM        Source: Field Reconnaissance
896          RS       4    FLOW      -1
897          RC    0.05   0.035    0.05    5972  0.0134
898          RX    1000    1004    1032    1047    1069 1072.75  1075.9  1081.9
899          RY   105.7   101.7    99.6    96.8    97.1    99.6   101.7   105.7
             *

900          KK    S501
901          KM   Sub-Basin   S501
902          KM
903          KM      The Clark Unit Hydrograph is used for this basin.
904          KM          The Urban time-area relation is used for this basin.
905          KM
```

```
906          KM      Time of Concentration for this sub-basin is based on the following:
907          KM          An rainfall areal reduction factor of 1.000
908          KM
909          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
910          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
911          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
912          KM
913          KM          L=   1.486 miles, S=  135 feet/mile, Kb= .06
914          KM
915          BA   0.614
916          LG    0.27    0.29    4.45    0.38   27.00
917          UC   0.467   0.288
918          UA       0       5      16      30      65      77      84      90      94      97
919          UA     100
             *
1                                                HEC-1 INPUT                                          PAGE 22

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

920          KK    C501
921          KM        Combine routed hydrograph 500501 w/runoff from S501
922          HC       2
             *

923          KK  501502
924          KM        Normal depth route from C501 to C502L
925          KM        Source: Field Reconniassance
926          RS       3    FLOW      -1
927          RC    0.05   0.035,   0.05    5021  0.0159
928          RX    1000    1001    1002    1006    1035    1039    1040    1041
929          RY     106     105     104     100     100     104     105     106
930          RL                    0.94   100.0
             *

931          KK    S502
932          KM   Sub-Basin   S502
933          KM
934          KM      The Clark Unit Hydrograph is used for this basin.
935          KM          The Natural time-area relation is used for this basin.
936          KM
937          KM      Time of Concentration for this sub-basin is based on the following:
938          KM          An rainfall areal reduction factor of 1.000
939          KM
940          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
941          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
942          KM   .25 .25 .24 .24 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
943          KM
944          KM          L=   1.053 miles, S=  209 feet/mile, Kb= .11
945          KM
946          BA   0.403
947          LG    0.27    0.30    4.50    0.36   22.00
948          UC   0.471   0.281
949          UA       0       3       5       8      12      20      43      75      90      96
950          UA     100
             *

951          KK   C502L
952          KM        Combine routed hydrograph 501502 w/runoff from S502
953          HC       2
             *

954          KK    S503
955          KM   Sub-Basin   S503
956          KM
957          KM      The Clark Unit Hydrograph is used for this basin.
958          KM          The Urban time-area relation is used for this basin.
959          KM
960          KM      Time of Concentration for this sub-basin is based on the following:
961          KM          An rainfall areal reduction factor of 1.000
962          KM
963          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
964          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
965          KM   .26 .26 .26 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1                                                HEC-1 INPUT                                          PAGE 23

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

966          KM
967          KM          L=   1.891 miles, S=  116 feet/mile, Kb= .06
968          KM
```

```
 969          BA   0.994
 970          LG    0.27    0.28    4.65    0.33   31.00
 971          UC   0.567   0.329
 972          UA       0       5      16      30      65      77      84      90      94      97
 973          UA     100
              *

 974          KK   C502I
 975          KM        Combine hydrograph from C502L w/runoff from S503
 976          HC       2
              *

 977          KK   C502O
 978          KM        Storage routing at crossing structure no. 81
 979          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 980          RS       1    STOR       0
 981          SQ       0     248     800    1600    2160    2500    2900    3200
 982          SE    1500    1503    1506    1512    1518    1524    1530    1536
 983          SV       0    2.37    9.23   20.95   37.67  122.58   212.7  516.24
 984          SE    1500    1508    1512    1516    1520    1528    1532    1540
              *

 985          KK  502505
 986          KM        Normal depth route from C502 to C505L
 987          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 988          RS       8    FLOW      -1
 989          RC    .046     .04    .046    8775  0.0091
 990          RX  9875.7  9921.8  9941.2  9962.7 10048.7 10088.3 10258.2 10339.9
 991          RY  1488.4  1476.5  1472.2    1469  1470.4  1480.9  1485.4  1497.1
 992          RL                    0.94    1469
              *

 993          KK    S504
 994          KM   Sub-Basin   S504
 995          KM
 996          KM      The Clark Unit Hydrograph is used for this basin.
 997          KM          The Urban time-area relation is used for this basin.
 998          KM
 999          KM      Time of Concentration for this sub-basin is based on the following:
1000          KM          An rainfall areal reduction factor of 1.000
1001          KM
1002          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1003          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1004          KM   .26 .25 .25 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1005          KM
1006          KM          L=   1.571 miles, S=   64 feet/mile, Kb= .04
1007          KM
1008          BA   0.326
1009          LG    0.24    0.25    4.40    0.39   33.00
1010          UC   0.483   0.449
1011          UA       0       5      16      30      65      77      84      90      94      97
1012          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1013          KK   C505L
1014          KM        Combine routed hydrograph 502505 w/runoff from S504
1015          HC       2
              *

1016          KK    S505
1017          KM   Sub-Basin   S505
1018          KM
1019          KM      The Clark Unit Hydrograph is used for this basin.
1020          KM          The Natural time-area relation is used for this basin.
1021          KM
1022          KM      Time of Concentration for this sub-basin is based on the following:
1023          KM          An rainfall areal reduction factor of 1.000
1024          KM
1025          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1026          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1027          KM   .25 .24 .24 .24 .24 .23 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1028          KM
1029          KM          L=   0.472 miles, S=  365 feet/mile, Kb= .14
1030          KM
1031          BA   0.143
1032          LG    0.24    0.33    4.40    0.37   20.00
1033          UC   0.300   0.162
```

```
1034        UA       0       3       5       8      12      20      43      75      90      96
1035        UA     100
            *

1036        KK   C5030
1037        KM        Storage routing at crossing structure no. 94
1038        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1039        RS       1    STOR       0
1040        SQ       0     7.5      22      45      71      93     110
1041        SE    1519  1520.25 1521.5    1524    1529    1534    1540
1042        SV       0    0.61    2.78    8.03   18.24
1043        SE    1519    1528    1532    1536    1540
            *

1044        KK  503505
1045        KM        Normal depth route from S505 to C505
1046        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1047        RS      14    FLOW      -1
1048        RC    .045    .047    .043    9136   .0115
1049        RX    9715  9892.4    9965  9996.6   10000 10044.9 10077.4 10088.5
1050        RY  1504.8  1497.4  1487.9  1471.1  1471.6  1487.4  1484.4  1483.1
1051        RL                    0.63  1471.1
            *

1052        KK    S506
1053        KM   Sub-Basin   S506
1054        KM
1055        KM      The Clark Unit Hydrograph is used for this basin.
1056        KM          The Natural time-area relation is used for this basin.
1057        KM
1058        KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1059        KM          An rainfall areal reduction factor of 1.000
1060        KM
1061        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1062        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1063        KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1064        KM
1065        KM          L=   0.726 miles, S=  307 feet/mile, Kb= .10
1066        KM
1067        BA   0.151
1068        LG    0.23    0.32    5.70    0.19   27.00
1069        UC   0.321   0.238
1070        UA       0       3       5       8      12      20      43      75      90      96
1071        UA     100
            *

1072        KK   C5040
1073        KM        Storage routing at crossing structure no. 93
1074        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1075        RS       1    STOR       0
1076        SQ       0     7.5      22      52      72      90     103     115
1077        SE  1513.9  1515.2  1516.4  1520.2  1524.2  1528.2  1532.2    1540
1078        SV       0     0.1    0.18    1.89    5.34   11.99   24.05    43.4
1079        SE  1513.9  1517.8    1520    1524    1528    1532    1536    1540
            *

1080        KK  504505
1081        KM        Normal depth route from S506 to C505
1082        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1083        RS      12    FLOW      -1
1084        RC    .045    .043    .044    7754  0.0129
1085        RX  9785.2  9855.2  9914.4  9959.2 10013.6 10041.2 10119.8 10183.2
1086        RY    1501  1493.8  1487.5    1473  1468.9  1480.7  1487.9  1494.5
            *

1087        KK    S507
1088        KM   Sub-Basin   S507
1089        KM
1090        KM      The Clark Unit Hydrograph is used for this basin.
1091        KM          The Urban time-area relation is used for this basin.
1092        KM
1093        KM      Time of Concentration for this sub-basin is based on the following:
1094        KM          An rainfall areal reduction factor of 1.000
1095        KM
1096        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1097        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1098        KM   .26 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .00 .00 .00 .00 .00 .00
```

```
1099        KM
1100        KM          L=   1.467 miles, S=   68 feet/mile, Kb= .03
1101        KM
1102        BA   0.666
1103        LG    0.28    0.25    5.70    0.21   12.00
1104        UC   0.392   0.224
1105        UA       0       5      16      30      65      77      84      90      94      97
1106        UA     100
            *
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1107        KK   C505R
1108        KM        Combine routed hydrographs 503505 and 504505 w/runoff from S507
1109        HC       3
            *

1110        KK    C505
1111        KM        Combine hydrographs from C505L and C505R
1112        HC       2
            *

1113        KK  505509
1114        KM        Normal depth route from C505 to C509L
1115        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1116        RS       7    FLOW      -1
1117        RC    .046    .047    .036    6213  0.0064
1118        RX  9136.7  9456.9  9928.8   10000 10150.9 10209.7   10414 10505.9
1119        RY  1419.5  1401.9    1395    1390  1390.3  1398.3  1395.1  1398.3
1120        RL                    0.94  1390.0
            *

1121        KK    S508
1122        KM   Sub-Basin   S508
1123        KM
1124        KM      The Clark Unit Hydrograph is used for this basin.
1125        KM          The Urban time-area relation is used for this basin.
1126        KM
1127        KM      Time of Concentration for this sub-basin is based on the following:
1128        KM          An rainfall areal reduction factor of 1.000
1129        KM
1130        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1131        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1132        KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1133        KM
1134        KM          L=   1.082 miles, S=   92 feet/mile, Kb= .03
1135        KM
1136        BA   0.295
1137        LG    0.28    0.26    5.30    0.25   22.00
1138        UC   0.304   0.211
1139        UA       0       5      16      30      65      77      84      90      94      97
1140        UA     100
            *

1141        KK   C509L
1142        KM        Combine routed hydrograph 505509 w/runoff from S508
1143        HC       2
            *

1144        KK    S509
1145        KM   Sub-Basin   S509
1146        KM
1147        KM      The Clark Unit Hydrograph is used for this basin.
1148        KM          The Urban time-area relation is used for this basin.
1149        KM
1150        KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1151        KM          An rainfall areal reduction factor of 1.000
1152        KM
1153        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1154        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1155        KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1156        KM
1157        KM          L=   0.721 miles, S=  304 feet/mile, Kb= .05
1158        KM
1159        BA   0.170
```

```
1160          LG    0.28     0.26    4.65    0.33   33.00
1161          UC   0.225    0.149
1162          UA       0        5      16      30      65      77      84      90      94      97
1163          UA     100
              *

1164          KK   C506O
1165          KM        Storage routing at crossing structure no. 84
1166          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1167          RS       1     STOR       0
1168          SQ       0      7.5      22      45      71      93     110
1169          SE    1519 1520.25  1521.5    1524    1529    1534    1540
1170          SV       0      .77    4.36   15.19   35.89
1171          SE    1519     1528    1532    1536    1540
              *

1172          KK  506508
1173          KM        Normal depth route from S506 to C508
1174          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1175          RS       6     FLOW      -1
1176          RC    .045     .045    .035    4023   .0149
1177          RX  9717.6   9800.2  9981.4   10000 10010.3 10036.3 10068.8 10227.2
1178          RY  1512.9   1510.9  1508.9    1502    1499  1505.7  1511.5  1512.3
              *

1179          KK    S510
1180          KM   Sub-Basin   S510
1181          KM
1182          KM     The Clark Unit Hydrograph is used for this basin.
1183          KM         The Urban time-area relation is used for this basin.
1184          KM
1185          KM     Time of Concentration for this sub-basin is based on the following:
1186          KM         An rainfall areal reduction factor of 1.000
1187          KM
1188          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1189          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1190          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
1191          KM
1192          KM         L=   0.803 miles, S=   75 feet/mile, Kb= .04
1193          KM
1194          BA   0.127
1195          LG    0.24     0.15    7.30    0.11   44.00
1196          UC   0.317    0.281
1197          UA       0        5      16      30      65      77      84      90      94      97
1198          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1199          KK   C508R
1200          KM        Combine routed hydrograph 506508 w/runoff from S510
1201          HC       2
              *

1202          KK    S511
1203          KM   Sub-Basin   S511
1204          KM
1205          KM     The Clark Unit Hydrograph is used for this basin.
1206          KM         The Urban time-area relation is used for this basin.
1207          KM
1208          KM     Time of Concentration for this sub-basin is based on the following:
1209          KM         An rainfall areal reduction factor of 1.000
1210          KM
1211          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1212          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1213          KM   .27 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1214          KM
1215          KM         L=   1.319 miles, S=  270 feet/mile, Kb= .05
1216          KM
1217          BA   0.385
1218          LG    0.29     0.28    5.70    0.22   29.00
1219          UC   0.313    0.219
1220          UA       0        5      16      30      65      77      84      90      94      97
1221          UA     100
              *

1222          KK   C507O
1223          KM        Storage routing at crossing structure no. 82
1224          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
```

```
1225          RS       1    STOR       0
1226          SQ       0     7.5      22      45      71      93     108     115
1227          SE    1516 1517.25  1518.5    1521    1526    1531    1536    1540
1228          SV       0     .75    4.47   19.99   60.85  133.63
1229          SE    1520    1524    1528    1532    1536    1540
              *

1230          KK  507508
1231          KM        Normal depth route from S511 to C508
1232          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1233          RS       8    FLOW      -1
1234          RC    .045    .045    .035    5400   .0111
1235          RX  9723.2  9781.7   9912.  9989.1   10000 10022.9 10089.7 10209.7
1236          RY  1491.1  1490.1  1489.9  1476.5  1477.1  1483.3  1486.2  1492.1
1237          RL                    0.39  1476.5
              *

1238          KK   S512
1239          KM   Sub-Basin   S512
1240          KM
1241          KM      The Clark Unit Hydrograph is used for this basin.
1242          KM          The Urban time-area relation is used for this basin.
1243          KM
1244          KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1245          KM          An rainfall areal reduction factor of 1.000
1246          KM
1247          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1248          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1249          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .02 .02 .02
1250          KM
1251          KM          L=   0.974 miles, S=   62 feet/mile, Kb= .04
1252          KM
1253          BA   0.214
1254          LG    0.19    0.15    8.00    0.08   48.00
1255          UC   0.367   0.286
1256          UA       0       5      16      30      65      77      84      90      94      97
1257          UA     100
              *

1258          KK   C508L
1259          KM        Combine routed hydrograph 507508 w/runoff from S512
1260          HC       2
              *

1261          KK    C508
1262          KM        Combine hydrographs from C508L and C508R
1263          HC       2
              *

1264          KK  508509
1265          KM        Normal depth route from C508 to C509
1266          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1267          RS      13    FLOW      -1
1268          RC    .045    .041    .045   10349  0.0077
1269          RX  9573.3  9869.3    9973  9985.2   10000   10053 10231.6 10511.6
1270          RY  1439.9  1425.1  1424.7  1422.1  1419.1  1425.1  1437.1  1444.5
1271          RL                    0.94  1419.1
              *

1272          KK    S513
1273          KM   Sub-Basin   S513
1274          KM
1275          KM      The Clark Unit Hydrograph is used for this basin.
1276          KM          The Urban time-area relation is used for this basin.
1277          KM
1278          KM      Time of Concentration for this sub-basin is based on the following:
1279          KM          An rainfall areal reduction factor of 1.000
1280          KM
1281          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1282          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1283          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01 .01
1284          KM
1285          KM          L=   2.301 miles, S=   52 feet/mile, Kb= .02
1286          KM
1287          BA   0.778
1288          LG    0.28    0.25    5.40    0.25   19.00
1289          UC   0.433   0.329
```

```
1290          UA       0       5      16      30      65      77      84      90      94      97
1291          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 30

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1292          KK   C509R
1293          KM        Combine routed hydrograph 508509 w/runoff from S513
1294          HC       2
              *

1295          KK    C509
1296          KM        Combine hydrographs from C509L and C509R
1297          HC       2
              *

1298          KK  509510
1299          KM        Normal depth route from C509 to C510
1300          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1301          RS       2    FLOW      -1
1302          RC    .046    .043    .045    1958   .0102
1303          RX  9605.5  9805.1  9911.8   10000 10026.3 10119.6 10293.4 10613.5
1304          RY  1374.6  1369.2  1370.3  1365.5  1365.6  1379.6  1383.9  1390.1
1305          RL                    0.38  1365.5
              *

1306          KK    S514
1307          KM   Sub-Basin   S514
1308          KM
1309          KM      The Clark Unit Hydrograph is used for this basin.
1310          KM          The Urban time-area relation is used for this basin.
1311          KM
1312          KM      Time of Concentration for this sub-basin is based on the following:
1313          KM          An rainfall areal reduction factor of 1.000
1314          KM
1315          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1316          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1317          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
1318          KM
1319          KM          L=   2.147 miles, S=   65 feet/mile, Kb= .02
1320          KM
1321          BA   0.650
1322          LG    0.24    0.16    7.60    0.10   31.00
1323          UC   0.375   0.293
1324          UA       0       5      16      30      65      77      84      90      94      97
1325          UA     100
              *

1326          KK    C510
1327          KM        Combine routed hydrograph 509510 w/runoff from S514
1328          HC       2
              *

1329          KK  510511
1330          KM        Normal depth route from C510 to C511
1331          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1332          RS       9    FLOW      -1
1333          RC    .046    .044    .046    6722  0.0067
1334          RX  9361.9  9781.7  9944.4  9985.6   10000 10040.8   10420 11470.9
1335          RY  1382.6  1375.5  1364.2  1355.1  1355.4  1360.8  1363.1  1381.1
1                                          HEC-1 INPUT                                          PAGE 31

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1336          RL                    0.38  1355.1
              *

1337          KK    S515
1338          KM   Sub-Basin   S515
1339          KM
1340          KM      The Clark Unit Hydrograph is used for this basin.
1341          KM          The Urban time-area relation is used for this basin.
1342          KM
1343          KM      Time of Concentration for this sub-basin is based on the following:
1344          KM          An rainfall areal reduction factor of 1.000
1345          KM
1346          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1347          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1348          KM   .29 .29 .29 .29 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
```

```
1349          KM
1350          KM          L=   1.948 miles, S=   54 feet/mile, Kb= .02
1351          KM
1352          BA   1.102
1353          LG    0.25    0.16    8.80    0.06   29.00
1354          UC   0.379   0.203
1355          UA       0       5      16      30      65      77      84      90      94      97
1356          UA     100
              *

1357          KK    C511
1358          KM        Combine routed hydrograph 510511 w/runoff from S515
1359          HC       2
              *

1360          KK  511512
1361          KM        Normal depth route from C511 to C512
1362          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1363          RS       9    FLOW      -1
1364          RC    .046    .044    .046    9226  0.0081
1365          RX  9565.4  9665.5  9852.4   10000 10019.5 10074.2 10242.6   10760
1366          RY  1305.6  1305.6  1303.1  1297.8  1296.9  1336.3  1339.9  1336.5
1367          RL                    0.40  1296.9
              *

1368          KK    S516
1369          KM   Sub-Basin   S516
1370          KM
1371          KM      The Clark Unit Hydrograph is used for this basin.
1372          KM          The Urban time-area relation is used for this basin.
1373          KM
1374          KM      Time of Concentration for this sub-basin is based on the following:
1375          KM          An rainfall areal reduction factor of 1.000
1376          KM
1377          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1378          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1379          KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .02 .02 .02 .02 .02 .02 .02
1380          KM
1381          KM          L=   1.747 miles, S=   66 feet/mile, Kb= .03
1382          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1383          BA   0.540
1384          LG    0.22    0.27    4.80    0.29   47.00
1385          UC   0.425   0.318
1386          UA       0       5      16      30      65      77      84      90      94      97
1387          UA     100
              *

1388          KK    C512
1389          KM        Combine routed hydrograph 511512 w/runoff from S516
1390          HC       2
              *

1391          KK  WEST-3
1392          KM        Dummy combine of major basins S100, S200, S300, S400 and S500
1393          HC       2
              *
              *  ******************************************************************************
              *                 Begin Major Basin 600 (Morgan City Wash)
              *  ******************************************************************************
              *

1394          KK    S600
1395          KM   Sub-Basin   S600
1396          KM
1397          KM      The Clark Unit Hydrograph is used for this basin.
1398          KM          The Natural time-area relation is used for this basin.
1399          KM
1400          KM      Time of Concentration for this sub-basin is based on the following:
1401          KM          An rainfall areal reduction factor of 1.000
1402          KM
1403          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1404          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1405          KM   .23 .23 .23 .23 .22 .22 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1406          KM
1407          KM          L=   2.796 miles, S=  271 feet/mile, Kb= .09
1408          KM
1409          BA   2.018
```

```
1410          LG    0.25    0.35    4.00    0.49   22.00
1411          UC   0.763   0.418
1412          UA       0       3       5       8      12      20      43      75      90      96
1413          UA     100
              *

1414          KK  600601
1415          KM        Normal depth route from S600 to C601
1416          KM        Source: Morgan City Wash FDS, FCD 89-15
1417          RS       2    FLOW      -1
1418          RC    0.05   0.035    0.05    3463   .0332
1419          RX     100     110     135     200     220     260     275     290
1420          RY    2516    2512    2504    2500    2510    2520    2530    2540
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1421          KK    S601
1422          KM   Sub-Basin   S601
1423          KM
1424          KM      The Clark Unit Hydrograph is used for this basin.
1425          KM          The Natural time-area relation is used for this basin.
1426          KM
1427          KM      Time of Concentration for this sub-basin is based on the following:
1428          KM          An rainfall areal reduction factor of 1.000
1429          KM
1430          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1431          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1432          KM   .27 .27 .27 .27 .26 .26 .03 .03 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
1433          KM
1434          KM          L=   1.840 miles, S=  232 feet/mile, Kb= .10
1435          KM
1436          BA   0.901
1437          LG    0.25    0.39    5.70    0.21   44.00
1438          UC   0.588   0.354
1439          UA       0       3       5       8      12      20      43      75      90      96
1440          UA     100
              *

1441          KK    C601
1442          KM        Combine routed hydrograph from S600 w/runoff from S601
1443          HC       2
              *

1444          KK  601602
1445          KM        Normal depth route from S601 to C602
1446          KM        Source: Morgan City Wash FDS, FCD 89-15
1447          RS       3    FLOW      -1
1448          RC    0.05   0.035    0.05    6017   .0266
1449          RX     100     130     140     155     245     255     270     340
1450          RY    2380    2360    2356    2352    2352    2356    2360    2380
              *

1451          KK    S603
1452          KM   Sub-Basin   S603
1453          KM
1454          KM      The Clark Unit Hydrograph is used for this basin.
1455          KM          The Natural time-area relation is used for this basin.
1456          KM
1457          KM      Time of Concentration for this sub-basin is based on the following:
1458          KM          An rainfall areal reduction factor of 1.000
1459          KM
1460          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1461          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1462          KM   .27 .27 .27 .26 .26 .26 .03 .03 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1463          KM
1464          KM          L=   1.377 miles, S=  326 feet/mile, Kb= .10
1465          KM
1466          BA   0.665
1467          LG    0.25    0.39    5.80    0.20   41.00
1468          UC   0.433   0.238
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1469          UA       0       3       5       8      12      20      43      75      90      96
1470          UA     100
              *
```

```
1471          KK   C602L
1472          KM        Combine routed hydrograph 601602 w/runoff from S603
1473          HC       2
              *

1474          KK    S602
1475          KM   Sub-Basin   S602
1476          KM
1477          KM      The Clark Unit Hydrograph is used for this basin.
1478          KM          The Natural time-area relation is used for this basin.
1479          KM
1480          KM      Time of Concentration for this sub-basin is based on the following:
1481          KM          An rainfall areal reduction factor of 1.000
1482          KM
1483          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1484          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1485          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1486          KM
1487          KM          L=   3.035 miles, S=  258 feet/mile, Kb= .09
1488          KM
1489          BA   1.883
1490          LG    0.25     0.35     4.35     0.41    35.00
1491          UC   0.788    0.481
1492          UA       0        3        5        8       12       20       43       75       90       96
1493          UA     100
              *

1494          KK    C602
1495          KM        Combine hydrograph at C602L w/runoff from S602
1496          HC       2
              *

1497          KK  602603
1498          KM        Normal depth route from C602 to C603L
1499          KM        Source: Morgan City Wash FDS, FCD 89-15
1500          RS       7    FLOW      -1
1501          RC    0.05    0.035    0.05    7614    .0171
1502          RX    1000     1020    1045    1065     1322     1340     1372     1405
1503          RY    2228     2224    2220    2212     2212     2220     2240     2260
1504          RL                     0.96  2212.0
              *

1505          KK    S606
1506          KM   Sub-Basin   S606
1507          KM
1508          KM      The Clark Unit Hydrograph is used for this basin.
1509          KM          The Natural time-area relation is used for this basin.
1510          KM
1511          KM      Time of Concentration for this sub-basin is based on the following:
1512          KM          An rainfall areal reduction factor of 1.000
1513          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1514          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1515          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1516          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1517          KM
1518          KM          L=   2.111 miles, S=  300 feet/mile, Kb= .10
1519          KM
1520          BA   0.660
1521          LG    0.26     0.35     4.50     0.37    35.00
1522          UC   0.600    0.484
1523          UA       0        3        5        8       12       20       43       75       90       96
1524          UA     100
              *

1525          KK   C603L
1526          KM        Combine routed hydrograph 602603 w/runoff from S606
1527          HC       2
              *

1528          KK    S605
1529          KM   Sub-Basin   S605
1530          KM
1531          KM      The Clark Unit Hydrograph is used for this basin.
1532          KM          The Natural time-area relation is used for this basin.
1533          KM
1534          KM      Time of Concentration for this sub-basin is based on the following:
1535          KM          An rainfall areal reduction factor of 1.000
```

```
1536        KM
1537        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1538        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1539        KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1540        KM
1541        KM          L=   2.322 miles, S=  229 feet/mile, Kb= .10
1542        KM
1543        BA   1.085
1544        LG    0.25    0.35    4.35    0.41   35.00
1545        UC   0.742   0.497
1546        UA       0       3       5       8      12      20      43      75      90      96
1547        UA     100
            *

1548        KK    S604
1549        KM   Sub-Basin   S604
1550        KM
1551        KM      The Clark Unit Hydrograph is used for this basin.
1552        KM          The Natural time-area relation is used for this basin.
1553        KM
1554        KM      Time of Concentration for this sub-basin is based on the following:
1555        KM          An rainfall areal reduction factor of 1.000
1556        KM
1557        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1558        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1559        KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1560        KM
1561        KM          L=   4.105 miles, S=  207 feet/mile, Kb= .09
1562        KM
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1563        BA   2.656
1564        LG    0.25    0.35    4.35    0.41   35.00
1565        UC   1.100   0.729
1566        UA       0       3       5       8      12      20      43      75      90      96
1567        UA     100
            *

1568        KK    C603
1569        KM        Combine hydrograph from C603L w/runoff from  S605, and S604
1570        HC       3
            *

1571        KK  603604
1572        KM        Normal depth route from C603 to C604R
1573        KM        Source: Morgan City Wash FDS, FCD 89-15
1574        RS       5    FLOW      -1
1575        RC    0.05   0.035    0.05    7830   .0192
1576        RX    1000    1022    1038    1053    1328    1375    1410    1430
1577        RY    2108    2104    2100    2088    2088    2100    2108    2112
1578        RL                    0.96  2088.0
            *

1579        KK    S609
1580        KM   Sub-Basin   S609
1581        KM
1582        KM      The Clark Unit Hydrograph is used for this basin.
1583        KM          The Natural time-area relation is used for this basin.
1584        KM
1585        KM      Time of Concentration for this sub-basin is based on the following:
1586        KM          An rainfall areal reduction factor of 1.000
1587        KM
1588        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1589        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1590        KM   .24 .24 .24 .24 .23 .23 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1591        KM
1592        KM          L=   2.239 miles, S=  214 feet/mile, Kb= .09
1593        KM
1594        BA   0.560
1595        LG    0.28    0.32    4.10    0.47   28.00
1596        UC   0.700   0.660
1597        UA       0       3       5       8      12      20      43      75      90      96
1598        UA     100
            *

1599        KK   C604R
1600        KM        Combine routed hydrograph 603604 w/runoff from S609
1601        HC       2
            *
```

```
1602          KK    S607
1603          KM   Sub-Basin   S607
1604          KM
1605          KM      The Clark Unit Hydrograph is used for this basin.
1606          KM          The Natural time-area relation is used for this basin.
1607          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1608          KM      Time of Concentration for this sub-basin is based on the following:
1609          KM          An rainfall areal reduction factor of 1.000
1610          KM
1611          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1612          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1613          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1614          KM
1615          KM          L=   2.567 miles, S=  257 feet/mile, Kb= .10
1616          KM
1617          BA   0.822
1618          LG    0.26    0.35    5.10    0.27   35.00
1619          UC   0.733   0.623
1620          UA       0       3       5       8      12      20      43      75      90      96
1621          UA     100
              *

1622          KK    C604
1623          KM        Combine hydrograph from C604R w/runoff from S607
1624          HC       2
              *

1625          KK  604605
1626          KM        Normal depth route from C604 to C605
1627          KM        Source: Morgan City Wash FDS, FCD 89-15
1628          RS       1    FLOW      -1
1629          RC    0.05   0.035    0.05    1543   .0065
1630          RX    1000    1080    1110    1125    1210    1292    1340    1375
1631          RY    2016    2112    2000    1984    1984    1992    2000    2008
              *

1632          KK    S608
1633          KM   Sub-Basin   S608
1634          KM
1635          KM      The Clark Unit Hydrograph is used for this basin.
1636          KM          The Natural time-area relation is used for this basin.
1637          KM
1638          KM      Time of Concentration for this sub-basin is based on the following:
1639          KM          An rainfall areal reduction factor of 1.000
1640          KM
1641          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1642          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1643          KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1644          KM
1645          KM          L=   1.398 miles, S=  230 feet/mile, Kb= .09
1646          KM
1647          BA   0.508
1648          LG    0.27    0.36    5.80    0.20   37.00
1649          UC   0.458   0.299
1650          UA       0       3       5       8      12      20      43      75      90      96
1651          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1652          KK    C605
1653          KM        Combine routed hydrograph from 604605 w/runoff from S608
1654          HC       2
              *

1655          KK  605606
1656          KM        Normal depth route from C605 to C606L
1657          KM        Source: Morgan City Wash FDS, FCD 89-15
1658          RS       3    FLOW      -1
1659          RC    0.05   0.035    0.05    5520   .0199
1660          RX    1000    1052    1190    1248    1281    1340    1368    1395
1661          RY    1940    1928    1928    1924    1924    1928    1936    1940
1662          RL                    0.96  1924.0
              *
```

```
1663          KK    S610
1664          KM   Sub-Basin   S610
1665          KM
1666          KM      The Clark Unit Hydrograph is used for this basin.
1667          KM          The Urban time-area relation is used for this basin.
1668          KM
1669          KM      Time of Concentration for this sub-basin is based on the following:
1670          KM          An rainfall areal reduction factor of 1.000
1671          KM
1672          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1673          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1674          KM   .27 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1675          KM
1676          KM          L=   1.869 miles, S=  118 feet/mile, Kb= .06
1677          KM
1678          BA   0.603
1679          LG    0.28    0.30    5.10    0.27   40.00
1680          UC   0.546   0.416
1681          UA       0       5      16      30      65      77      84      90      94      97
1682          UA     100
              *

1683          KK   C606L
1684          KM        Combine routed hydrograph 605606 w/runoff from S610
1685          HC       2
              *

1686          KK    S612
1687          KM   Sub-Basin   S612
1688          KM
1689          KM      The Clark Unit Hydrograph is used for this basin.
1690          KM          The Urban time-area relation is used for this basin.
1691          KM
1692          KM      Time of Concentration for this sub-basin is based on the following:
1693          KM          An rainfall areal reduction factor of 1.000
1694          KM
1695          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1696          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1697          KM   .28 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1698          KM
1699          KM          L=   2.531 miles, S=  230 feet/mile, Kb= .08
1700          KM
1701          BA   0.808
1702          LG    0.29    0.26    6.40    0.16   34.00
1703          UC   0.617   0.514
1704          UA       0       5      16      30      65      77      84      90      94      97
1705          UA     100
              *

1706          KK    C606
1707          KM        Combine hydrograph from C606L w/runoff from S612
1708          HC       2
              *

1709          KK  606608
1710          KM        Normal depth route from C606 to C608
1711          KM        Source: Morgan City Wash FDS, FCD 89-15
1712          RS       1    FLOW      -1
1713          RC    0.05   0.035    0.05    1141   .0175
1714          RX    1000    1034    1070    1150    1237    1280    1378    1420
1715          RY    1888    1880    1876    1868    1868    1876    1900    1920
1716          RL                    0.96  1868.0
              *

1717          KK    S611
1718          KM   Sub-Basin   S611
1719          KM
1720          KM      The Clark Unit Hydrograph is used for this basin.
1721          KM          The Natural time-area relation is used for this basin.
1722          KM
1723          KM      Time of Concentration for this sub-basin is based on the following:
1724          KM          An rainfall areal reduction factor of 1.000
1725          KM
1726          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1727          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1728          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
```

```
1729          KM
1730          KM         L=   1.286 miles, S=  270 feet/mile, Kb= .12
1731          KM
1732          BA   0.569
1733          LG    0.25    0.35    4.35    0.41   35.00
1734          UC   0.504   0.292
1735          UA       0       3       5       8      12      20      43      75      90      96
1736          UA     100
              *

1737          KK  607608
1738          KM       Normal depth route from S611 to S613
1739          KM       Source: Field Reconnaissance
1740          RS       6    FLOW      -1
1741          RC    .075     .03    .075   11167  0.0242
1742          RX     100     106     114     120     168     172     232     292
1743          RY     110     107     103     100     100     104     107     110
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1744          KK    S613
1745          KM   Sub-Basin   S613
1746          KM
1747          KM     The Clark Unit Hydrograph is used for this basin.
1748          KM         The Natural time-area relation is used for this basin.
1749          KM
1750          KM     Time of Concentration for this sub-basin is based on the following:
1751          KM         An rainfall areal reduction factor of 1.000
1752          KM
1753          KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1754          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1755          KM   .26 .26 .26 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1756          KM
1757          KM         L=   2.525 miles, S=  131 feet/mile, Kb= .09
1758          KM
1759          BA   1.797
1760          LG    0.28    0.29    4.55    0.35   36.00
1761          UC   0.925   0.510
1762          UA       0       3       5       8      12      20      43      75      90      96
1763          UA     100
              *

1764          KK    C608
1765          KM       Combine routed hydrograph 606608 and 607608 w/runoff from S613
1766          HC       3
              *

1767          KK  608609
1768          KM       Normal depth route from C608 to C609
1769          KM       Source: Morgan City Wash FDS, FCD 89-15
1770          RS       3    FLOW      -1
1771          RC    0.05   0.035    0.05    6518   .0123
1772          RX    1000    1031    1052    1090    1132    1290    1320    1360
1773          RY    1860    1848    1844    1836    1836    1844    1848    1860
1774          RL                    0.94  1836.0
              *

1775          KK    S614
1776          KM   Sub-Basin   S614
1777          KM
1778          KM     The Clark Unit Hydrograph is used for this basin.
1779          KM         The Natural time-area relation is used for this basin.
1780          KM
1781          KM     Time of Concentration for this sub-basin is based on the following:
1782          KM         An rainfall areal reduction factor of 1.000
1783          KM
1784          KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1785          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1786          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1787          KM
1788          KM         L=   2.285 miles, S=  149 feet/mile, Kb= .10
1789          KM
1790          BA   1.079
1791          LG    0.26    0.32    4.40    0.39   35.00
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
1792          UC   0.888   0.601
1793          UA       0       3       5       8      12      20      43      75      90      96
1794          UA     100
              *

1795          KK    C609
1796          KM        Combine routed hydrograph 608609 w/runoff from S614
1797          HC       2
              *

1798          KK  609611
1799          KM        Normal depth route from C609 to C611R
1800          KM        Source: Morgan City Wash FDS, FCD 89-15
1801          RS       5    FLOW      -1
1802          RC    0.05   0.035    0.05    6519   .0031
1803          RX    1000    1070    1145    1230    1410    1430    1550    1642
1804          RY    1732    1720    1716    1708    1708    1716    1720    1740
1805          RL                    0.94  1708.0
              *

1806          KK    S617
1807          KM   Sub-Basin   S617
1808          KM
1809          KM      The Clark Unit Hydrograph is used for this basin.
1810          KM          The Urban time-area relation is used for this basin.
1811          KM
1812          KM      Time of Concentration for this sub-basin is based on the following:
1813          KM          An rainfall areal reduction factor of 1.000
1814          KM
1815          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1816          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1817          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1818          KM
1819          KM          L=   1.368 miles, S=  154 feet/mile, Kb= .08
1820          KM
1821          BA   0.675
1822          LG    0.26    0.31    4.80    0.31   24.00
1823          UC   0.496   0.273
1824          UA       0       5      16      30      65      77      84      90      94      97
1825          UA     100
              *

1826          KK   C611R
1827          KM        Combine routed hydrograph 609611 w/runoff from S617
1828          HC       2
              *

1829          KK    S615
1830          KM   Sub-Basin   S615
1831          KM
1832          KM      The Clark Unit Hydrograph is used for this basin.
1833          KM          The Natural time-area relation is used for this basin.
1834          KM
1835          KM      Time of Concentration for this sub-basin is based on the following:
1836          KM          An rainfall areal reduction factor of 1.000
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1837          KM
1838          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1839          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1840          KM   .28 .28 .28 .27 .27 .27 .03 .03 .03 .03 .03 .03 .02 .02 .02 .02 .02 .02
1841          KM
1842          KM          L=   2.059 miles, S=  136 feet/mile, Kb= .12
1843          KM
1844          BA   1.055
1845          LG    0.25    0.39    6.20    0.17   55.00
1846          UC   0.913   0.578
1847          UA       0       3       5       8      12      20      43      75      90      96
1848          UA     100
              *

1849          KK  610611
1850          KM        Normal depth route from S615 to C611
1851          KM        Source: Morgan City Wash FDS, FCD 89-15
1852          RS       5    FLOW      -1
1853          RC    0.05   0.035    0.05    7981   .0100
1854          RX    1000    1028    1041    1078    1087    1092    1100    1108
1855          RY    1860    1840    1820    1800    1800    1820    1840    1860
              *
```

```
1856          KK    S616
1857          KM   Sub-Basin   S616
1858          KM
1859          KM      The Clark Unit Hydrograph is used for this basin.
1860          KM          The Natural time-area relation is used for this basin.
1861          KM
1862          KM      Time of Concentration for this sub-basin is based on the following:
1863          KM          An rainfall areal reduction factor of 1.000
1864          KM
1865          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1866          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1867          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1868          KM
1869          KM          L=   1.738 miles, S=  213 feet/mile, Kb= .09
1870          KM
1871          BA   0.505
1872          LG    0.25    0.32    5.20    0.26   21.00
1873          UC   0.554   0.441
1874          UA       0       3       5       8      12      20      43      75      90      96
1875          UA     100
              *

1876          KK   C611L
1877          KM        Combine routed hydrograph 6110611 w/runoff frm S616
1878          HC       2
              *
```

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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1879          KK    C611
1880          KM        Combine hydrographs C611L and C611R
1881          HC       2
              *

1882          KK  611613
1883          KM        Normal depth route from C611 to C613
1884          KM        Source: Morgan City Wash FDS, FCD 89-15
1885          RS       1    FLOW      -1
1886          RC    0.05   0.035    0.05    4445   .0382
1887          RX    1000    1050    1080    1122    1210    1250    1305    1338
1888          RY    1644    1644    1628    1620    1620    1628    1660    1680
1889          RL                    0.94  1620.0
              *

1890          KK    S618
1891          KM   Sub-Basin   S618
1892          KM
1893          KM      The Clark Unit Hydrograph is used for this basin.
1894          KM          The Natural time-area relation is used for this basin.
1895          KM
1896          KM      Time of Concentration for this sub-basin is based on the following:
1897          KM          An rainfall areal reduction factor of 1.000
1898          KM
1899          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1900          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1901          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1902          KM
1903          KM          L=   2.364 miles, S=  199 feet/mile, Kb= .10
1904          KM
1905          BA   0.958
1906          LG    0.21    0.36    5.20    0.26   22.00
1907          UC   0.796   0.586
1908          UA       0       3       5       8      12      20      43      75      90      96
1909          UA     100
              *

1910          KK   C613R
1911          KM        Combine routed hydrograph 611613 w/runoff from S618
1912          HC       2
              *

1913          KK    S619
1914          KM   Sub-Basin   S619
1915          KM
1916          KM      The Clark Unit Hydrograph is used for this basin.
1917          KM          The Natural time-area relation is used for this basin.
1918          KM
1919          KM      Time of Concentration for this sub-basin is based on the following:
```

```
1920          KM          An rainfall areal reduction factor of 1.000
1921          KM
1922          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1923          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1924          KM   .28 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
1                                          HEC-1 INPUT                                          PAGE 44

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1925          KM
1926          KM          L=   1.212 miles, S=   99 feet/mile, Kb= .12
1927          KM
1928          BA   0.827
1929          LG    0.27    0.36    6.80    0.14   39.00
1930          UC   0.721   0.334
1931          UA       0       3       5       8      12      20      43      75      90      96
1932          UA     100
              *

1933          KK  612613
1934          KM        Normal depth route from S619 to S620
1935          KM        Source: Morgan City Wash FDS, FCD 89-15
1936          RS       5    FLOW      -1
1937          RC    0.05   0.035    0.05    8752   .0331
1938          RX     100     103     106     110     180     184     187     190
1939          RY     110     107     104     100     100     104     107     110
              *

1940          KK    S620
1941          KM   Sub-Basin   S620
1942          KM
1943          KM      The Clark Unit Hydrograph is used for this basin.
1944          KM          The Natural time-area relation is used for this basin.
1945          KM
1946          KM      Time of Concentration for this sub-basin is based on the following:
1947          KM          An rainfall areal reduction factor of 1.000
1948          KM
1949          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1950          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1951          KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
1952          KM
1953          KM          L=   1.763 miles, S=  228 feet/mile, Kb= .13
1954          KM
1955          BA   0.444
1956          LG    0.23    0.38    6.40    0.16   37.00
1957          UC   0.696   0.619
1958          UA       0       3       5       8      12      20      43      75      90      96
1959          UA     100
              *

1960          KK   C613L
1961          KM        Combine routed hydrograph 612613 w/runoff from S620
1962          HC       2
              *

1963          KK    C613
1964          KM        Combine hydrographs C613R and C613L
1965          HC       2
              *
1                                          HEC-1 INPUT                                          PAGE 45

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1966          KK  613614
1967          KM        Normal depth route from C613 to C614
1968          KM        Source: Morgan City Wash FDS, FCD 89-15
1969          RS       3    FLOW      -1
1970          RC    0.05   0.035    0.05    5557   .0108
1971          RX    1000    1022    1050    1100    1180    1225    1260    1360
1972          RY    1640    1620    1580    1552    1552    1564    1576    1580
1973          RL                    0.94  1552.0
              *

1974          KK    S621
1975          KM   Sub-Basin   S621
1976          KM
1977          KM      The Clark Unit Hydrograph is used for this basin.
1978          KM          The Natural time-area relation is used for this basin.
1979          KM
1980          KM      Time of Concentration for this sub-basin is based on the following:
```

```
1981          KM          An rainfall areal reduction factor of 1.000
1982          KM
1983          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1984          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1985          KM   .24 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
1986          KM
1987          KM          L=   1.470 miles, S=  170 feet/mile, Kb= .08
1988          KM
1989          BA   0.923
1990          LG    0.22    0.31    4.80    0.31    4.00
1991          UC   0.508   0.249
1992          UA       0       3       5       8      12      20      43      75      90      96
1993          UA     100
              *

1994          KK    C614
1995          KM        Combine routed hydrograph 613614 w/runoff from S621
1996          HC       2
              *

1997          KK  614615
1998          KM        Normal depth route from C614 to C615
1999          KM        Source: Morgan City Wash FDS, FCD 89-15
2000          RS       4    FLOW      -1
2001          RC    0.05   0.035    0.05    7995   .0144
2002          RX    1000    1050    1088    1150    1195    1290    1340    1405
2003          RY    1496    1484    1476    1460    1460    1476    1484    1516
2004          RL                    0.94  1460.0
              *

2005          KK    S622
2006          KM   Sub-Basin   S622
2007          KM
2008          KM      The Clark Unit Hydrograph is used for this basin.
2009          KM          The Natural time-area relation is used for this basin.
2010          KM
2011          KM      Time of Concentration for this sub-basin is based on the following:
1                                        HEC-1 INPUT                                          PAGE 46

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2012          KM          An rainfall areal reduction factor of 1.000
2013          KM
2014          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2015          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2016          KM   .24 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2017          KM
2018          KM          L=   2.004 miles, S=  152 feet/mile, Kb= .12
2019          KM
2020          BA   0.897
2021          LG    0.19    0.35    4.90    0.30    4.00
2022          UC   0.975   0.667
2023          UA       0       3       5       8      12      20      43      75      90      96
2024          UA     100
              *

2025          KK    C615
2026          KM        Combine routed hydrograph from 614615 w/runoff from S622
2027          HC       2
              *

2028          KK  WEST-4
2029          KM        Dummy combine for all major basins, west of the Agua Fria River
2030          HC       2
              *

2031          KK    S700
2032          KM   Sub-Basin   S700
2033          KM
2034          KM      The Clark Unit Hydrograph is used for this basin.
2035          KM          The Urban time-area relation is used for this basin.
2036          KM
2037          KM      Time of Concentration for this sub-basin is based on the following:
2038          KM          An rainfall areal reduction factor of 1.000
2039          KM
2040          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2041          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2042          KM   .25 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
2043          KM
2044          KM          L=   1.923 miles, S=  185 feet/mile, Kb= .04
2045          KM
```

```
2046        BA   0.610
2047        LG    0.28    0.26    5.10    0.27    9.00
2048        UC   0.388   0.289
2049        UA       0       5      16      30      65      77      84      90      94      97
2050        UA     100
            *

2051        KK    S701
2052        KM   Sub-Basin   S701
2053        KM
2054        KM      The Clark Unit Hydrograph is used for this basin.
2055        KM          The Urban time-area relation is used for this basin.
2056        KM
2057        KM     Time of Concentration for this sub-basin is based on the following:
2058        KM          An rainfall areal reduction factor of 1.000
1                                        HEC-1 INPUT                                          PAGE 47

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2059        KM
2060        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2061        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2062        KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
2063        KM
2064        KM          L=   2.821 miles, S=  136 feet/mile, Kb= .06
2065        KM
2066        BA   0.720
2067        LG    0.28    0.29    5.60    0.22   18.00
2068        UC   0.708   0.698
2069        UA       0       5      16      30      65      77      84      90      94      97
2070        UA     100
            *

2071        KK    S702
2072        KM   Sub-Basin   S702
2073        KM
2074        KM     The Clark Unit Hydrograph is used for this basin.
2075        KM          The Urban time-area relation is used for this basin.
2076        KM
2077        KM     Time of Concentration for this sub-basin is based on the following:
2078        KM          An rainfall areal reduction factor of 1.000
2079        KM
2080        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2081        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2082        KM   .26 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
2083        KM
2084        KM          L=   1.395 miles, S=  215 feet/mile, Kb= .05
2085        KM
2086        BA   0.257
2087        LG    0.23    0.27    5.10    0.26   24.00
2088        UC   0.350   0.327
2089        UA       0       5      16      30      65      77      84      90      94      97
2090        UA     100
            *

2091        KK    S703
2092        KM   Sub-Basin   S703
2093        KM
2094        KM     The Clark Unit Hydrograph is used for this basin.
2095        KM          The Natural time-area relation is used for this basin.
2096        KM
2097        KM     Time of Concentration for this sub-basin is based on the following:
2098        KM          An rainfall areal reduction factor of 1.000
2099        KM
2100        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2101        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2102        KM   .24 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2103        KM
2104        KM          L=   1.126 miles, S=  204 feet/mile, Kb= .09
2105        KM
2106        BA   0.257
2107        LG    0.19    0.32    4.90    0.30    1.00
2108        UC   0.446   0.360
2109        UA       0       3       5       8      12      20      43      75      90      96
1                                        HEC-1 INPUT                                          PAGE 48

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2110        UA     100
            *
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```
2111          KK    S704
2112          KM   Sub-Basin   S704
2113          KM
2114          KM      The Clark Unit Hydrograph is used for this basin.
2115          KM          The Urban time-area relation is used for this basin.
2116          KM
2117          KM      Time of Concentration for this sub-basin is based on the following:
2118          KM          An rainfall areal reduction factor of 1.000
2119          KM
2120          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2121          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2122          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
2123          KM
2124          KM          L=   1.266 miles, S=  300 feet/mile, Kb= .07
2125          KM
2126          BA   0.408
2127          LG    0.28    0.29    4.90    0.29   14.00
2128          UC   0.363   0.241
2129          UA       0       5      16      30      65      77      84      90      94      97
2130          UA     100
              *

2131          KK  704705
2132          KM        Normal depth route from S704 to C705
2133          KM        Source: Field reconnaissance
2134          RS       6    FLOW      -1
2135          RC    .035    .045    .025    7534   .0186
2136          RX     100     123   159.5   162.8   186.8   205.3   206.3   207.3
2137          RY   108.5   102.7   101.3   100.2     100   108.3   109.3   110.3
              *

2138          KK    S705
2139          KM   Sub-Basin   S705
2140          KM
2141          KM      The Clark Unit Hydrograph is used for this basin.
2142          KM          The Urban time-area relation is used for this basin.
2143          KM
2144          KM      Time of Concentration for this sub-basin is based on the following:
2145          KM          An rainfall areal reduction factor of 1.000
2146          KM
2147          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2148          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2149          KM   .28 .28 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2150          KM
2151          KM          L=   2.145 miles, S=  253 feet/mile, Kb= .04
2152          KM
2153          BA   0.754
2154          LG    0.25    0.21    6.40    0.16   33.00
2155          UC   0.358   0.256
2156          UA       0       5      16      30      65      77      84      90      94      97
2157          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2158          KK    C705
2159          KM        Combine routed hydrograph 704705 w/runoff from S705
2160          HC       2
              *

2161          KK   C7050
2162          KM        Storage routing at crossing structure no. 63
2163          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2164          KM        Cooper Aerial Photography extended from Agua Fria FDS
2165          RS       1    STOR       0
2166          SQ       0     200     400     600     800    1000    1200    1400    1420    1800
2167          SQ    2000
2168          SE  1338.2 1342.26 1344.68 1347.93 1352.52 1359.03 1367.08 1376.59 1377.62    1400
2169          SE  1413.9
2170          SV       0    0.08    0.46    1.29    2.71    4.72    7.32   10.63   14.77   19.75
2171          SV   25.57   32.07   39.09   46.63   54.70   63.28   72.40   82.03   92.19  102.87
2172          SE  1338.2    1339    1340    1341    1342    1343    1344    1345    1346    1347
2173          SE    1348    1349    1350    1351    1352    1353    1354    1355    1356    1357
              *

2174          KK  7050AF
2175          KM        Normal depth route from C7050 to C705AF
2176          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2177          RS       5    FLOW      -1
```

```
2178          RC    .045    .045    .045 2253.82    .0082
2179          RX     100  147.63  203.16  349.46  505.89  666.35  920.07 1239.80
2180          RY    1324 1324.30    1324 1321.84 1321.64 1322.54    1324    1326
              *

2181          KK  S705AF
2182          KM   Sub-Basin S705AF
2183          KM
2184          KM      The Clark Unit Hydrograph is used for this basin.
2185          KM          The Natural time-area relation is used for this basin.
2186          KM
2187          KM      Time of Concentration for this sub-basin is based on the following:
2188          KM          An rainfall areal reduction factor of 1.000
2189          KM
2190          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2191          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2192          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2193          KM
2194          KM          L=   0.933 miles, S=   34 feet/mile, Kb= .05
2195          KM
2196          BA   0.183
2197          LG    0.31    0.22   10.10    0.03    0.00
2198          UC   0.488   0.415
2199          UA       0       3       5       8      12      20      43      75      90      96
2200          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2201          KK  C705AF
2202          KM       Combine routed hydrograph 7050AF w/runoff from S705
2203          HC       2
              *

2204          KK  WEST-5
2205          KM       Dummy combine for minor basins, west of the Agua Fria River
2206          HC       5
              *

2207          KK    S706
2208          KM   Sub-Basin   S706
2209          KM
2210          KM      The Clark Unit Hydrograph is used for this basin.
2211          KM          The Urban time-area relation is used for this basin.
2212          KM
2213          KM      Time of Concentration for this sub-basin is based on the following:
2214          KM          An rainfall areal reduction factor of 1.000
2215          KM
2216          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2217          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2218          KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2219          KM
2220          KM          L=   2.022 miles, S=  185 feet/mile, Kb= .03
2221          KM
2222          BA   0.713
2223          LG    0.26    0.25    5.70    0.21   37.00
2224          UC   0.329   0.230
2225          UA       0       5      16      30      65      77      84      90      94      97
2226          UA     100
              *

2227          KK    S707
2228          KM   Sub-Basin   S707
2229          KM
2230          KM      The Clark Unit Hydrograph is used for this basin.
2231          KM          The Urban time-area relation is used for this basin.
2232          KM
2233          KM      Time of Concentration for this sub-basin is based on the following:
2234          KM          An rainfall areal reduction factor of 1.000
2235          KM
2236          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2237          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2238          KM   .28 .28 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2239          KM
2240          KM          L=   2.256 miles, S=  217 feet/mile, Kb= .03
2241          KM
2242          BA   0.638
2243          LG    0.21    0.23    6.20    0.17   51.00
2244          UC   0.329   0.267
```

```
2245          UA       0       5      16      30      65      77      84      90      94      97
2246          UA     100
              *
1                                          HEC-1 INPUT                                                PAGE 51

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2247          KK    S728
2248          KM   Sub-Basin   S728
2249          KM
2250          KM      The Clark Unit Hydrograph is used for this basin.
2251          KM          The Urban time-area relation is used for this basin.
2252          KM
2253          KM      Time of Concentration for this sub-basin is based on the following:
2254          KM          An rainfall areal reduction factor of 1.000
2255          KM
2256          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2257          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2258          KM   .28 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .02 .02 .02 .02 .02 .02
2259          KM
2260          KM          L=   1.550 miles, S=   77 feet/mile, Kb= .04
2261          KM
2262          BA   0.276
2263          LG    0.21    0.30    5.20    0.22   46.00
2264          UC   0.442   0.442
2265          UA       0       5      16      30      65      77      84      90      94      97
2266          UA     100
              *

2267          KK    WEST
2268          KM       Dummy combine for all operations in the stack, west of the Agua Fria R.
2269          HC       5
              *

2270          KK    S708
2271          KM   Sub-Basin   S708
2272          KM
2273          KM      The Clark Unit Hydrograph is used for this basin.
2274          KM          The Urban time-area relation is used for this basin.
2275          KM
2276          KM      Time of Concentration for this sub-basin is based on the following:
2277          KM          An rainfall areal reduction factor of 1.000
2278          KM
2279          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2280          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2281          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2282          KM
2283          KM          L=   1.594 miles, S=  194 feet/mile, Kb= .04
2284          KM
2285          BA   0.706
2286          LG    0.29    0.16    9.70    0.05    7.00
2287          UC   0.329   0.191
2288          UA       0       5      16      30      65      77      84      90      94      97
2289          UA     100
              *
1                                          HEC-1 INPUT                                                PAGE 52

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2290          KK    S709
2291          KM   Sub-Basin   S709
2292          KM
2293          KM      The Clark Unit Hydrograph is used for this basin.
2294          KM          The Urban time-area relation is used for this basin.
2295          KM
2296          KM      Time of Concentration for this sub-basin is based on the following:
2297          KM          An rainfall areal reduction factor of 1.000
2298          KM
2299          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2300          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2301          KM   .29 .29 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
2302          KM
2303          KM          L=   1.417 miles, S=  155 feet/mile, Kb= .05
2304          KM
2305          BA   0.441
2306          LG    0.29    0.13   11.20    0.02    9.00
2307          UC   0.371   0.259
2308          UA       0       5      16      30      65      77      84      90      94      97
2309          UA     100
```

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                 *
2310             KK   C709O
2311             KM        Storage routing at crossing structure no. (South of 95)
2312             KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2313             KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2314             KM        Detour, Jan 4, 1985
2315             RS       1    STOR       0
2316             SQ       0     120     240     360     480     600     720     840     903    1080
2317             SQ    1200
2318             SE    1496 1500.80 1505.20 1512.68 1523.15 1525.11 1525.18 1525.23 1525.26 1525.33
2319             SE  1525.4
2320             SV     0.0    1.59    4.55    8.36   13.04   20.12   29.31   42.75   51.34   63.40
2321             SV   78.92   97.91
2322             SE    1496    1500    1504    1508    1512    1516    1520    1524    1528    1532
2323             SE    1536    1540
                 *

2324             KK  709710
2325             KM        Normal depth route from S709 to C710
2326             KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2327             RS       2    FLOW      -1
2328             RC     .05    .035     .05    2683   .0261
2329             RX     100     160     200     220     255     265     280     305
2330             RY    1448    1444    1440    1436    1436    1440    1444    1448
                 *

2331             KK    S710
2332             KM   Sub-Basin   S710
2333             KM
2334             KM      The Clark Unit Hydrograph is used for this basin.
2335             KM          The Urban time-area relation is used for this basin.
2336             KM
2337             KM      Time of Concentration for this sub-basin is based on the following:
1                                          HEC-1 INPUT                                          PAGE 53

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2338             KM          An rainfall areal reduction factor of 1.000
2339             KM
2340             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2341             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2342             KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2343             KM
2344             KM          L=   0.633 miles, S=  198 feet/mile, Kb= .03
2345             KM
2346             BA   0.112
2347             LG    0.23    0.16   10.10    0.04   13.00
2348             UC   0.179   0.133
2349             UA       0       5      16      30      65      77      84      90      94      97
2350             UA     100
                 *

2351             KK   C710I
2352             KM        Combine routed hydrograph 709710 w/runoff from S710
2353             HC       2
                 *

2354             KK   C710O
2355             KM        Storage routing at crossing structure no. 58
2356             KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2357             KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2358             KM        Detour, Jan 4, 1985
2359             RS       1    STOR       0
2360             SQ       0     120     240     360     480     600     720     840     960    1058
2361             SQ    1200
2362             SE  1424.2 1428.52 1431.70 1436.37 1442.23 1442.33 1442.39 1442.45 1442.50 1442.54
2363             SE  1442.6
2364             SV     0.0    1.08    3.46    7.13   13.17   22.51
2365             SE    1424    1428    1432    1436    1440    1444
                 *

2366             KK    S711
2367             KM   Sub-Basin   S711
2368             KM
2369             KM      The Clark Unit Hydrograph is used for this basin.
2370             KM          The Urban time-area relation is used for this basin.
2371             KM
2372             KM      Time of Concentration for this sub-basin is based on the following:
2373             KM          An rainfall areal reduction factor of 1.000
2374             KM
```

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2375          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2376          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2377          KM   .29 .29 .29 .29 .29 .29 .05 .05 .05 .05 .05 .04 .03 .03 .03 .03 .03 .03
2378          KM
2379          KM          L=   0.520 miles, S=  154 feet/mile, Kb= .03
2380          KM
2381          BA   0.159
2382          LG    0.28    0.10   11.20    0.03   22.00
2383          UC   0.171   0.088
2384          UA       0       5      16      30      65      77      84      90      94      97
2385          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 54

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2386          KK   C711O
2387          KM        Storage routing at crossing structure no. 71
2388          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2389          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2390          KM        Detour, Jan 4, 1985
2391          RS       1    STOR       0
2392          SQ       0      60     120     180     240     300     360     420     480     483
2393          SQ     600
2394          SE  1496.1 1499.98 1504.58 1512.31 1524.39 1525.07 1525.12 1525.15 1525.19 1525.19
2395          SE  1525.2
2396          SV     0.0    0.20    0.59    3.79    7.98   16.27   27.64   42.75   63.25
2397          SE  1496.1    1500    1504    1508    1512    1516    1520    1524    1528
              *

2398          KK  711712
2399          KM        Normal depth route from S711 to C712
2400          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2401          RS       1    FLOW      -1
2402          RC     .05    .035     .05    1586   .0441
2403          RX     100     135     190     215     250     285     335     395
2404          RY    1488    1484    1480    1476    1476    1480    1484    1488
              *

2405          KK    S712
2406          KM   Sub-Basin   S712
2407          KM
2408          KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2409          KM
2410          KM      The Clark Unit Hydrograph is used for this basin.
2411          KM          The Urban time-area relation is used for this basin.
2412          KM
2413          KM      Time of Concentration for this sub-basin is based on the following:
2414          KM          An rainfall areal reduction factor of 1.000
2415          KM
2416          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2417          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2418          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2419          KM
2420          KM          L=   0.312 miles, S=  271 feet/mile, Kb= .03
2421          KM
2422          BA   0.068
2423          LG    0.27    0.13   10.10    0.04   19.00
2424          UC   0.167   0.092
2425          UA       0       5      16      30      65      77      84      90      94      97
2426          UA     100
              *

2427          KK   C712I
2428          KM        Combine routed hydrograph 711712 w/runoff from S712
2429          HC       2
              *
1                                          HEC-1 INPUT                                          PAGE 55

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2430          KK   C712O
2431          KM        Storage routing at crossing structure no. 60
2432          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2433          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2434          KM        Detour, Jan 4, 1985
2435          RS       1    STOR       0
2436          SQ       0      90     180     270     360     450     540     630     658     810
2437          SQ     900
```

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2438          SE    1432 1435.56 1437.81 1440.49 1444.18 1449.19 1450.09 1450.14 1450.16 1450.24
2439          SE  1450.2
2440          SV     0.0     0.14     0.36     0.65     1.02     1.56     2.43     3.61     5.10
2441          SE    1432     1433     1434     1435     1436     1437     1438     1439     1440
              *

2442          KK  712714
2443          KM        Normal depth route from C712 to C714
2444          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2445          RS       3    FLOW      -1
2446          RC     .05     .035      .05     2032    .0172
2447          RX     100      325      355      370      415      435      450      515
2448          RY    1416     1412     1408     1404     1404     1408     1412     1408
              *

2449          KK    S713
2450          KM   Sub-Basin   S713
2451          KM
2452          KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2453          KM
2454          KM      The Clark Unit Hydrograph is used for this basin.
2455          KM          The Urban time-area relation is used for this basin.
2456          KM
2457          KM      Time of Concentration for this sub-basin is based on the following:
2458          KM          An rainfall areal reduction factor of 1.000
2459          KM
2460          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2461          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2462          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2463          KM
2464          KM          L=   0.545 miles, S=  220 feet/mile, Kb= .03
2465          KM
2466          BA   0.107
2467          LG    0.20     0.18    10.10     0.03    12.00
2468          UC   0.167    0.111
2469          UA       0        5       16       30       65       77       84       90       94       97
2470          UA     100
              *

2471          KK   C713O
2472          KM        Storage routing at crossing structure no. 59
2473          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2474          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2475          KM        Detour, Jan 4, 1985
2476          RS       1    STOR       0
2477          SQ       0      60      120      180      240      300      326      420      480      540
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2478          SQ     600
2479          SE    1420 1423.17 1425.30 1428.15 1432.22 1437.97 1438.04 1438.12 1438.15 1438.18
2480          SE  1438.2
2481          SV     0.0     2.35     5.72    10.11    15.52    26.19
2482          SE    1420     1424     1428     1432     1436     1440
              *

2483          KK  713714
2484          KM        Normal depth route from S713 to C714
2485          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2486          RS       1    FLOW      -1
2487          RC     .05     .035      .05      831    .0421
2488          RX     100      260      270      280      305      315      335      490
2489          RY    1416     1416     1412     1408     1408     1412     1416     1420
              *

2490          KK    S714
2491          KM   Sub-Basin   S714
2492          KM
2493          KM      The Clark Unit Hydrograph is used for this basin.
2494          KM          The Urban time-area relation is used for this basin.
2495          KM
2496          KM      Time of Concentration for this sub-basin is based on the following:
2497          KM          An rainfall areal reduction factor of 1.000
2498          KM
2499          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2500          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2501          KM   .28 .28 .28 .28 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2502          KM
2503          KM          L=   0.428 miles, S=  129 feet/mile, Kb= .04
2504          KM
```

```
2505          BA   0.060
2506          LG    0.35    0.29    8.40    0.06    0.00
2507          UC   0.196   0.153
2508          UA       0       5      16      30      65      77      84      90      94      97
2509          UA     100
              *

2510          KK    C714
2511          KM        Combine routed hydrographs 712714 and 713714 w/runoff from S714
2512          HC       3
              *

2513          KK    S715
2514          KM   Sub-Basin   S715
2515          KM
2516          KM      The Clark Unit Hydrograph is used for this basin.
2517          KM          The Urban time-area relation is used for this basin.
2518          KM
2519          KM      Time of Concentration for this sub-basin is based on the following:
2520          KM          An rainfall areal reduction factor of 1.000
2521          KM
2522          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2523          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2524          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2525          KM
2526          KM          L=   0.959 miles, S=   63 feet/mile, Kb= .05
2527          KM
2528          BA   0.220
2529          LG    0.31    0.17   11.20    0.02    4.00
2530          UC   0.404   0.310
2531          UA       0       5      16      30      65      77      84      90      94      97
2532          UA     100
              *

2533          KK    S716
2534          KM   Sub-Basin   S716
2535          KM
2536          KM      The Clark Unit Hydrograph is used for this basin.
2537          KM          The Urban time-area relation is used for this basin.
2538          KM
2539          KM      Time of Concentration for this sub-basin is based on the following:
2540          KM          An rainfall areal reduction factor of 1.000
2541          KM
2542          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2543          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2544          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2545          KM
2546          KM          L=   2.353 miles, S=   87 feet/mile, Kb= .03
2547          KM
2548          BA   1.128
2549          LG    0.26    0.14   10.10    0.04   23.00
2550          UC   0.442   0.277
2551          UA       0       5      16      30      65      77      84      90      94      97
2552          UA     100
              *

2553          KK   C7160
2554          KM        Storage routing at crossing structure no. 74
2555          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2556          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2557          KM        Detour, Jan 4, 1985
2558          RS       1    STOR       0
2559          SQ       0     230     460     690     920    1150    1380    1610    1625    2070
2560          SQ    2300
2561          SE  1504.9 1509.94 1516.13 1526.53 1544.42 1592.19 1729.99 2074.29 2108.01 4241.67
2562          SE  6746.9
2563          SV       0    0.40    5.42   17.50   37.71   68.23  111.87
2564          SE  1504.9    1508    1512    1516    1520    1524    1528
              *

2565          KK  716717
2566          KM        Normal depth route from C7160 to C717
2567          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2568          RS       4    FLOW      -1
2569          RC     .05    .035     .05    4232   .0177
2570          RX     100     115     150     165     195     285     370     425
2571          RY    1504    1500    1496    1492    1492    1496    1500    1504
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2572            KK    S717
2573            KM   Sub-Basin   S717
2574            KM
2575            KM      The Clark Unit Hydrograph is used for this basin.
2576            KM          The Natural time-area relation is used for this basin.
2577            KM
2578            KM      Time of Concentration for this sub-basin is based on the following:
2579            KM          An rainfall areal reduction factor of 1.000
2580            KM
2581            KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2582            KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2583            KM   .29 .29 .29 .29 .29 .29 .05 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2584            KM
2585            KM          L=   0.727 miles, S=  131 feet/mile, Kb= .05
2586            KM
2587            BA   0.286
2588            LG    0.26    0.15   11.20    0.02   10.00
2589            UC   0.279   0.142
2590            UA       0       3       5       8      12      20      43      75      90      96
2591            UA     100
                *

2592            KK    C717
2593            KM        Combine routed hydrograph 716717 w/runoff from S717
2594            HC       2
                *

2595            KK  717718
2596            KM        Normal depth route from C717 to C718
2597            KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2598            RS       9    FLOW      -1
2599            RC     .05    .045     .05    7146   .0105
2600            RX     100     235     275     325     420     455     465     530
2601            RY    1364    1360    1356    1352    1352    1356    1360    1380
2602            RL                    0.03  1352.0
                *

2603            KK    S718
2604            KM   Sub-Basin   S718
2605            KM
2606            KM      The Clark Unit Hydrograph is used for this basin.
2607            KM          The Natural time-area relation is used for this basin.
2608            KM
2609            KM      Time of Concentration for this sub-basin is based on the following:
2610            KM          An rainfall areal reduction factor of 1.000
2611            KM
2612            KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2613            KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2614            KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2615            KM
2616            KM          L=   2.103 miles, S=   45 feet/mile, Kb= .05
2617            KM
2618            BA   0.442
2619            LG    0.27    0.15   11.20    0.02    6.00
```



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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2620            UC   0.754   0.781
2621            UA       0       3       5       8      12      20      43      75      90      96
2622            UA     100
                *

2623            KK    C718
2624            KM        Combine routed hydrograph 717718 w/runoff from S718
2625            HC       2
                *

2626            KK    S719
2627            KM   Sub-Basin   S719
2628            KM
2629            KM      The Clark Unit Hydrograph is used for this basin.
2630            KM          The Urban time-area relation is used for this basin.
2631            KM
2632            KM      Time of Concentration for this sub-basin is based on the following:
```

```
2633        KM         An rainfall areal reduction factor of 1.000
2634        KM
2635        KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2636        KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2637        KM  .30 .30 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
2638        KM
2639        KM         L=   1.221 miles, S=   82 feet/mile, Kb= .04
2640        KM
2641        BA  0.154
2642        LG   0.31    0.07   12.40    0.01   12.00
2643        UC  0.375   0.424
2644        UA      0       5      16      30      65      77      84      90      94      97
2645        UA    100
            *

2646        KK  EAST-1
2647        KM       Dummy combine of minor subbasins east of the Agua Fria River
2648        HC      6
            *

2649        KK   S720
2650        KM  Sub-Basin   S720
2651        KM
2652        KM     The Clark Unit Hydrograph is used for this basin.
2653        KM         The Urban time-area relation is used for this basin.
2654        KM
2655        KM     Time of Concentration for this sub-basin is based on the following:
2656        KM         An rainfall areal reduction factor of 1.000
2657        KM
2658        KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2659        KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2660        KM  .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2661        KM
2662        KM         L=   1.516 miles, S=   86 feet/mile, Kb= .03
2663        KM
2664        BA  0.370
2665        LG   0.28    0.11   11.20    0.03   19.00
2666        UC  0.354   0.287
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2667        UA      0       5      16      30      65      77      84      90      94      97
2668        UA    100
            *

2669        KK   S721
2670        KM  Sub-Basin   S721
2671        KM
2672        KM     The Clark Unit Hydrograph is used for this basin.
2673        KM         The Urban time-area relation is used for this basin.
2674        KM
2675        KM     Time of Concentration for this sub-basin is based on the following:
2676        KM         An rainfall areal reduction factor of 1.000
2677        KM
2678        KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2679        KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2680        KM  .29 .29 .29 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2681        KM
2682        KM         L=   0.832 miles, S=  114 feet/mile, Kb= .03
2683        KM
2684        BA  0.335
2685        LG   0.21    0.15    7.30    0.11   50.00
2686        UC  0.242   0.123
2687        UA      0       5      16      30      65      77      84      90      94      97
2688        UA    100
            *

2689        KK  C7210
2690        KM       Storage routing at crossing structure no. 75
2691        KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2692        KM       CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2693        KM       Detour, Jan 4, 1985
2694        RS      1    STOR       0
2695        SQ      0     120     240     360     480     600     720     840     866    1080
2696        SQ   1200
2697        SE   1490 1494.74 1499.14 1506.62 1517.09 1534.17 1572.06 1662.33 1693.69 2254.60
2698        SE  2968.5
2699        SV      0    1.83    7.58   17.18   30.63   47.92   69.05   94.03  122.85  155.51
2700        SV  192.02
2701        SE   1490    1493    1496    1499    1502    1505    1508    1511    1514    1517
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2702          SE    1520
              *

2703          KK  721722
2704          KM        Normal depth route from C7210 to C722
2705          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2706          RS      10    FLOW      -1
2707          RC     .05    .035     .05    8812   .0170
2708          RX     100     125     175     200     235     250     270     595
2709          RY    1420    1416    1412    1408    1408    1412    1420    1424
2710          RL                    0.03  1408.0
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2711          KK    S722
2712          KM   Sub-Basin   S722
2713          KM
2714          KM      The Clark Unit Hydrograph is used for this basin.
2715          KM          The Urban time-area relation is used for this basin.
2716          KM
2717          KM      Time of Concentration for this sub-basin is based on the following:
2718          KM          An rainfall areal reduction factor of 1.000
2719          KM
2720          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2721          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2722          KM   .29 .29 .29 .29 .29 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2723          KM
2724          KM          L=   2.334 miles, S=   79 feet/mile, Kb= .03
2725          KM
2726          BA   0.955
2727          LG    0.26    0.16    9.70    0.05   23.00
2728          UC   0.454   0.312
2729          UA       0       5      16      30      65      77      84      90      94      97
2730          UA     100
              *

2731          KK    C722
2732          KM        Combine routed hydrograph 721722 w/runoff from S722
2733          HC       2
              *

2734          KK    S723
2735          KM   Sub-Basin   S723
2736          KM
2737          KM      The Clark Unit Hydrograph is used for this basin.
2738          KM          The Urban time-area relation is used for this basin.
2739          KM
2740          KM      Time of Concentration for this sub-basin is based on the following:
2741          KM          An rainfall areal reduction factor of 1.000
2742          KM
2743          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2744          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2745          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2746          KM
2747          KM          L=   0.562 miles, S=  178 feet/mile, Kb= .04
2748          KM
2749          BA   0.085
2750          LG    0.22    0.17   10.10    0.03   28.00
2751          UC   0.200   0.159
2752          UA       0       5      16      30      65      77      84      90      94      97
2753          UA     100
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2754          KK    S724
2755          KM   Sub-Basin   S724
2756          KM
2757          KM      The Clark Unit Hydrograph is used for this basin.
2758          KM          The Urban time-area relation is used for this basin.
2759          KM
2760          KM      Time of Concentration for this sub-basin is based on the following:
2761          KM          An rainfall areal reduction factor of 1.000
2762          KM
2763          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2764          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
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2765          KM   .30 .30 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
2766          KM
2767          KM          L=   2.319 miles, S=   97 feet/mile, Kb= .03
2768          KM
2769          BA   1.156
2770          LG    0.18    0.11   11.20    0.02   45.00
2771          UC   0.421   0.255
2772          UA       0       5      16      30      65      77      84      90      94      97
2773          UA     100
              *

2774          KK    S725
2775          KM   Sub-Basin   S725
2776          KM
2777          KM      The Clark Unit Hydrograph is used for this basin.
2778          KM          The Urban time-area relation is used for this basin.
2779          KM
2780          KM      Time of Concentration for this sub-basin is based on the following:
2781          KM          An rainfall areal reduction factor of 1.000
2782          KM
2783          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2784          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2785          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2786          KM
2787          KM          L=   3.038 miles, S=   71 feet/mile, Kb= .03
2788          KM
2789          BA   1.158
2790          LG    0.18    0.16    8.80    0.06   50.00
2791          UC   0.550   0.426
2792          UA       0       5      16      30      65      77      84      90      94      97
2793          UA     100
              *

2794          KK  EAST-2
2795          KM       Dummy combine of minor subbasins east of the Agua Fria River
2796          HC       5
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2797          KK    S726
2798          KM   Sub-Basin   S726
2799          KM
2800          KM      The Clark Unit Hydrograph is used for this basin.
2801          KM          The Urban time-area relation is used for this basin.
2802          KM
2803          KM      Time of Concentration for this sub-basin is based on the following:
2804          KM          An rainfall areal reduction factor of 1.000
2805          KM
2806          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2807          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2808          KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
2809          KM
2810          KM          L=   1.036 miles, S=  295 feet/mile, Kb= .04
2811          KM
2812          BA   0.334
2813          LG    0.27    0.28    5.70    0.21   29.00
2814          UC   0.242   0.147
2815          UA       0       5      16      30      65      77      84      90      94      97
2816          UA     100
              *

2817          KK  726727
2818          KM       Normal depth route from C726 to C727
2819          KM       Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2820          RS       4    FLOW      -1
2821          RC     .05    .035     .05    6228   .0185
2822          RX     100     120     145     170     225     240     250     265
2823          RY    1308    1304    1300    1296    1296    1300    1304    1308
              *

2824          KK    S727
2825          KM   Sub-Basin   S727
2826          KM
2827          KM      The Clark Unit Hydrograph is used for this basin.
2828          KM          The Urban time-area relation is used for this basin.
2829          KM
2830          KM      Time of Concentration for this sub-basin is based on the following:
2831          KM          An rainfall areal reduction factor of 1.000
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```
2832          KM
2833          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2834          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2835          KM   .29 .29 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
2836          KM
2837          KM          L=   1.815 miles, S=   85 feet/mile, Kb= .04
2838          KM
2839          BA   0.375
2840          LG    0.18    0.16    9.70    0.05   54.00
2841          UC   0.450   0.430
2842          UA       0       5      16      30      65      77      84      90      94      97
2843          UA     100
              *
1                                                HEC-1 INPUT                                                PAGE 64

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2844          KK    C727
2845          KM        Combine routed hydrograph 726727 w/runoff from S727
2846          HC       2
              *

2847          KK   TOTAL
2848          KM        Dummy combine of all operations
2849          HC       4
              *
2850          ZZ
1
              SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   39        S100
                V
                V
   59      100102
                .
                .
   66           .        S101
                .           .
                .           .
   86       C102R............
                .
                .
   89           .        S102
                .           V
                .           V
  109           .      101102
                .           .
                .           .
  116           .           .        S103
                .           .           .
                .           .           .
  136           .       C102L............
                .           .
                .           .
  139        C102............
                V
                V
  142      102103
                .
                .
  149           .        S104
                .           .
                .           .
  169       C103R............
                .
                .
  172           .        S105
                .           .
                .           .
  192        C103............
                V
                V
  195      103104
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  202           .        S106
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                .          .
                .          .
222          C104...........
                V
                V
225        104105
                .
                .
232             .       S107
                .          .
                .          .
252         C105L..........
                .
                .
255             .       S200
                .          V
                .          V
275             .     200201
                .          .
                .          .
282             .          .       S201
                .          .          .
                .          .          .
302             .       C201...........
                .          V
                .          V
305             .     201203
                .          .
                .          .
312             .          .       S202
                .          .          V
                .          .          V
332             .          .     202203
                .          .          .
                .          .          .
339             .          .          .       S203
                .          .          .          .
                .          .          .          .
359             .      C203R......................
                .          .
                .          .
362             .          .       S204
                .          .          .
                .          .          .
382             .       C203...........
                .          V
                .          V
385             .     203204
                .          .
                .          .
392             .          .       S205
                .          .          .
                .          .          .
412             .       C204...........
                .          V
                .          V
415             .     204205
                .          .
                .          .
422             .          .       S206
                .          .          .
                .          .          .
442             .      C205L...........
                .          .
                .          .
445             .          .       S207
                .          .          .
                .          .          .
465             .       C205...........
                .          V
                .          V
468             .     205206
                .          .
                .          .
475             .          .       S208
                .          .          .
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495             .       C206...........
                .          V
                .          V
498             .     206207
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505             .           .        S209
                .           .           .
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525             .       C207R............
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528             .           .        S210
                .           .           .
                .           .           .
548             .        C207............
                .           V
                .           V
551             .      207105
                .           .
                .           .
558             .           .        S211
                .           .           .
                .           .           .
578             .       C105R............
                .           .
                .           .
581         C105............
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                .
584             .        S300
                .           .
                .           .
604             .           .        S301
                .           .           .
                .           .           .
624             .        C300............
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                .           V
627             .      300301
                .           .
                .           .
634             .           .        S302
                .           .           .
                .           .           .
654             .        C301............
                .           V
                .           V
657             .      301302
                .           .
                .           .
664             .           .        S303
                .           .           .
                .           .           .
684             .        C302............
                .           V
                .           V
687             .      302303
                .           .
                .           .
694             .           .        S304
                .           .           .
                .           .           .
714             .        C303............
                .           .
                .           .
717       WEST-1............
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                .
720             .        S400
                .           V
                .           V
740             .       C4000
                .           V
                .           V
748             .      400401
                .           .
                .           .
755             .           .        S401
                .           .           .
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775             .        C401............
                .           V
                .           V
778             .      401402
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                .          .
                .          .
  785           .          .        S402
                .          .          .
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  805           .       C402............
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                .          V
  808           .     402403
                .          .
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  816           .          .        S403
                .          .          .
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  836           .       C403............
                .          V
                .          V
  839           .     403404
                .          .
                .          .
  847           .          .        S404
                .          .          .
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  867           .       C404............
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                .          .
  870      WEST-2............
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  873           .       S500
                .          V
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  893           .     500501
                .          .
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  900           .          .        S501
                .          .          .
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  920           .       C501............
                .          V
                .          V
  923           .     501502
                .          .
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  931           .          .        S502
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  951           .      C502L............
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                .          .
  954           .          .        S503
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                .          .          .
  974           .      C502I............
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                .          V
  977           .      C502O
                .          V
                .          V
  985           .     502505
                .          .
                .          .
  993           .          .        S504
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                .          .          .
 1013           .      C505L............
                .          .
                .          .
 1016           .          .        S505
                .          .          V
                .          .          V
 1036           .          .      C503O
                .          .          V
                .          .          V
 1044           .          .     503505
                .          .          .
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 1052           .          .          .       S506
                .          .          .          V
                .          .          .          V
 1072           .          .          .      C504O
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                 .          .          .          V
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1080             .          .          .     504505
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1087             .          .          .          .        S507
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1107             .          .      C505R.......................
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1110             .      C505............
                 .         V
                 .         V
1113             .    505509
                 .          .
                 .          .
1121             .          .       S508
                 .          .          .
                 .          .          .
1141             .     C509L............
                 .          .
                 .          .
1144             .          .       S509
                 .          .          V
                 .          .          V
1164             .          .      C506O
                 .          .          V
                 .          .          V
1172             .          .    506508
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1179             .          .          .       S510
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1199             .          .      C508R............
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1202             .          .          .       S511
                 .          .          .          V
                 .          .          .          V
1222             .          .          .     C507O
                 .          .          .          V
                 .          .          .          V
1230             .          .          .    507508
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1238             .          .          .          .        S512
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1258             .          .          .     C508L............
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1261             .          .       C508............
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                 .          .          V
1264             .          .    508509
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1272             .          .          .       S513
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1292             .          .      C509R............
                 .          .          .
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1295             .      C509............
                 .         V
                 .         V
1298             .    509510
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                 .          .
1306             .          .       S514
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1326             .      C510............
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                 .         V
1329             .    510511
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1337             .          .       S515
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1357            .       C511...........
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1360            .     511512
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1368            .          .       S516
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1388            .       C512...........
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1391      WEST-3...........
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1394            .       S600
                .          V
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1414            .     600601
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1421            .          .       S601
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1441            .       C601...........
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1444            .     601602
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1451            .          .       S603
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                .          .          .
1471            .      C602L...........
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1474            .          .       S602
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1494            .       C602...........
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1497            .     602603
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1505            .          .       S606
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1525            .      C603L...........
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1528            .          .       S605
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1548            .          .          .       S604
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1568            .       C603......................
                .          V
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1571            .     603604
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1579            .          .       S609
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1599            .      C604R...........
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1602            .          .       S607
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1622            .       C604...........
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                .          V
1625            .     604605
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1632            .          .       S608
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1652            .       C605...........
                .          V
                .          V
1655            .     605606
                .          .
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1663            .          .       S610
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                .          .          .
1683            .      C606L...........
                .          .
                .          .
1686            .          .       S612
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1706            .       C606...........
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                .          V
1709            .     606608
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                .          .
1717            .          .       S611
                .          .          V
                .          .          V
1737            .          .     607608
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1744            .          .          .       S613
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1764            .       C608......................
                .          V
                .          V
1767            .     608609
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1775            .          .       S614
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                .          .          .
1795            .       C609...........
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                .          V
1798            .     609611
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1806            .          .       S617
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1826            .      C611R...........
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1829            .          .       S615
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                .          .          V
1849            .          .     610611
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1856            .          .          .       S616
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1876            .          .      C611L...........
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1879            .       C611...........
                .          V
                .          V
1882            .     611613
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1890            .          .       S618
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1910            .      C613R...........
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1913            .          .       S619
                .          .          V
                .          .          V
1933            .          .     612613
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1940            .          .          .        S620
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                .          .          .          .
1960            .          .      C613L..........
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                .          .          .
1963            .       C613..........
                .          V
                .          V
1966            .     613614
                .          .
                .          .
1974            .          .       S621
                .          .          .
                .          .          .
1994            .       C614..........
                .          V
                .          V
1997            .     614615
                .          .
                .          .
2005            .          .       S622
                .          .          .
                .          .          .
2025            .       C615..........
                .          .
                .          .
2028      WEST-4..........
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                .
2031            .       S700
                .          .
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2051            .          .       S701
                .          .          .
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2071            .          .          .        S702
                .          .          .          .
                .          .          .          .
2091            .          .          .          .        S703
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2111            .          .          .          .          .       S704
                .          .          .          .          .          V
                .          .          .          .          .          V
2131            .          .          .          .          .     704705
                .          .          .          .          .          .
                .          .          .          .          .          .
2138            .          .          .          .          .          .        S705
                .          .          .          .          .          .          .
                .          .          .          .          .          .          .
2158            .          .          .          .          .       C705..........
                .          .          .          .          .          V
                .          .          .          .          .          V
2161            .          .          .          .          .      C705O
                .          .          .          .          .          V
                .          .          .          .          .          V
2174            .          .          .          .          .     705OAF
                .          .          .          .          .          .
                .          .          .          .          .          .
2181            .          .          .          .          .          .      S705AF
                .          .          .          .          .          .          .
                .          .          .          .          .          .          .
2201            .          .          .          .          .     C705AF..........
                .          .          .          .          .          .
                .          .          .          .          .          .
2204            .     WEST-5.........................................
                .          .
                .          .
2207            .          .       S706
                .          .          .
                .          .          .
2227            .          .          .        S707
                .          .          .          .
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2247            .          .          .          .        S728
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2267      WEST.........................................
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2270            .       S708
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                .          .
2290            .          .       S709
                .          .          V
                .          .          V
2310            .          .      C709O
                .          .          V
                .          .          V
2324            .          .     709710
                .          .          .
                .          .          .
2331            .          .          .       S710
                .          .          .          .
                .          .          .          .
2351            .          .      C710I...........
                .          .          V
                .          .          V
2354            .          .      C710O
                .          .          .
                .          .          .
2366            .          .          .       S711
                .          .          .          V
                .          .          .          V
2386            .          .          .      C711O
                .          .          .          V
                .          .          .          V
2398            .          .          .     711712
                .          .          .          .
                .          .          .          .
2405            .          .          .          .       S712
                .          .          .          .          .
                .          .          .          .          .
2427            .          .          .      C712I...........
                .          .          .          V
                .          .          .          V
2430            .          .          .      C712O
                .          .          .          V
                .          .          .          V
2442            .          .          .     712714
                .          .          .          .
                .          .          .          .
2449            .          .          .          .       S713
                .          .          .          .          V
                .          .          .          .          V
2471            .          .          .          .      C713O
                .          .          .          .          V
                .          .          .          .          V
2483            .          .          .          .     713714
                .          .          .          .          .
                .          .          .          .          .
2490            .          .          .          .          .       S714
                .          .          .          .          .          .
                .          .          .          .          .          .
2510            .          .          .       C714......................
                .          .          .          .
                .          .          .          .
2513            .          .          .          .       S715
                .          .          .          .          .
                .          .          .          .          .
2533            .          .          .          .          .       S716
                .          .          .          .          .          V
                .          .          .          .          .          V
2553            .          .          .          .          .      C716O
                .          .          .          .          .          V
                .          .          .          .          .          V
2565            .          .          .          .          .     716717
                .          .          .          .          .          .
                .          .          .          .          .          .
2572            .          .          .          .          .          .       S717
                .          .          .          .          .          .          .
                .          .          .          .          .          .          .
2592            .          .          .          .          .       C717...........
                .          .          .          .          .          V
                .          .          .          .          .          V
2595            .          .          .          .          .     717718
                .          .          .          .          .          .
                .          .          .          .          .          .
2603            .          .          .          .          .          .       S718
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 2623           .         .         .         .         .       C718.........
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                .         .         .         .         .         .
 2626           .         .         .         .         .         .       S719
                .         .         .         .         .         .         .
                .         .         .         .         .         .         .
 2646           .     EAST-1.......................................................
                .         .
                .         .
 2649           .         .       S720
                .         .         .
                .         .         .
 2669           .         .         .       S721
                .         .         .          V
                .         .         .          V
 2689           .         .         .      C7210
                .         .         .          V
                .         .         .          V
 2703           .         .         .     721722
                .         .         .         .
                .         .         .         .
 2711           .         .         .         .       S722
                .         .         .         .         .
                .         .         .         .         .
 2731           .         .         .       C722........
                .         .         .         .
                .         .         .         .
 2734           .         .         .         .       S723
                .         .         .         .         .
                .         .         .         .         .
 2754           .         .         .         .         .       S724
                .         .         .         .         .         .
                .         .         .         .         .         .
 2774           .         .         .         .         .         .       S725
                .         .         .         .         .         .         .
                .         .         .         .         .         .         .
 2794           .         .     EAST-2...........................................
                .         .         .
                .         .         .
 2797           .         .         .       S726
                .         .         .          V
                .         .         .          V
 2817           .         .         .     726727
                .         .         .         .
                .         .         .         .
 2824           .         .         .         .       S727
                .         .         .         .         .
                .         .         .         .         .
 2844           .         .         .       C727........
                .         .         .         .
                .         .         .         .
 2847       TOTAL...................................
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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*              JUN   1998              *                    *   HYDROLOGIC ENGINEERING CENTER      *
*           VERSION 4.1                *                    *         609 SECOND STREET            *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE   09AUG01  TIME  13:52:48  *                    *          (916) 756-1104              *
*                                      *                    *                                      *
****************************************                    ****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU100-24.IH1
Original:05-04-00 MCG
Revised:05-02-01 MMZ

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future condition 100-year, 24-hour storm event. A companion model is also created for the future condition 100-year, 6-hour storm event. Both models 100-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
100-year, 24-hour rainfall with FCDMC design rainfall distributions

Green & Ampt Loss Rate Method
NMIN = 2 minutes
Clark Unit Hydrograph
Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME        0918  ENDING TIME
                     ICENT          19  CENTURY MARK

               COMPUTATION INTERVAL    0.03 HOURS
                    TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM        4.20  PRECIPITATION DEPTH
                      TRDA        0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.03    0.03    0.03    0.03    0.03
                 0.03    0.03    0.03    0.03    0.03    0.03    0.03    0.03    0.03    0.03
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                 0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM	4.18	PRECIPITATION DEPTH
TRDA	1.00	TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 4.07 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 3.95 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD   INDEX STORM NO. 5

STRM 3.80 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI   PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 3.59 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	522.	12.43	102.	30.	22.	0.57		
+	ROUTED TO	100102	497.	12.70	102.	30.	22.	0.57		
+	HYDROGRAPH AT	S101	717.	12.30	101.	28.	21.	0.63		
+	2 COMBINED AT	C102R	974.	12.37	202.	58.	42.	1.20		
+	HYDROGRAPH AT	S102	470.	12.20	84.	26.	19.	0.45		
+	ROUTED TO	101102	446.	12.37	84.	26.	19.	0.45		
+	HYDROGRAPH AT	S103	348.	12.47	67.	19.	14.	0.40		
+	2 COMBINED AT	C102L	784.	12.43	150.	44.	32.	0.84		
+	2 COMBINED AT	C102	1729.	12.40	348.	102.	73.	2.05		
+	ROUTED TO	102103	1669.	12.63	348.	101.	73.	2.05		
+	HYDROGRAPH AT	S104	1040.	12.37	164.	48.	34.	0.90		
+	2 COMBINED AT	C103R	2383.	12.53	504.	147.	106.	2.95		
+	HYDROGRAPH AT	S105	507.	12.27	108.	32.	23.	0.59		
+	2 COMBINED AT	C103	2781.	12.53	607.	177.	128.	3.54		
+	ROUTED TO	103104	2733.	12.70	606.	177.	128.	3.54		
+	HYDROGRAPH AT	S106	602.	12.17	91.	25.	18.	0.57		

	2 COMBINED AT							
+		C104	2971.	12.67	691.	200.	145.	4.11
	ROUTED TO							
+		104105	2904.	12.83	691.	200.	145.	4.11
	HYDROGRAPH AT							
+		S107	918.	12.33	133.	34.	25.	0.94
	2 COMBINED AT							
+		C105L	3244.	12.80	815.	231.	168.	5.05
	HYDROGRAPH AT							
+		S200	1067.	12.37	179.	56.	40.	0.96
	ROUTED TO							
+		200201	1048.	12.40	179.	56.	40.	0.96
	HYDROGRAPH AT							
+		S201	387.	12.30	65.	20.	15.	0.35
	2 COMBINED AT							
+		C201	1396.	12.37	243.	75.	55.	1.31
	ROUTED TO							
+		201203	1373.	12.47	243.	75.	55.	1.31
	HYDROGRAPH AT							
+		S202	159.	12.20	24.	7.	5.	0.13
	ROUTED TO							
+		202203	156.	12.27	24.	7.	5.	0.13
	HYDROGRAPH AT							
+		S203	321.	12.23	72.	23.	16.	0.37
	3 COMBINED AT							
+		C203R	1753.	12.43	335.	104.	76.	1.81
	HYDROGRAPH AT							
+		S204	880.	12.47	171.	53.	38.	0.95
	2 COMBINED AT							
+		C203	2592.	12.43	500.	155.	112.	2.76
	ROUTED TO							
+		203204	2581.	12.47	500.	155.	112.	2.76
	HYDROGRAPH AT							
+		S205	497.	12.27	80.	25.	18.	0.41
	2 COMBINED AT							
+		C204	2923.	12.43	576.	179.	129.	3.17
	ROUTED TO							
+		204205	2868.	12.53	576.	179.	129.	3.17
	HYDROGRAPH AT							
+		S206	671.	12.30	159.	48.	35.	0.85
	2 COMBINED AT							
+		C205L	3432.	12.53	728.	224.	162.	4.03
	HYDROGRAPH AT							
+		S207	787.	12.53	181.	56.	41.	0.96
	2 COMBINED AT							
+		C205	4175.	12.53	899.	278.	201.	4.98
	ROUTED TO							
+		205206	3998.	12.87	899.	277.	201.	4.98
	HYDROGRAPH AT							
+		S208	849.	12.70	208.	63.	45.	1.10
	2 COMBINED AT							
+		C206	4699.	12.83	1088.	334.	242.	6.09
	ROUTED TO							
+		206207	4656.	12.90	1088.	334.	242.	6.09

+	HYDROGRAPH AT S209	704.	12.37	105.	30.	21.	0.65
+	2 COMBINED AT C207R	4850.	12.90	1181.	360.	261.	6.74
+	HYDROGRAPH AT S210	561.	12.13	69.	18.	13.	0.48
+	2 COMBINED AT C207	4897.	12.90	1241.	375.	272.	7.22
+	ROUTED TO 207105	4840.	13.00	1241.	375.	272.	7.22
+	HYDROGRAPH AT S211	542.	12.17	74.	20.	14.	0.49
+	2 COMBINED AT C105R	4900.	12.97	1304.	392.	284.	7.70
+	2 COMBINED AT C105	7609.	12.93	2038.	601.	436.	12.75
+	HYDROGRAPH AT S300	790.	12.10	115.	35.	25.	0.62
+	HYDROGRAPH AT S301	1413.	12.10	202.	64.	46.	0.99
+	2 COMBINED AT C300	2181.	12.10	315.	99.	71.	1.61
+	ROUTED TO 300301	2095.	12.17	314.	98.	71.	1.61
+	HYDROGRAPH AT S302	588.	12.27	84.	26.	18.	0.47
+	2 COMBINED AT C301	2639.	12.20	396.	123.	89.	2.07
+	ROUTED TO 301302	2445.	12.50	396.	123.	89.	2.07
+	HYDROGRAPH AT S303	733.	12.33	105.	29.	21.	0.71
+	2 COMBINED AT C302	3042.	12.47	495.	150.	109.	2.78
+	ROUTED TO 302303	2977.	12.60	495.	150.	109.	2.78
+	HYDROGRAPH AT S304	844.	12.17	124.	33.	24.	0.82
+	2 COMBINED AT C303	3387.	12.57	612.	181.	131.	3.60
+	2 COMBINED AT WEST-1	9424.	12.87	2577.	761.	552.	16.36
+	HYDROGRAPH AT S400	1533.	12.23	217.	67.	48.	1.05
+	ROUTED TO C400O	518.	12.63	217.	67.	48.	1.05
+	ROUTED TO 400401	516.	12.97	217.	67.	48.	1.05
+	HYDROGRAPH AT S401	886.	12.10	106.	29.	21.	0.65
+	2 COMBINED AT C401	1070.	12.13	319.	95.	68.	1.69
+	ROUTED TO 401402	998.	12.43	319.	95.	68.	1.69

+	HYDROGRAPH AT	S402	1152.	12.07	150.	46.	33.	0.74
+	2 COMBINED AT	C402	1582.	12.20	463.	138.	100.	2.43
+	ROUTED TO	402403	1513.	12.57	463.	138.	100.	2.43
+	HYDROGRAPH AT	S403	906.	12.07	135.	41.	29.	0.56
+	2 COMBINED AT	C403	1823.	12.50	591.	177.	128.	2.99
+	ROUTED TO	403404	1809.	12.60	591.	177.	128.	2.99
+	HYDROGRAPH AT	S404	394.	12.17	45.	12.	9.	0.26
+	2 COMBINED AT	C404	1919.	12.53	633.	188.	136.	3.26
+	2 COMBINED AT	WEST-2	10756.	12.87	3131.	926.	672.	19.61
+	HYDROGRAPH AT	S500	1007.	12.23	208.	65.	47.	1.05
+	ROUTED TO	500501	982.	12.37	208.	65.	47.	1.05
+	HYDROGRAPH AT	S501	761.	12.13	109.	33.	24.	0.61
+	2 COMBINED AT	C501	1536.	12.23	313.	97.	70.	1.67
+	ROUTED TO	501502	1520.	12.33	310.	94.	68.	1.67
+	HYDROGRAPH AT	S502	500.	12.23	68.	20.	14.	0.40
+	2 COMBINED AT	C502L	1985.	12.30	375.	113.	81.	2.07
+	HYDROGRAPH AT	S503	1178.	12.17	187.	57.	41.	0.99
+	2 COMBINED AT	C502I	3012.	12.27	555.	167.	121.	3.07
+	ROUTED TO	C502O	2246.	12.50	555.	167.	121.	3.07
+	ROUTED TO	502505	2216.	12.77	544.	157.	113.	3.07
+	HYDROGRAPH AT	S504	343.	12.17	62.	19.	14.	0.33
+	2 COMBINED AT	C505L	2358.	12.70	603.	175.	127.	3.39
+	HYDROGRAPH AT	S505	210.	12.10	23.	7.	5.	0.14
+	ROUTED TO	C503O	89.	12.37	23.	7.	5.	0.14
+	ROUTED TO	503505	88.	12.83	23.	6.	4.	0.14
+	HYDROGRAPH AT	S506	225.	12.17	30.	9.	6.	0.15
+	ROUTED TO	C504O	90.	12.50	30.	9.	6.	0.15

	ROUTED TO						
+	504505	89.	12.87	30.	9.	6.	0.15
	HYDROGRAPH AT						
+	S507	967.	12.10	114.	31.	22.	0.67
	3 COMBINED AT						
+	C505R	986.	12.10	166.	46.	33.	0.96
	2 COMBINED AT						
+	C505	2698.	12.60	760.	219.	158.	4.35
	ROUTED TO						
+	505509	2653.	12.83	738.	199.	143.	4.35
	HYDROGRAPH AT						
+	S508	446.	12.07	54.	16.	11.	0.29
	2 COMBINED AT						
+	C509L	2687.	12.83	788.	214.	154.	4.65
	HYDROGRAPH AT						
+	S509	281.	12.03	33.	10.	7.	0.17
	ROUTED TO						
+	C506O	89.	12.30	33.	10.	7.	0.17
	ROUTED TO						
+	506508	89.	12.50	33.	10.	7.	0.17
	HYDROGRAPH AT						
+	S510	197.	12.07	31.	10.	7.	0.13
	2 COMBINED AT						
+	C508R	275.	12.10	64.	20.	14.	0.30
	HYDROGRAPH AT						
+	S511	588.	12.07	75.	22.	16.	0.38
	ROUTED TO						
+	C507O	97.	12.70	74.	22.	16.	0.38
	ROUTED TO						
+	507508	96.	12.97	73.	23.	16.	0.38
	HYDROGRAPH AT						
+	S512	332.	12.10	56.	17.	12.	0.21
	2 COMBINED AT						
+	C508L	393.	12.10	128.	40.	29.	0.60
	2 COMBINED AT						
+	C508	667.	12.10	191.	59.	43.	0.90
	ROUTED TO						
+	508509	602.	12.53	187.	58.	42.	0.90
	HYDROGRAPH AT						
+	S513	966.	12.13	138.	39.	28.	0.78
	2 COMBINED AT						
+	C509R	1107.	12.30	318.	96.	70.	1.67
	2 COMBINED AT						
+	C509	3374.	12.77	1083.	303.	219.	6.32
	ROUTED TO						
+	509510	3352.	12.83	1082.	302.	219.	6.32
	HYDROGRAPH AT						
+	S514	971.	12.10	150.	44.	32.	0.65
	2 COMBINED AT						
+	C510	3555.	12.80	1215.	343.	248.	6.97
	ROUTED TO						
+	510511	3505.	13.10	1212.	341.	247.	6.97
	HYDROGRAPH AT						
+	S515	1868.	12.07	271.	79.	57.	1.10

+	2 COMBINED AT	C511	3642.	13.07	1449.	412.	298.	8.07
+	ROUTED TO	511512	3596.	13.37	1443.	409.	297.	8.07
+	HYDROGRAPH AT	S516	725.	12.13	120.	38.	28.	0.54
+	2 COMBINED AT	C512	3644.	13.37	1544.	444.	322.	8.61
+	2 COMBINED AT	WEST-3	13479.	12.87	4499.	1317.	957.	28.22
+	HYDROGRAPH AT	S600	1804.	12.47	313.	92.	67.	2.02
+	ROUTED TO	600601	1778.	12.53	313.	92.	67.	2.02
+	HYDROGRAPH AT	S601	1116.	12.33	195.	62.	45.	0.90
+	2 COMBINED AT	C601	2687.	12.43	501.	152.	110.	2.92
+	ROUTED TO	601602	2651.	12.53	501.	152.	110.	2.92
+	HYDROGRAPH AT	S603	972.	12.20	141.	44.	32.	0.67
+	2 COMBINED AT	C602L	3097.	12.47	636.	195.	140.	3.58
+	HYDROGRAPH AT	S602	1738.	12.50	349.	109.	78.	1.88
+	2 COMBINED AT	C602	4746.	12.47	968.	298.	215.	5.47
+	ROUTED TO	602603	4583.	12.70	924.	254.	183.	5.47
+	HYDROGRAPH AT	S606	651.	12.37	126.	39.	28.	0.66
+	2 COMBINED AT	C603L	4966.	12.67	1038.	290.	209.	6.13
+	HYDROGRAPH AT	S605	1008.	12.47	204.	63.	46.	1.09
+	HYDROGRAPH AT	S604	1851.	12.73	488.	152.	110.	2.66
+	3 COMBINED AT	C603	7308.	12.67	1662.	485.	350.	9.87
+	ROUTED TO	603604	7141.	12.80	1613.	438.	316.	9.87
+	HYDROGRAPH AT	S609	429.	12.43	96.	29.	21.	0.56
+	2 COMBINED AT	C604R	7398.	12.80	1697.	464.	334.	10.43
+	HYDROGRAPH AT	S607	720.	12.47	161.	50.	36.	0.82
+	2 COMBINED AT	C604	7844.	12.80	1838.	508.	366.	11.25
+	ROUTED TO	604605	7800.	12.83	1838.	508.	366.	11.25
+	HYDROGRAPH AT	S608	683.	12.23	105.	32.	23.	0.51

+	2 COMBINED AT	C605	7950.	12.83	1930.	536.	387.	11.76
+	ROUTED TO	605606	7840.	12.93	1921.	530.	382.	11.76
+	HYDROGRAPH AT	S610	678.	12.17	126.	39.	28.	0.60
+	2 COMBINED AT	C606L	8003.	12.93	2030.	565.	407.	12.36
+	HYDROGRAPH AT	S612	832.	12.23	171.	52.	37.	0.81
+	2 COMBINED AT	C606	8294.	12.93	2180.	610.	440.	13.17
+	ROUTED TO	606608	8279.	12:93	2177.	607.	438.	13.17
+	HYDROGRAPH AT	S611	699.	12.27	107.	33.	24.	0.57
+	ROUTED TO	607608	662.	12.47	107.	33.	24.	0.57
+	HYDROGRAPH AT	S613	1643.	12.57	348.	108.	78.	1.80
+	3 COMBINED AT	C608	9534.	12.90	2574.	732.	528.	15.53
+	ROUTED TO	608609	9430.	13.00	2562.	723.	521.	15.53
+	HYDROGRAPH AT	S614	900.	12.57	205.	64.	46.	1.08
+	2 COMBINED AT	C609	9914.	13.00	2737.	778.	561.	16.61
+	ROUTED TO	609611	9755.	13.17	2708.	750.	541.	16.61
+	HYDROGRAPH AT	S617	858.	12.13	118.	35.	25.	0.68
+	2 COMBINED AT	C611R	9791.	13.17	2806.	780.	562.	17.29
+	HYDROGRAPH AT	S615	1027.	12.60	252.	82.	59.	1.05
+	ROUTED TO	610611	1001.	12.77	252.	82.	59.	1.05
+	HYDROGRAPH AT	S616	530.	12.33	88.	25.	18.	0.50
+	2 COMBINED AT	C611L	1264.	12.70	337.	107.	77.	1.56
+	2 COMBINED AT	C611	10509.	13.13	3097.	873.	630.	18.85
+	ROUTED TO	611613	10461.	13.17	3087.	863.	622.	18.85
+	HYDROGRAPH AT	S618	820.	12.50	167.	49.	35.	0.96
+	2 COMBINED AT	C613R	10741.	13.17	3225.	904.	652.	19.81
+	HYDROGRAPH AT	S619	1040.	12.40	180.	56.	40.	0.83
+	ROUTED TO	612613	1007.	12.57	180.	56.	40.	0.83

+	HYDROGRAPH AT	S620	414.	12.43	94.	29.	21.	0.44
+	2 COMBINED AT	C613L	1389.	12.53	272.	84.	61.	1.27
+	2 COMBINED AT	C613	11241.	13.13	3457.	976.	704.	21.08
+	ROUTED TO	613614	11193.	13.23	3445.	965.	696.	21.08
+	HYDROGRAPH AT	S621	1141.	12.27	128.	33.	24.	0.92
+	2 COMBINED AT	C614	11199.	13.20	3549.	992.	715.	22.00
+	ROUTED TO	614615	11135.	13.33	3537.	981.	707.	22.00
+	HYDROGRAPH AT	S622	625.	12.63	124.	32.	23.	0.90
+	2 COMBINED AT	C615	11339.	13.30	3636.	1007.	726.	22.90
+	2 COMBINED AT	WEST-4	21498.	13.10	7731.	2207.	1599.	51.12
+	HYDROGRAPH AT	S700	778.	12.10	96.	26.	19.	0.61
+	HYDROGRAPH AT	S701	558.	12.27	127.	36.	26.	0.72
+	HYDROGRAPH AT	S702	331.	12.10	48.	14.	10.	0.26
+	HYDROGRAPH AT	S703	278.	12.23	35.	9.	6.	0.26
+	HYDROGRAPH AT	S704	554.	12.10	65.	18.	13.	0.41
+	ROUTED TO	704705	506.	12.30	65.	18.	13.	0.41
+	HYDROGRAPH AT	S705	1141.	12.10	162.	49.	35.	0.75
+	2 COMBINED AT	C705	1477.	12.13	226.	67.	48.	1.16
+	ROUTED TO	C705O	698.	12.60	226.	67.	48.	1.16
+	ROUTED TO	705OAF	696.	12.77	226.	66.	48.	1.16
+	HYDROGRAPH AT	S705AF	237.	12.30	44.	11.	8.	0.18
+	2 COMBINED AT	C705AF	841.	12.50	269.	77.	56.	1.34
+	5 COMBINED AT	WEST-5	2398.	12.20	559.	158.	114.	3.19
+	HYDROGRAPH AT	S706	1103.	12.07	152.	47.	34.	0.71
+	HYDROGRAPH AT	S707	981.	12.07	153.	49.	35.	0.64
+	HYDROGRAPH AT	S728	324.	12.13	62.	20.	14.	0.28
+	5 COMBINED AT	WEST	22506.	13.07	8446.	2423.	1755.	55.94

+	HYDROGRAPH AT S708	1222.	12.07	163.	43.	31.	0.71
+	HYDROGRAPH AT S709	715.	12.10	121.	34.	24.	0.44
+	ROUTED TO C709O	379.	12.43	121.	34.	24.	0.44
+	ROUTED TO 709710	378.	12.50	121.	34.	24.	0.44
+	HYDROGRAPH AT S710	214.	12.00	28.	8.	5.	0.11
+	2 COMBINED AT C710I	488.	12.07	149.	41.	30.	0.55
+	ROUTED TO C710O	384.	12.80	149.	41.	30.	0.55
+	HYDROGRAPH AT S711	318.	12.00	44.	13.	9.	0.16
+	ROUTED TO C711O	165.	12.17	44.	13.	9.	0.16
+	ROUTED TO 711712	164.	12.20	44.	13.	9.	0.16
+	HYDROGRAPH AT S712	135.	12.00	18.	5.	4.	0.07
+	2 COMBINED AT C712I	283.	12.03	61.	17.	13.	0.23
+	ROUTED TO C712O	223.	12.17	61.	17.	13.	0.23
+	ROUTED TO 712714	222.	12.27	61.	17.	13.	0.23
+	HYDROGRAPH AT S713	210.	12.00	28.	8.	5.	0.11
+	ROUTED TO C713O	142.	12.13	28.	8.	5.	0.11
+	ROUTED TO 713714	142.	12.13	28.	8.	5.	0.11
+	HYDROGRAPH AT S714	107.	12.03	12.	3.	2.	0.06
+	3 COMBINED AT C714	445.	12.07	100.	28.	20.	0.39
+	HYDROGRAPH AT S715	330.	12.10	58.	16.	11.	0.22
+	HYDROGRAPH AT S716	1733.	12.13	291.	83.	60.	1.13
+	ROUTED TO C716O	605.	12.70	291.	83.	60.	1.13
+	ROUTED TO 716717	604.	12.83	291.	83.	60.	1.13
+	HYDROGRAPH AT S717	535.	12.07	78.	22.	16.	0.29
+	2 COMBINED AT C717	986.	12.13	366.	104.	75.	1.41
+	ROUTED TO 717718	924.	12.40	366.	103.	74.	1.41
+	HYDROGRAPH AT S718	408.	12.50	119.	33.	24.	0.44

+	2 COMBINED AT C718	1314.	12.43	481.	135.	97.	1.86
+	HYDROGRAPH AT S719	209.	12.13	46.	14.	10.	0.15
+	6 COMBINED AT EAST-1	2950.	12.13	972.	269.	194.	3.88
+	HYDROGRAPH AT S720	581.	12.10	100.	28.	20.	0.37
+	HYDROGRAPH AT S721	638.	12.00	85.	27.	19.	0.34
+	ROUTED TO C721O	243.	12.27	85.	27.	19.	0.34
+	ROUTED TO 721722	241.	12.60	85.	27.	19.	0.34
+	HYDROGRAPH AT S722	1392.	12.13	235.	66.	48.	0.95
+	2 COMBINED AT C722	1462.	12.13	318.	92.	67.	1.29
+	HYDROGRAPH AT S723	160.	12.03	23.	7.	5.	0.09
+	HYDROGRAPH AT S724	1877.	12.10	339.	106.	77.	1.16
+	HYDROGRAPH AT S725	1467.	12.20	310.	97.	70.	1.16
+	5 COMBINED AT EAST-2	5343.	12.13	1062.	322.	232.	4.06
+	HYDROGRAPH AT S726	569.	12.03	66.	20.	14.	0.33
+	ROUTED TO 726727	534.	12.17	66.	20.	14.	0.33
+	HYDROGRAPH AT S727	489.	12.17	103.	33.	24.	0.38
+	2 COMBINED AT C727	1023.	12.17	169.	52.	38.	0.71
+	4 COMBINED AT TOTAL	25224.	12.97	10204.	2940.	2130.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 50-Year, 6-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  10:16:58  *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU50-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 50-year, 6-hour storm event. A companion model is also created for the existing condition 50-year, 24-hour storm event. Both models (50-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 50-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.03 HOURS
                      TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       3.00  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        2.98  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        2.94  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        2.77  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        2.43  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	612.	4.47	106.	27.	19.	0.57		
+	ROUTED TO	100102	581.	4.73	106.	27.	19.	0.57		
+	HYDROGRAPH AT	S101	828.	4.37	106.	27.	19.	0.63		
+	2 COMBINED AT	C102R	964.	4.60	199.	50.	36.	1.20		
+	HYDROGRAPH AT	S102	565.	4.23	88.	22.	16.	0.45		
+	ROUTED TO	101102	538.	4.43	88.	22.	16.	0.45		
+	HYDROGRAPH AT	S103	413.	4.50	71.	18.	13.	0.40		
+	2 COMBINED AT	C102L	849.	4.50	152.	38.	28.	0.84		
+	2 COMBINED AT	C102	1586.	4.53	331.	84.	60.	2.05		
+	ROUTED TO	102103	1559.	4.80	331.	84.	60.	2.05		
+	HYDROGRAPH AT	S104	1104.	4.43	166.	42.	30.	0.90		
+	2 COMBINED AT	C103R	2133.	4.70	470.	119.	86.	2.95		
+	HYDROGRAPH AT	S105	570.	4.33	113.	28.	21.	0.59		
+	2 COMBINED AT	C103	2444.	4.67	558.	142.	102.	3.54		
+	ROUTED TO	103104	2408.	4.83	557.	142.	102.	3.54		
+	HYDROGRAPH AT	S106	687.	4.23	97.	24.	17.	0.57		
+	2 COMBINED AT	C104	2579.	4.80	627.	159.	115.	4.11		
+	ROUTED TO	104105	2537.	5.00	626.	159.	115.	4.11		
	HYDROGRAPH AT									

+		S107	912.	4.43	137.	34.	25.	0.94
	2 COMBINED AT							
+		C105L	2792.	4.97	721.	183.	132.	5.05
	HYDROGRAPH AT							
+		S200	1110.	4.43	175.	44.	32.	0.96
	ROUTED TO							
+		200201	1096.	4.50	175.	44.	32.	0.96
	HYDROGRAPH AT							
+		S201	490.	4.33	67.	17.	12.	0.35
	2 COMBINED AT							
+		C201	1354.	4.47	233.	59.	42.	1.31
	ROUTED TO							
+		201203	1330.	4.57	233.	59.	42.	1.31
	HYDROGRAPH AT							
+		S202	230.	4.20	24.	6.	4.	0.13
	ROUTED TO.							
+		202203	217.	4.27	24.	6.	4.	0.13
	HYDROGRAPH AT							
+		S203	161.	4.87	69.	19.	13.	0.37
	3 COMBINED AT							
+		C203R	1449.	4.57	307.	80.	58.	1.81
	HYDROGRAPH AT							
+		S204	894.	4.53	167.	42.	30.	0.95
	2 COMBINED AT							
+		C203	1996.	4.60	448.	116.	84.	2.76
	ROUTED TO							
+		203204	1989.	4.63	448.	116.	84.	2.76
	HYDROGRAPH AT							
+		S205	648.	4.30	84.	21.	15.	0.41
	2 COMBINED AT							
+		C204	2249.	4.57	514.	133.	96.	3.17
	ROUTED TO							
+		204205	2223.	4.70	514.	133.	96.	3.17
	HYDROGRAPH AT							
+		S206	701.	4.40	160.	41.	29.	0.85
	2 COMBINED AT							
+		C205L	2639.	4.70	643.	166.	119.	4.03
	HYDROGRAPH AT							
+		S207	804.	4.63	177.	45.	32.	0.96
	2 COMBINED AT							
+		C205	3138.	4.70	782.	202.	145.	4.98
	ROUTED TO							
+		205206	3035.	5.07	781.	202.	145.	4.98
	HYDROGRAPH AT							
+		S208	643.	5.17	203.	53.	38.	1.10
	2 COMBINED AT							
+		C206	3423.	5.07	940.	243.	175.	6.09
	ROUTED TO							
+		206207	3396.	5.17	940.	243.	175.	6.09
	HYDROGRAPH AT							
+		S209	810.	4.43	111.	28.	20.	0.65
	2 COMBINED AT							
+		C207R	3508.	5.13	1014.	263.	189.	6.74
	HYDROGRAPH AT							

+		S210	681.	4.17	76.	19.	14.	0.48
	2 COMBINED AT							
+		C207	3516.	5.13	1060.	274.	198.	7.22
	ROUTED TO							
+		207105	3486.	5.23	1059.	274.	198.	7.22
	HYDROGRAPH AT							
+		S211	648.	4.20	80.	20.	15.	0.49
	2 COMBINED AT							
+		C105R	3502.	5.23	1108.	287.	207.	7.70
	2 COMBINED AT							
+		C105	5365.	5.17	1685.	435.	313.	12.75
	HYDROGRAPH AT							
+		S300	988.	4.13	119.	30.	22.	0.62
	HYDROGRAPH AT							
+		S301	1570.	4.13	200.	50.	36.	0.99
	2 COMBINED AT							
+		C300	2128.	4.13	305.	77.	55.	1.61
	ROUTED TO							
+		300301	2056.	4.23	304.	77.	55.	1.61
	HYDROGRAPH AT							
+		S302	768.	4.30	88.	22.	16.	0.47
	2 COMBINED AT							
+		C301	2403.	4.27	378.	95.	69.	2.07
	ROUTED TO							
+		301302	2261.	4.60	377.	95.	69.	2.07
	HYDROGRAPH AT							
+		S303	809.	4.43	108.	27.	20.	0.71
	2 COMBINED AT							
+		C302	2603.	4.57	460.	116.	84.	2.78
	ROUTED TO							
+		302303	2563.	4.70	459.	116.	84.	2.78
	HYDROGRAPH AT							
+		S304	856.	4.23	129.	32.	23.	0.82
	2 COMBINED AT							
+		C303	2882.	4.67	556.	141.	101.	3.60
	2 COMBINED AT							
+		WEST-1	6364.	5.07	2089.	539.	388.	16.36
	HYDROGRAPH AT							
+		S400	1689.	4.27	219.	55.	40.	1.05
	ROUTED TO							
+		C400O	528.	4.77	217.	55.	40.	1.05
	ROUTED TO							
+		400401	526.	5.03	217.	55.	40.	1.05
	HYDROGRAPH AT							
+		S401	1085.	4.13	112.	28.	20.	0.65
	2 COMBINED AT							
+		C401	1038.	4.20	313.	79.	57.	1.69
	ROUTED TO							
+		401402	994.	4.53	313.	79.	57.	1.69
	HYDROGRAPH AT							
+		S402	1427.	4.10	154.	39.	28.	0.74
	2 COMBINED AT							
+		C402	1527.	4.37	445.	114.	82.	2.43
	ROUTED TO							

+		402403	1454.	4.70	445.	114.	82.	2.43
	HYDROGRAPH AT							
+		S403	1234.	4.10	137.	34.	25.	0.56
	2 COMBINED AT							
+		C403	1707.	4.63	565.	145.	104.	2.99
	ROUTED TO							
+		403404	1694.	4.73	565.	145.	104.	2.99
	HYDROGRAPH AT							
+		S404	565.	4.20	48.	12.	9.	0.26
	2 COMBINED AT							
+		C404	1778.	4.50	601.	154.	111.	3.26
	2 COMBINED AT							
+		WEST-2	7315.	4.97	2522.	652.	470.	19.61
	HYDROGRAPH AT							
+		S500	1001.	4.30	203.	51.	37.	1.05
	ROUTED TO							
+		500501	987.	4.47	203.	51.	37.	1.05
	HYDROGRAPH AT							
+		S501	916.	4.17	112.	28.	20.	0.61
	2 COMBINED AT							
+		C501	1450.	4.37	299.	76.	55.	1.67
	ROUTED TO							
+		501502	1423.	4.43	296.	75.	54.	1.67
	HYDROGRAPH AT							
+		S502	663.	4.30	72.	18.	13.	0.40
	2 COMBINED AT							
+		C502L	1749.	4.40	353.	89.	64.	2.07
	HYDROGRAPH AT							
+		S503	1190.	4.23	188.	47.	34.	0.99
	2 COMBINED AT							
+		C502I	2486.	4.40	513.	130.	94.	3.07
	ROUTED TO							
+		C502O	2079.	4.63	513.	130.	94.	3.07
	ROUTED TO							
+		502505	2044.	4.87	501.	126.	91.	3.07
	HYDROGRAPH AT							
+		S504	420.	4.20	65.	16.	12.	0.33
	2 COMBINED AT							
+		C505L	2160.	4.80	552.	139.	100.	3.39
	HYDROGRAPH AT							
+		S505	336.	4.13	25.	6.	4.	0.14
	ROUTED TO							
+		C503O	94.	4.37	25.	6.	4.	0.14
	ROUTED TO							
+		503505	92.	4.87	24.	6.	4.	0.14
	HYDROGRAPH AT							
+		S506	333.	4.17	31.	8.	6.	0.15
	ROUTED TO							
+		C504O	94.	4.50	31.	8.	6.	0.15
	ROUTED TO							
+		504505	93.	4.90	31.	8.	6.	0.15
	HYDROGRAPH AT							
+		S507	1216.	4.13	120.	30.	22.	0.67
	3 COMBINED AT							

+	C505R	1129.	4.13	168.	42.	30.	0.96
2 COMBINED AT +	C505	2457.	4.63	683.	173.	125.	4.35
ROUTED TO +	505509	2409.	4.97	662.	166.	120.	4.35
HYDROGRAPH AT +	S508	667.	4.07	57.	14.	10.	0.29
2 COMBINED AT +	C509L	2417.	4.93	703.	177.	127.	4.65
HYDROGRAPH AT +	S509	448.	4.03	35.	9.	6.	0.17
ROUTED TO +	C506O	93.	4.33	35.	9.	6.	0.17
ROUTED TO +	506508	92.	4.53	35.	9.	6.	0.17
HYDROGRAPH AT +	S510	284.	4.10	32.	8.	6.	0.13
2 COMBINED AT +	C508R	355.	4.10	66.	17.	12.	0.30
HYDROGRAPH AT +	S511	856.	4.07	79.	20.	14.	0.38
ROUTED TO +	C507O	98.	4.63	76.	20.	14.	0.38
ROUTED TO +	507508	97.	4.90	75.	20.	15.	0.38
HYDROGRAPH AT +	S512	458.	4.10	56.	14.	10.	0.21
2 COMBINED AT +	C508L	501.	4.13	127.	34.	25.	0.60
2 COMBINED AT +	C508	784.	4.10	187.	50.	36.	0.90
ROUTED TO +	508509	698.	4.53	183.	50.	36.	0.90
HYDROGRAPH AT +	S513	1090.	4.17	142.	36.	26.	0.78
2 COMBINED AT +	C509R	1254.	4.40	307.	83.	59.	1.67
2 COMBINED AT +	C509	3032.	4.83	956.	246.	177.	6.32
ROUTED TO +	509510	3017.	4.90	955.	246.	177.	6.32
HYDROGRAPH AT +	S514	1226.	4.13	153.	38.	28.	0.65
2 COMBINED AT +	C510	3222.	4.83	1078.	278.	200.	6.97
ROUTED TO +	510511	3183.	5.17	1075.	278.	200.	6.97
HYDROGRAPH AT +	S515	2060.	4.13	263.	66.	48.	1.10
2 COMBINED AT +	C511	3324.	5.07	1290.	335.	241.	8.07
ROUTED TO +	511512	3285.	5.37	1284.	334.	241.	8.07
HYDROGRAPH AT							

+		S516	934.	4.13	124.	31.	23.	0.54
	2 COMBINED AT							
+		C512	3327.	5.37	1370.	359.	259.	8.61
	2 COMBINED AT							
+		WEST-3	9262.	5.07	3528.	922.	664.	28.22
	HYDROGRAPH AT							
+		S600	1415.	4.63	282.	71.	51.	2.02
	ROUTED TO							
+		600601	1402.	4.70	282.	71.	51.	2.02
	HYDROGRAPH AT							
+		S601	1215.	4.40	196.	49.	36.	0.90
	2 COMBINED AT							
+		C601	2056.	4.63	453.	114.	82.	2.92
	ROUTED TO							
+		601602	2034.	4.73	453.	114.	82.	2.92
	HYDROGRAPH AT							
+		S603	1229.	4.27	145.	36.	26.	0.67
	2 COMBINED AT							
+		C602L	2378.	4.63	573.	145.	105.	3.58
	HYDROGRAPH AT							
+		S602	1505.	4.63	329.	83.	60.	1.88
	2 COMBINED AT							
+		C602	3455.	4.63	847.	215.	155.	5.47
	ROUTED TO							
+		602603	3355.	4.87	802.	201.	145.	5.47
	HYDROGRAPH AT							
+		S606	735.	4.43	127.	32.	23.	0.66
	2 COMBINED AT							
+		C603L	3629.	4.83	897.	225.	162.	6.13
	HYDROGRAPH AT							
+		S605	1000.	4.53	198.	50.	36.	1.09
	HYDROGRAPH AT							
+		S604	1526.	4.97	444.	114.	82.	2.66
	3 COMBINED AT							
+		C603	5096.	4.83	1395.	355.	256.	9.87
	ROUTED TO							
+		603604	4998.	5.00	1346.	339.	244.	9.87
	HYDROGRAPH AT							
+		S609	489.	4.50	98.	25.	18.	0.56
	2 COMBINED AT							
+		C604R	5149.	5.00	1408.	355.	256.	10.43
	HYDROGRAPH AT							
+		S607	772.	4.53	162.	41.	30.	0.82
	2 COMBINED AT							
+		C604	5469.	4.97	1526.	385.	278.	11.25
	ROUTED TO							
+		604605	5457.	5.03	1526.	385.	278.	11.25
	HYDROGRAPH AT							
+		S608	896.	4.27	109.	27.	20.	0.51
	2 COMBINED AT							
+		C605	5561.	5.00	1604.	405.	292.	11.76
	ROUTED TO							
+		605606	5511.	5.13	1594.	403.	290.	11.76
	HYDROGRAPH AT							

+	S610	780.	4.23	129.	33.	23.	0.60
2 COMBINED AT +	C606L	5632.	5.10	1686.	427.	308.	12.36
HYDROGRAPH AT +	S612	889.	4.27	174.	44.	32.	0.81
2 COMBINED AT +	C606	5862.	5.10	1815.	461.	332.	13.17
ROUTED TO +	606608	5858.	5.10	1813.	460.	331.	13.17
HYDROGRAPH AT +	S611	873.	4.33	109.	27.	20.	0.57
ROUTED TO +	607608	796.	4.53	109.	27.	20.	0.57
HYDROGRAPH AT +	S613	1499.	4.70	336.	85.	61.	1.80
3 COMBINED AT +	C608	6783.	5.03	2131.	542.	391.	15.53
ROUTED TO +	608609	6732.	5.17	2119.	538.	388.	15.53
HYDROGRAPH AT +	S614	900.	4.67	200.	51.	37.	1.08
2 COMBINED AT +	C609	7057.	5.13	2250.	573.	413.	16.61
ROUTED TO +	609611	6970.	5.33	2220.	563.	406.	16.61
HYDROGRAPH AT +	S617	976.	4.20	123.	31.	22.	0.68
2 COMBINED AT +	C611R	6965.	5.30	2289.	582.	419.	17.29
HYDROGRAPH AT +	S615	1095.	4.67	250.	63.	46.	1.05
ROUTED TO +	610611	1068.	4.83	250.	63.	46.	1.05
HYDROGRAPH AT +	S616	648.	4.37	94.	24.	17.	0.50
2 COMBINED AT +	C611L	1299.	4.77	331.	84.	61.	1.56
2 COMBINED AT +	C611	7491.	5.30	2522.	644.	464.	18.85
ROUTED TO +	611613	7455.	5.33	2511.	640.	461.	18.85
HYDROGRAPH AT +	S618	838.	4.60	168.	42.	31.	0.96
2 COMBINED AT +	C613R	7622.	5.33	2608.	665.	479.	19.81
HYDROGRAPH AT +	S619	1163.	4.47	182.	46.	33.	0.83
ROUTED TO +	612613	1121.	4.63	181.	46.	33.	0.83
HYDROGRAPH AT +	S620	502.	4.47	97.	24.	18.	0.44
2 COMBINED AT +	C613L	1435.	4.63	270.	68.	49.	1.27
2 COMBINED AT							

+	C613	7995.	5.30	2790.	714.	514.	21.08
ROUTED TO +	613614	7948.	5.37	2778.	709.	511.	21.08
HYDROGRAPH AT +	S621	1197.	4.37	132.	33.	24.	0.92
2 COMBINED AT +	C614	7944.	5.37	2844.	726.	523.	22.00
ROUTED TO +	614615	7846.	5.47	2823.	720.	519.	22.00
HYDROGRAPH AT +	S622	614.	4.73	127.	32.	23.	0.90
2 COMBINED AT +	C615	7935.	5.47	2875.	733.	529.	22.90
2 COMBINED AT +	WEST-4	13682.	5.33	5603.	1456.	1050.	51.12
HYDROGRAPH AT +	S700	985.	4.13	102.	26.	18.	0.61
HYDROGRAPH AT +	S701	590.	4.37	130.	33.	24.	0.72
HYDROGRAPH AT +	S702	463.	4.10	51.	13.	9.	0.26
HYDROGRAPH AT +	S703	365.	4.27	39.	10.	7.	0.26
HYDROGRAPH AT +	S704	787.	4.10	71.	18.	13.	0.41
ROUTED TO +	704705	687.	4.37	71.	18.	13.	0.41
HYDROGRAPH AT +	S705	1402.	4.10	167.	42.	30.	0.75
2 COMBINED AT +	C705	1549.	4.20	229.	58.	41.	1.16
ROUTED TO +	C705O	723.	4.63	229.	58.	41.	1.16
ROUTED TO +	705OAF	721.	4.83	229.	58.	41.	1.16
HYDROGRAPH AT +	S705AF	295.	4.30	40.	10.	7.	0.18
2 COMBINED AT +	C705AF	871.	4.57	266.	67.	48.	1.34
5 COMBINED AT +	WEST-5	2154.	4.33	527.	133.	96.	3.19
HYDROGRAPH AT +	S706	1419.	4.10	156.	39.	28.	0.71
HYDROGRAPH AT +	S707	1310.	4.10	158.	40.	29.	0.64
HYDROGRAPH AT +	S728	416.	4.17	65.	16.	12.	0.28
5 COMBINED AT +	WEST	14134.	5.27	6072.	1586.	1143.	55.94
HYDROGRAPH AT +	S708	1575.	4.10	154.	39.	28.	0.71
HYDROGRAPH AT +	S709	984.	4.10	108.	27.	20.	0.44
ROUTED TO							

+		C709O	412.	4.47	108.	27.	20.	0.44
	ROUTED TO							
+		709710	411.	4.53	108.	27.	20.	0.44
	HYDROGRAPH AT							
+		S710	337.	4.03	26.	7.	5.	0.11
	2 COMBINED AT							
+		C710I	583.	4.03	134.	34.	24.	0.55
	ROUTED TO							
+		C710O	399.	4.80	134.	34.	24.	0.55
	HYDROGRAPH AT							
+		S711	516.	4.00	40.	10.	7.	0.16
	ROUTED TO							
+		C711O	180.	4.17	40.	10.	7.	0.16
	ROUTED TO							
+		711712	179.	4.23	40.	10.	7.	0.16
	HYDROGRAPH AT							
+		S712	230.	4.00	17.	4.	3.	0.07
	2 COMBINED AT							
+		C712I	374.	4.00	57.	14.	10.	0.23
	ROUTED TO							
+		C712O	244.	4.13	57.	14.	10.	0.23
	ROUTED TO							
+		712714	243.	4.23	57.	14.	10.	0.23
	HYDROGRAPH AT							
+		S713	338.	4.00	26.	6.	5.	0.11
	ROUTED TO							
+		C713O	177.	4.13	26.	6.	5.	0.11
	ROUTED TO							
+		713714	176.	4.17	26.	6.	5.	0.11
	HYDROGRAPH AT							
+		S714	166.	4.03	12.	3.	2.	0.06
	3 COMBINED AT							
+		C714	541.	4.07	94.	24.	17.	0.39
	HYDROGRAPH AT							
+		S715	436.	4.13	52.	13.	9.	0.22
	HYDROGRAPH AT							
+		S716	1844.	4.17	272.	68.	49.	1.13
	ROUTED TO							
+		C716O	622.	4.77	271.	68.	49.	1.13
	ROUTED TO							
+		716717	621.	4.90	271.	68.	49.	1.13
	HYDROGRAPH AT							
+		S717	822.	4.10	70.	18.	13.	0.29
	2 COMBINED AT							
+		C717	1033.	4.13	339.	85.	61.	1.41
	ROUTED TO							
+		717718	946.	4.43	338.	85.	61.	1.41
	HYDROGRAPH AT							
+		S718	490.	4.53	107.	27.	19.	0.44
	2 COMBINED AT							
+		C718	1300.	4.47	441.	111.	80.	1.86
	HYDROGRAPH AT							
+		S719	284.	4.13	41.	10.	7.	0.15
	6 COMBINED AT							

+		EAST-1	2937.	4.37	881.	222.	160.	3.88
+	HYDROGRAPH AT	S720	805.	4.10	92.	23.	17.	0.37
+	HYDROGRAPH AT	S721	1003.	4.03	87.	22.	16.	0.34
+	ROUTED TO	C721O	262.	4.30	86.	22.	16.	0.34
+	ROUTED TO	721722	260.	4.60	86.	22.	16.	0.34
+	HYDROGRAPH AT	S722	1518.	4.17	224.	56.	41.	0.95
+	2 COMBINED AT	C722	1523.	4.20	306.	77.	56.	1.29
+	HYDROGRAPH AT	S723	246.	4.03	22.	5.	4.	0.09
+	HYDROGRAPH AT	S724	2035.	4.17	321.	81.	58.	1.16
+	HYDROGRAPH AT	S725	1518.	4.23	304.	77.	55.	1.16
+	5 COMBINED AT	EAST-2	4586.	4.20	1008.	254.	183.	4.06
+	HYDROGRAPH AT	S726	888.	4.03	69.	17.	13.	0.33
+	ROUTED TO	726727	786.	4.20	69.	17.	13.	0.33
+	HYDROGRAPH AT	S727	628.	4.17	102.	26.	18.	0.38
+	2 COMBINED AT	C727	1303.	4.20	169.	42.	31.	0.71
+	4 COMBINED AT	TOTAL	16378.	5.03	7442.	1950.	1405.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 50-Year, 24-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  10:16:38  *
*                                      *
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*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU50-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 50-year, 24-hour storm event. A companion model is also created for the existing condition 50-year, 6-hour storm event. Both models (50-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 50-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

               COMPUTATION INTERVAL    0.03 HOURS
                    TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       3.76  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 3.74 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 3.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 3.53 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 3.40 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 3.22 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	425.	12.47	88.	26.	19.	0.57		
+	ROUTED TO	100102	406.	12.73	88.	26.	19.	0.57		
+	HYDROGRAPH AT	S101	581.	12.33	87.	24.	18.	0.63		
+	2 COMBINED AT	C102R	801.	12.40	174.	51.	37.	1.20		
	HYDROGRAPH AT									

+	S102	383.	12.20	73.	22.	16.	0.45
ROUTED TO							
+	101102	366.	12.43	73.	22.	16.	0.45
HYDROGRAPH AT							
+	S103	280.	12.50	57.	16.	12.	0.40
2 COMBINED AT							
+	C102L	640.	12.47	129.	39.	28.	0.84
2 COMBINED AT							
+	C102	1417.	12.43	300.	88.	64.	2.05
ROUTED TO							
+	102103	1375.	12.70	300.	88.	64.	2.05
HYDROGRAPH AT							
+	S104	853.	12.40	140.	41.	30.	0.90
2 COMBINED AT							
+	C103R	1963.	12.60	434.	127.	92.	2.95
HYDROGRAPH AT							
+	S105	408.	12.30	93.	27.	20.	0.59
2 COMBINED AT							
+	C103	2281.	12.57	523.	153.	111.	3.54
ROUTED TO							
+	103104	2241.	12.73	522.	153.	111.	3.54
HYDROGRAPH AT							
+	S106	487.	12.20	77.	21.	15.	0.57
2 COMBINED AT							
+	C104	2428.	12.73	595.	173.	125.	4.11
ROUTED TO							
+	104105	2381.	12.93	595.	173.	125.	4.11
HYDROGRAPH AT							
+	S107	737.	12.37	112.	29.	21.	0.94
2 COMBINED AT							
+	C105L	2654.	12.90	700.	200.	145.	5.05
HYDROGRAPH AT							
+	S200	873.	12.40	154.	48.	35.	0.96
ROUTED TO							
+	200201	852.	12.43	154.	48.	35.	0.96
HYDROGRAPH AT							
+	S201	316.	12.33	56.	18.	13.	0.35
2 COMBINED AT							
+	C201	1133.	12.40	210.	66.	47.	1.31
ROUTED TO							
+	201203	1114.	12.50	210.	66.	47.	1.31
HYDROGRAPH AT							
+	S202	133.	12.20	21.	6.	5.	0.13
ROUTED TO							
+	202203	129.	12.27	21.	6.	5.	0.13
HYDROGRAPH AT							
+	S203	259.	12.27	63.	20.	14.	0.37
3 COMBINED AT							
+	C203R	1420.	12.47	290.	91.	66.	1.81
HYDROGRAPH AT							
+	S204	710.	12.50	148.	46.	33.	0.95
2 COMBINED AT							
+	C203	2099.	12.50	432.	135.	98.	2.76
ROUTED TO							

+	203204	2088.	12.53	432.	135.	98.	2.76
HYDROGRAPH AT +	S205	417.	12.27	69.	21.	16.	0.41
2 COMBINED AT +	C204	2362.	12.50	499.	156.	113.	3.17
ROUTED TO +	204205	2315.	12.60	499.	156.	113.	3.17
HYDROGRAPH AT +	S206	544.	12.33	138.	42.	30.	0.85
2 COMBINED AT +	C205L	2772.	12.60	631.	196.	142.	4.03
HYDROGRAPH AT +	S207	639.	12.60	157.	49.	35.	0.96
2 COMBINED AT +	C205	3375.	12.60	780.	242.	175.	4.98
ROUTED TO +	205206	3225.	12.93	779.	242.	175.	4.98
HYDROGRAPH AT +	S208	688.	12.77	180.	54.	39.	1.10
2 COMBINED AT +	C206	3782.	12.93	942.	291.	211.	6.09
ROUTED TO +	206207	3747.	13.00	942.	291.	211.	6.09
HYDROGRAPH AT +	S209	573.	12.40	91.	26.	19.	0.65
2 COMBINED AT +	C207R	3896.	13.00	1021.	313.	227.	6.74
HYDROGRAPH AT +	S210	457.	12.17	58.	15.	11.	0.48
2 COMBINED AT +	C207	3928.	13.00	1071.	326.	237.	7.22
ROUTED TO +	207105	3864.	13.10	1071.	326.	237.	7.22
HYDROGRAPH AT +	S211	438.	12.20	62.	17.	12.	0.49
2 COMBINED AT +	C105R	3905.	13.07	1124.	340.	247.	7.70
2 COMBINED AT +	C105	6084.	13.03	1749.	519.	377.	12.75
HYDROGRAPH AT +	S300	664.	12.13	100.	31.	22.	0.62
HYDROGRAPH AT +	S301	1196.	12.10	177.	56.	41.	0.99
2 COMBINED AT +	C300	1839.	12.10	274.	86.	62.	1.61
ROUTED TO +	300301	1787.	12.20	274.	86.	62.	1.61
HYDROGRAPH AT +	S302	489.	12.30	73.	22.	16.	0.47
2 COMBINED AT +	C301	2234.	12.20	345.	108.	78.	2.07
ROUTED TO +	301302	2089.	12.53	345.	108.	78.	2.07
HYDROGRAPH AT							

+	S303	589.	12.40	89.	25.	18.	0.71
2 COMBINED AT +	C302	2594.	12.50	430.	131.	95.	2.78
ROUTED TO +	302303	2536.	12.63	430.	131.	95.	2.78
HYDROGRAPH AT +	S304	682.	12.20	105.	28.	20.	0.82
2 COMBINED AT +	C303	2883.	12.60	529.	157.	114.	3.60
2 COMBINED AT +	WEST-1	7390.	12.97	2212.	657.	477.	16.36
HYDROGRAPH AT +	S400	1315.	12.23	189.	58.	42.	1.05
ROUTED TO +	C400O	489.	12.63	188.	58.	42.	1.05
ROUTED TO +	400401	486.	12.93	188.	58.	42.	1.05
HYDROGRAPH AT +	S401	742.	12.10	90.	25.	18.	0.65
2 COMBINED AT +	C401	906.	12.17	275.	82.	59.	1.69
ROUTED TO +	401402	850.	12.47	275.	82.	59.	1.69
HYDROGRAPH AT +	S402	985.	12.07	130.	40.	29.	0.74
2 COMBINED AT +	C402	1307.	12.27	400.	120.	87.	2.43
ROUTED TO +	402403	1253.	12.60	399.	120.	87.	2.43
HYDROGRAPH AT +	S403	788.	12.10	118.	35.	26.	0.56
2 COMBINED AT +	C403	1523.	12.50	512.	154.	112.	2.99
ROUTED TO +	403404	1516.	12.60	511.	154.	112.	2.99
HYDROGRAPH AT +	S404	335.	12.20	38.	10.	7.	0.26
2 COMBINED AT +	C404	1639.	12.37	548.	164.	119.	3.26
2 COMBINED AT +	WEST-2	8474.	12.90	2690.	800.	581.	19.61
HYDROGRAPH AT +	S500	823.	12.27	181.	57.	41.	1.05
ROUTED TO +	500501	804.	12.40	181.	57.	41.	1.05
HYDROGRAPH AT +	S501	633.	12.13	94.	28.	20.	0.61
2 COMBINED AT +	C501	1253.	12.30	272.	85.	61.	1.67
ROUTED TO +	501502	1229.	12.37	269.	81.	59.	1.67
HYDROGRAPH AT +	S502	418.	12.27	59.	17.	12.	0.40
2 COMBINED AT							

+	C502L	1604.	12.33	325.	98.	71.	2.07
HYDROGRAPH AT							
+	S503	968.	12.20	163.	50.	36.	0.99
2 COMBINED AT							
+	C502I	2453.	12.27	482.	146.	105.	3.07
ROUTED TO							
+	C502O	2013.	12.50	482.	146.	105.	3.07
ROUTED TO							
+	502505	1975.	12.73	471.	136.	98.	3.07
HYDROGRAPH AT							
+	S504	285.	12.17	54.	17.	12.	0.33
2 COMBINED AT							
+	C505L	2105.	12.70	522.	152.	109.	3.39
HYDROGRAPH AT							
+	S505	177.	12.13	20.	6.	4.	0.14
ROUTED TO							
+	C503O	86.	12.33	20.	6.	4.	0.14
ROUTED TO							
+	503505	84.	12.83	19.	5.	4.	0.14
HYDROGRAPH AT							
+	S506	194.	12.17	26.	8.	5.	0.15
ROUTED TO							
+	C504O	84.	12.47	26.	8.	5.	0.15
ROUTED TO							
+	504505	83.	12.90	26.	8.	5.	0.15
HYDROGRAPH AT							
+	S507	822.	12.10	97.	27.	19.	0.67
3 COMBINED AT							
+	C505R	837.	12.10	142.	39.	28.	0.96
2 COMBINED AT							
+	C505	2394.	12.63	656.	189.	136.	4.35
ROUTED TO							
+	505509	2341.	12.93	635.	170.	122.	4.35
HYDROGRAPH AT							
+	S508	379.	12.07	46.	13.	10.	0.29
2 COMBINED AT							
+	C509L	2363.	12.93	678.	182.	131.	4.65
HYDROGRAPH AT							
+	S509	241.	12.03	29.	9.	6.	0.17
ROUTED TO							
+	C506O	87.	12.30	29.	9.	6.	0.17
ROUTED TO							
+	506508	87.	12.50	29.	9.	6.	0.17
HYDROGRAPH AT							
+	S510	172.	12.10	27.	8.	6.	0.13
2 COMBINED AT							
+	C508R	245.	12.10	56.	17.	12.	0.30
HYDROGRAPH AT							
+	S511	501.	12.07	65.	19.	14.	0.38
ROUTED TO							
+	C507O	95.	12.67	65.	19.	14.	0.38
ROUTED TO							
+	507508	94.	12.93	64.	20.	14.	0.38
HYDROGRAPH AT							

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+                    S512      289.  12.10      49.      15.      11.    0.21
        2 COMBINED AT
+                    C508L     348.  12.13     112.      35.      25.    0.60
        2 COMBINED AT
+                    C508      591.  12.13     167.      52.      38.    0.90
        ROUTED TO
+                    508509    533.  12.60     163.      51.      37.    0.90
        HYDROGRAPH AT
+                    S513      813.  12.13     117.      34.      24.    0.78
        2 COMBINED AT
+                    C509R     937.  12.37     276.      84.      61.    1.67
        2 COMBINED AT
+                    C509     2919.  12.80     933.     260.     188.    6.32
        ROUTED TO
+                    509510   2909.  12.90     932.     259.     187.    6.32
        HYDROGRAPH AT
+                    S514      837.  12.10     130.      39.      28.    0.65
        2 COMBINED AT
+                    C510     3064.  12.87    1047.     294.     212.    6.97
        ROUTED TO
+                    510511   3018.  13.20    1045.     293.     212.    6.97
        HYDROGRAPH AT
+                    S515     1634.  12.10     234.      68.      49.    1.10
        2 COMBINED AT
+                    C511     3109.  13.17    1249.     354.     256.    8.07
        ROUTED TO
+                    511512   3073.  13.47    1243.     351.     254.    8.07
        HYDROGRAPH AT
+                    S516      619.  12.13     105.      34.      24.    0.54
        2 COMBINED AT
+                    C512     3113.  13.47    1330.     381.     276.    8.61
        2 COMBINED AT
+                    WEST-3  10770.  12.90    3868.    1136.     826.   28.22
        HYDROGRAPH AT
+                    S600     1426.  12.50     266.      79.      57.    2.02
        ROUTED TO
+                    600601   1408.  12.57     266.      79.      57.    2.02
        HYDROGRAPH AT
+                    S601      935.  12.37     170.      54.      39.    0.90
        2 COMBINED AT
+                    C601     2150.  12.50     430.     132.      95.    2.92
        ROUTED TO
+                    601602   2124.  12.60     430.     132.      95.    2.92
        HYDROGRAPH AT
+                    S603      355.  13.10     121.      39.      28.    0.67
        2 COMBINED AT
+                    C602L    2289.  12.63     545.     169.     122.    3.58
        HYDROGRAPH AT
+                    S602     1411.  12.53     302.      95.      68.    1.88
        2 COMBINED AT
+                    C602     3603.  12.57     833.     259.     187.    5.47
        ROUTED TO
+                    602603   3469.  12.80     789.     216.     155.    5.47
        HYDROGRAPH AT
```

+	S606	530.	12.40	109.	34.	25.	0.66
2 COMBINED AT +	C603L	3754.	12.77	886.	246.	178.	6.13
HYDROGRAPH AT +	S605	820.	12.50	176.	55.	40.	1.09
HYDROGRAPH AT +	S604	1493.	12.80	422.	132.	96.	2.66
3 COMBINED AT +	C603	5609.	12.77	1419.	415.	299.	9.87
ROUTED TO +	603604	5471.	12.93	1371.	369.	266.	9.87
HYDROGRAPH AT +	S609	342.	12.50	83.	25.	18.	0.56
2 COMBINED AT +	C604R	5667.	12.90	1441.	391.	282.	10.43
HYDROGRAPH AT +	S607	588.	12.50	141.	44.	31.	0.82
2 COMBINED AT +	C604	6021.	12.90	1564.	429.	309.	11.25
ROUTED TO +	604605	5986.	12.93	1564.	429.	309.	11.25
HYDROGRAPH AT +	S608	579.	12.27	91.	28.	20.	0.51
2 COMBINED AT +	C605	6094.	12.93	1643.	454.	327.	11.76
ROUTED TO +	605606	6019.	13.07	1635.	448.	323.	11.76
HYDROGRAPH AT +	S610	563.	12.20	110.	34.	25.	0.60
2 COMBINED AT +	C606L	6147.	13.03	1730.	478.	345.	12.36
HYDROGRAPH AT +	S612	691.	12.23	149.	45.	33.	0.81
2 COMBINED AT +	C606	6375.	13.03	1859.	518.	374.	13.17
ROUTED TO +	606608	6365.	13.07	1856.	515.	371.	13.17
HYDROGRAPH AT +	S611	578.	12.30	93.	29.	21.	0.57
ROUTED TO +	607608	545.	12.50	93.	29.	21.	0.57
HYDROGRAPH AT +	S613	1354.	12.63	303.	95.	68.	1.80
3 COMBINED AT +	C608	7340.	13.00	2199.	623.	450.	15.53
ROUTED TO +	608609	7262.	13.13	2187.	615.	443.	15.53
HYDROGRAPH AT +	S614	733.	12.63	178.	56.	40.	1.08
2 COMBINED AT +	C609	7635.	13.10	2338.	662.	478.	16.61
ROUTED TO +	609611	7523.	13.30	2309.	636.	458.	16.61
HYDROGRAPH AT							

+	S617	707.	12.17	103.	30.	22.	0.68
2 COMBINED AT +	C611R	7550.	13.30	2392.	661.	477.	17.29
HYDROGRAPH AT +	S615	860.	12.63	221.	72.	52.	1.05
ROUTED TO +	610611	838.	12.83	221.	72.	52.	1.05
HYDROGRAPH AT +	S616	433.	12.37	76.	22.	16.	0.50
2 COMBINED AT +	C611L	1054.	12.77	294.	94.	68.	1.56
2 COMBINED AT +	C611	8112.	13.27	2645.	743.	536.	18.85
ROUTED TO +	611613	8067.	13.30	2635.	733.	528.	18.85
HYDROGRAPH AT +	S618	665.	12.57	144.	42.	30.	0.96
2 COMBINED AT +	C613R	8284.	13.30	2754.	768.	554.	19.81
HYDROGRAPH AT +	S619	871.	12.47	157.	49.	35.	0.83
ROUTED TO +	612613	836.	12.60	157.	49.	35.	0.83
HYDROGRAPH AT +	S620	342.	12.50	81.	25.	18.	0.44
2 COMBINED AT +	C613L	1152.	12.60	237.	73.	53.	1.27
2 COMBINED AT +	C613	8647.	13.30	2953.	832.	600.	21.08
ROUTED TO +	613614	8590.	13.37	2942.	820.	591.	21.08
HYDROGRAPH AT +	S621	928.	12.30	109.	28.	20.	0.92
2 COMBINED AT +	C614	8593.	13.37	3029.	843.	607.	22.00
ROUTED TO +	614615	8520.	13.47	3016.	832.	600.	22.00
HYDROGRAPH AT +	S622	492.	12.70	105.	27.	20.	0.90
2 COMBINED AT +	C615	8676.	13.47	3099.	854.	615.	22.90
2 COMBINED AT +	WEST-4	16963.	13.13	6619.	1890.	1370.	51.12
HYDROGRAPH AT +	S700	648.	12.10	81.	22.	16.	0.61
HYDROGRAPH AT +	S701	447.	12.30	108.	31.	22.	0.72
HYDROGRAPH AT +	S702	280.	12.10	41.	12.	9.	0.26
HYDROGRAPH AT +	S703	229.	12.27	29.	7.	5.	0.26
HYDROGRAPH AT +	S704	466.	12.10	56.	16.	11.	0.41
ROUTED TO							

+	704705	426.	12.33	56.	16.	11.	0.41
+ HYDROGRAPH AT	S705	984.	12.10	141.	43.	31.	0.75
+ 2 COMBINED AT	C705	1254.	12.13	197.	58.	42.	1.16
+ ROUTED TO	C705O	647.	12.57	197.	58.	42.	1.16
+ ROUTED TO	705OAF	644.	12.73	197.	58.	42.	1.16
+ HYDROGRAPH AT	S705AF	203.	12.30	37.	9.	7.	0.18
+ 2 COMBINED AT	C705AF	775.	12.53	233.	67.	49.	1.34
+ 5 COMBINED AT	WEST-5	2014.	12.23	481.	136.	98.	3.19
+ HYDROGRAPH AT	S706	945.	12.07	132.	41.	29.	0.71
+ HYDROGRAPH AT	S707	854.	12.10	135.	43.	31.	0.64
+ HYDROGRAPH AT	S728	278.	12.17	54.	17.	13.	0.28
+ 5 COMBINED AT	WEST	17825.	13.13	7235.	2078.	1506.	55.94
+ HYDROGRAPH AT	S708	1068.	12.07	138.	36.	26.	0.71
+ HYDROGRAPH AT	S709	624.	12.10	105.	29.	21.	0.44
+ ROUTED TO	C709O	358.	12.40	105.	29.	21.	0.44
+ ROUTED TO	709710	358.	12.50	105.	29.	21.	0.44
+ HYDROGRAPH AT	S710	190.	12.00	24.	6.	5.	0.11
+ 2 COMBINED AT	C710I	442.	12.07	129.	35.	25.	0.55
+ ROUTED TO	C710O	364.	12.73	129.	35.	25.	0.55
+ HYDROGRAPH AT	S711	282.	12.00	38.	11.	8.	0.16
+ ROUTED TO	C711O	156.	12.17	38.	11.	8.	0.16
+ ROUTED TO	711712	155.	12.20	38.	11.	8.	0.16
+ HYDROGRAPH AT	S712	120.	12.00	15.	4.	3.	0.07
+ 2 COMBINED AT	C712I	261.	12.00	53.	15.	11.	0.23
+ ROUTED TO	C712O	208.	12.10	53.	15.	11.	0.23
+ ROUTED TO	712714	207.	12.20	53.	15.	11.	0.23
+ HYDROGRAPH AT	S713	187.	12.00	24.	6.	5.	0.11
ROUTED TO							

+	C713O	129.	12.13	24.	6.	5.	0.11
ROUTED TO +	713714	129.	12.13	24.	6.	5.	0.11
HYDROGRAPH AT +	S714	94.	12.03	10.	2.	2.	0.06
3 COMBINED AT +	C714	413.	12.07	87.	24.	17.	0.39
HYDROGRAPH AT +	S715	287.	12.13	50.	13.	10.	0.22
HYDROGRAPH AT +	S716	1514.	12.13	251.	71.	51.	1.13
ROUTED TO +	C716O	575.	12.67	251.	71.	51.	1.13
ROUTED TO +	716717	574.	12.80	251.	71.	51.	1.13
HYDROGRAPH AT +	S717	473.	12.10	68.	19.	13.	0.29
2 COMBINED AT +	C717	904.	12.17	317.	89.	64.	1.41
ROUTED TO +	717718	835.	12.47	317.	89.	64.	1.41
HYDROGRAPH AT +	S718	346.	12.53	103.	28.	20.	0.44
2 COMBINED AT +	C718	1166.	12.47	416.	116.	84.	1.86
HYDROGRAPH AT +	S719	183.	12.13	40.	12.	9.	0.15
6 COMBINED AT +	EAST-1	2592.	12.13	841.	231.	167.	3.88
HYDROGRAPH AT +	S720	506.	12.10	87.	24.	18.	0.37
HYDROGRAPH AT +	S721	564.	12.03	75.	24.	17.	0.34
ROUTED TO +	C721O	226.	12.27	75.	24.	17.	0.34
ROUTED TO +	721722	222.	12.57	74.	23.	17.	0.34
HYDROGRAPH AT +	S722	1210.	12.13	202.	57.	41.	0.95
2 COMBINED AT +	C722	1274.	12.17	275.	80.	58.	1.29
HYDROGRAPH AT +	S723	141.	12.03	20.	6.	4.	0.09
HYDROGRAPH AT +	S724	1643.	12.13	300.	93.	67.	1.16
HYDROGRAPH AT +	S725	1256.	12.20	271.	85.	61.	1.16
5 COMBINED AT +	EAST-2	4646.	12.13	931.	281.	203.	4.06
HYDROGRAPH AT +	S726	493.	12.03	57.	17.	12.	0.33
ROUTED TO +	726727	459.	12.20	57.	17.	12.	0.33
HYDROGRAPH AT							

+	S727	424.	12.17	91.	29.	21.	0.38
2 COMBINED AT							
+	C727	878.	12.17	147.	46.	33.	0.71
4 COMBINED AT							
+	TOTAL	20108.	13.07	8759.	2527.	1832.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 25-Year, 6-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUN   1998           *
 *           VERSION 4.1             *
 *                                   *
 *  RUN DATE   10AUG01  TIME  10:15:10  *
 *                                   *
 *************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 756-1104           *
*                                   *
*************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU25-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 25-year, 6-hour storm event. A companion model is also created for the existing condition 25-year, 24-hour storm event. Both models (25-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 25-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       2.64  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                 0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                 0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                 0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        2.62  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        2.59  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        2.43  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        2.14  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	462.	4.53	88.	22.	16.	0.57		
+	ROUTED TO	100102	440.	4.83	88.	22.	16.	0.57		
+	HYDROGRAPH AT	S101	621.	4.43	86.	22.	16.	0.63		
+	2 COMBINED AT	C102R	734.	4.60	162.	41.	30.	1.20		
+	HYDROGRAPH AT	S102	432.	4.27	73.	18.	13.	0.45		
+	ROUTED TO	101102	415.	4.47	73.	18.	13.	0.45		
+	HYDROGRAPH AT	S103	307.	4.60	58.	15.	10.	0.40		
+	2 COMBINED AT	C102L	643.	4.57	125.	32.	23.	0.84		
+	2 COMBINED AT	C102	1211.	4.60	268.	68.	49.	2.05		
+	ROUTED TO	102103	1186.	4.87	268.	68.	49.	2.05		
+	HYDROGRAPH AT	S104	859.	4.50	138.	35.	25.	0.90		
+	2 COMBINED AT	C103R	1627.	4.77	380.	97.	70.	2.95		
+	HYDROGRAPH AT	S105	428.	4.37	93.	24.	17.	0.59		
+	2 COMBINED AT	C103	1855.	4.73	452.	115.	83.	3.54		
+	ROUTED TO	103104	1829.	4.90	451.	115.	83.	3.54		
+	HYDROGRAPH AT	S106	513.	4.27	79.	20.	14.	0.57		
+	2 COMBINED AT	C104	1948.	4.90	505.	129.	93.	4.11		
+	ROUTED TO	104105	1911.	5.10	505.	129.	93.	4.11		

+	HYDROGRAPH AT	S107	670.	4.50	109.	27.	20.	0.94
+	2 COMBINED AT	C105L	2072.	5.07	575.	147.	106.	5.05
+	HYDROGRAPH AT	S200	851.	4.50	146.	37.	26.	0.96
+	ROUTED TO	200201	839.	4.57	145.	37.	26.	0.96
+	HYDROGRAPH AT	S201	378.	4.40	56.	14.	10.	0.35
+	2 COMBINED AT	C201	1033.	4.53	193.	49.	35.	1.31
+	ROUTED TO	201203	1012.	4.63	193.	49.	35.	1.31
+	HYDROGRAPH AT	S202	181.	4.23	21.	5.	4.	0.13
+	ROUTED TO	202203	172.	4.30	21.	5.	4.	0.13
+	HYDROGRAPH AT	S203	287.	4.33	62.	16.	11.	0.37
+	3 COMBINED AT	C203R	1208.	4.63	261.	66.	48.	1.81
+	HYDROGRAPH AT	S204	673.	4.63	138.	35.	25.	0.95
+	2 COMBINED AT	C203	1602.	4.63	374.	95.	68.	2.76
+	ROUTED TO	203204	1599.	4.67	374.	95.	68.	2.76
+	HYDROGRAPH AT	S205	513.	4.33	70.	18.	13.	0.41
+	2 COMBINED AT	C204	1795.	4.63	428.	109.	78.	3.17
+	ROUTED TO	204205	1771.	4.77	428.	109.	78.	3.17
+	HYDROGRAPH AT	S206	526.	4.47	132.	34.	24.	0.85
+	2 COMBINED AT	C205L	2074.	4.77	532.	135.	98.	4.03
+	HYDROGRAPH AT	S207	609.	4.73	147.	37.	27.	0.96
+	2 COMBINED AT	C205	2437.	4.77	644.	165.	119.	4.98
+	ROUTED TO	205206	2353.	5.17	643.	165.	119.	4.98
+	HYDROGRAPH AT	S208	647.	4.90	171.	44.	31.	1.10
+	2 COMBINED AT	C206	2724.	5.17	774.	199.	143.	6.09
+	ROUTED TO	206207	2702.	5.23	774.	199.	143.	6.09
+	HYDROGRAPH AT	S209	607.	4.50	90.	23.	16.	0.65
+	2 COMBINED AT	C207R	2778.	5.23	830.	213.	154.	6.74

+	HYDROGRAPH AT	S210	512.	4.20	61.	15.	11.	0.48
+	2 COMBINED AT	C207	2776.	5.23	864.	222.	160.	7.22
+	ROUTED TO	207105	2746.	5.33	862.	222.	160.	7.22
+	HYDROGRAPH AT	S211	479.	4.23	65.	16.	12.	0.49
+	2 COMBINED AT	C105R	2754.	5.30	899.	231.	167.	7.70
+	2 COMBINED AT	C105	4089.	5.27	1344.	346.	249.	12.75
+	HYDROGRAPH AT	S300	773.	4.17	99.	25.	18.	0.62
+	HYDROGRAPH AT	S301	1253.	4.17	169.	42.	31.	0.99
+	2 COMBINED AT	C300	1689.	4.17	255.	64.	46.	1.61
+	ROUTED TO	300301	1629.	4.27	254.	64.	46.	1.61
+	HYDROGRAPH AT	S302	597.	4.33	73.	18.	13.	0.47
+	2 COMBINED AT	C301	1894.	4.30	314.	79.	57.	2.07
+	ROUTED TO	301302	1798.	4.63	313.	79.	57.	2.07
+	HYDROGRAPH AT	S303	592.	4.50	87.	22.	16.	0.71
+	2 COMBINED AT	C302	2048.	4.60	377.	95.	69.	2.78
+	ROUTED TO	302303	2012.	4.73	376.	95.	69.	2.78
+	HYDROGRAPH AT	S304	634.	4.27	104.	26.	19.	0.82
+	2 COMBINED AT	C303	2242.	4.70	450.	114.	82.	3.60
+	2 COMBINED AT	WEST-1	4839.	5.07	1658.	427.	308.	16.36
+	HYDROGRAPH AT	S400	1371.	4.30	185.	46.	33.	1.05
+	ROUTED TO	C400O	489.	4.77	183.	46.	33.	1.05
+	ROUTED TO	400401	487.	5.10	183.	46.	33.	1.05
+	HYDROGRAPH AT	S401	843.	4.17	91.	23.	16.	0.65
+	2 COMBINED AT	C401	837.	4.27	260.	66.	47.	1.69
+	ROUTED TO	401402	809.	4.60	260.	66.	47.	1.69
+	HYDROGRAPH AT	S402	1164.	4.13	130.	33.	23.	0.74
+	2 COMBINED AT	C402	1195.	4.43	370.	94.	68.	2.43

	ROUTED TO							
+		402403	1144.	4.80	370.	94.	68.	2.43
	HYDROGRAPH AT							
+		S403	1031.	4.10	117.	29.	21.	0.56
	2 COMBINED AT							
+		C403	1329.	4.70	472.	121.	87.	2.99
	ROUTED TO							
+		403404	1323.	4.80	472.	121.	87.	2.99
	HYDROGRAPH AT							
+		S404	453.	4.20	40.	10.	7.	0.26
	2 COMBINED AT							
+		C404	1444.	4.47	501.	128.	92.	3.26
	2 COMBINED AT							
+		WEST-2	5592.	5.03	2012.	520.	375.	19.61
	HYDROGRAPH AT							
+		S500	765.	4.37	170.	43.	31.	1.05
	ROUTED TO							
+		500501	753.	4.53	170.	43.	31.	1.05
	HYDROGRAPH AT							
+		S501	703.	4.20	93.	23.	17.	0.61
	2 COMBINED AT							
+		C501	1103.	4.40	248.	63.	45.	1.67
	ROUTED TO							
+		501502	1088.	4.50	244.	62.	45.	1.67
	HYDROGRAPH AT							
+		S502	513.	4.33	59.	15.	11.	0.40
	2 COMBINED AT							
+		C502L	1336.	4.47	290.	74.	53.	2.07
	HYDROGRAPH AT							
+		S503	919.	4.27	156.	39.	28.	0.99
	2 COMBINED AT							
+		C502I	1905.	4.43	420.	107.	77.	3.07
	ROUTED TO							
+		C502O	1716.	4.63	420.	107.	77.	3.07
	ROUTED TO							
+		502505	1683.	4.87	409.	103.	74.	3.07
	HYDROGRAPH AT							
+		S504	324.	4.23	55.	14.	10.	0.33
	2 COMBINED AT							
+		C505L	1778.	4.83	450.	114.	82.	3.39
	HYDROGRAPH AT							
+		S505	272.	4.13	20.	5.	4.	0.14
	ROUTED TO							
+		C503O	89.	4.37	20.	5.	4.	0.14
	ROUTED TO							
+		503505	87.	4.87	20.	5.	4.	0.14
	HYDROGRAPH AT							
+		S506	274.	4.17	26.	7.	5.	0.15
	ROUTED TO							
+		C504O	90.	4.50	26.	7.	5.	0.15
	ROUTED TO							
+		504505	89.	4.90	26.	7.	5.	0.15
	HYDROGRAPH AT							
+		S507	963.	4.13	99.	25.	18.	0.67

+	3 COMBINED AT C505R	894.	4.13	138.	35.	25.	0.96
+	2 COMBINED AT C505	2005.	4.70	554.	140.	101.	4.35
+	ROUTED TO 505509	1959.	5.03	533.	134.	96.	4.35
+	HYDROGRAPH AT S508	537.	4.07	47.	12.	9.	0.29
+	2 COMBINED AT C509L	1958.	5.03	567.	142.	103.	4.65
+	HYDROGRAPH AT S509	372.	4.03	29.	7.	5.	0.17
+	ROUTED TO C5060	89.	4.33	29.	7.	5.	0.17
+	ROUTED TO 506508	89.	4.53	29.	7.	5.	0.17
+	HYDROGRAPH AT S510	237.	4.10	28.	7.	5.	0.13
+	2 COMBINED AT C508R	302.	4.10	56.	14.	10.	0.30
+	HYDROGRAPH AT S511	699.	4.10	66.	17.	12.	0.38
+	ROUTED TO C5070	96.	4.63	65.	17.	12.	0.38
+	ROUTED TO 507508	96.	4.93	64.	17.	12.	0.38
+	HYDROGRAPH AT S512	383.	4.13	49.	12.	9.	0.21
+	2 COMBINED AT C508L	426.	4.13	109.	29.	21.	0.60
+	2 COMBINED AT C508	670.	4.13	160.	42.	31.	0.90
+	ROUTED TO 508509	593.	4.57	156.	43.	31.	0.90
+	HYDROGRAPH AT S513	848.	4.20	117.	29.	21.	0.78
+	2 COMBINED AT C509R	1023.	4.47	259.	69.	50.	1.67
+	2 COMBINED AT C509	2434.	4.90	776.	199.	144.	6.32
+	ROUTED TO 509510	2425.	5.00	775.	199.	143.	6.32
+	HYDROGRAPH AT S514	1014.	4.13	130.	33.	24.	0.65
+	2 COMBINED AT C510	2574.	4.90	878.	226.	163.	6.97
+	ROUTED TO 510511	2542.	5.27	875.	226.	163.	6.97
+	HYDROGRAPH AT S515	1734.	4.13	225.	56.	41.	1.10
+	2 COMBINED AT C511	2623.	5.17	1055.	274.	198.	8.07
+	ROUTED TO 511512	2590.	5.50	1050.	274.	197.	8.07

+	HYDROGRAPH AT	S516	758.	4.17	106.	27.	19.	0.54
+	2 COMBINED AT	C512	2620.	5.47	1121.	295.	212.	8.61
+	2 COMBINED AT	WEST-3	7119.	5.00	2821.	738.	532.	28.22
+	HYDROGRAPH AT	S600	1003.	4.73	223.	56.	41.	2.02
+	ROUTED TO	600601	998.	4.83	223.	56.	41.	2.02
+	HYDROGRAPH AT	S601	965.	4.43	166.	42.	30.	0.90
+	2 COMBINED AT	C601	1493.	4.70	364.	92.	67.	2.92
+	ROUTED TO	601602	1478.	4.80	364.	92.	67.	2.92
+	HYDROGRAPH AT	S603	994.	4.30	122.	31.	22.	0.67
+	2 COMBINED AT	C602L	1716.	4.73	463.	118.	85.	3.58
+	HYDROGRAPH AT	S602	1136.	4.73	271.	69.	50.	1.88
+	2 COMBINED AT	C602	2500.	4.73	684.	174.	126.	5.47
+	ROUTED TO	602603	2418.	4.97	639.	160.	116.	5.47
+	HYDROGRAPH AT	S606	563.	4.47	106.	27.	19.	0.66
+	2 COMBINED AT	C603L	2620.	4.93	716.	180.	130.	6.13
+	HYDROGRAPH AT	S605	759.	4.63	164.	42.	30.	1.09
+	HYDROGRAPH AT	S604	1137.	5.10	362.	94.	68.	2.66
+	3 COMBINED AT	C603	3665.	4.93	1111.	284.	205.	9.87
+	ROUTED TO	603604	3590.	5.10	1062.	268.	193.	9.87
+	HYDROGRAPH AT	S609	368.	4.57	81.	21.	15.	0.56
+	2 COMBINED AT	C604R	3696.	5.10	1110.	280.	202.	10.43
+	HYDROGRAPH AT	S607	592.	4.60	135.	34.	25.	0.82
+	2 COMBINED AT	C604	3935.	5.07	1205.	305.	220.	11.25
+	ROUTED TO	604605	3923.	5.10	1205.	305.	220.	11.25
+	HYDROGRAPH AT	S608	716.	4.30	92.	23.	17.	0.51
+	2 COMBINED AT	C605	3999.	5.10	1268.	321.	232.	11.76
+	ROUTED TO	605606	3964.	5.23	1259.	319.	230.	11.76

+	HYDROGRAPH AT S610	611.	4.27	109.	27.	20.	0.60
+	2 COMBINED AT C606L	4058.	5.20	1334.	339.	244.	12.36
+	HYDROGRAPH AT S612	706.	4.33	147.	37.	27.	0.81
+	2 COMBINED AT C606	4231.	5.17	1439.	366.	264.	13.17
+	ROUTED TO 606608	4227.	5.20	1436.	365.	263.	13.17
+	HYDROGRAPH AT S611	679.	4.37	92.	23.	17.	0.57
+	ROUTED TO 607608	624.	4.60	92.	23.	17.	0.57
+	HYDROGRAPH AT S613	1151.	4.80	279.	71.	51.	1.80
+	3 COMBINED AT C608	4920.	5.13	1690.	431.	311.	15.53
+	ROUTED TO 608609	4869.	5.30	1679.	428.	308.	15.53
+	HYDROGRAPH AT S614	684.	4.77	166.	42.	31.	1.08
+	2 COMBINED AT C609	5109.	5.27	1784.	456.	328.	16.61
+	ROUTED TO 609611	5028.	5.50	1755.	446.	321.	16.61
+	HYDROGRAPH AT S617	746.	4.20	101.	25.	18.	0.68
+	2 COMBINED AT C611R	5026.	5.47	1809.	461.	332.	17.29
+	HYDROGRAPH AT S615	878.	4.73	213.	54.	39.	1.05
+	ROUTED TO 610611	860.	4.93	213.	54.	39.	1.05
+	HYDROGRAPH AT S616	492.	4.43	77.	19.	14.	0.50
+	2 COMBINED AT C611L	1033.	4.87	279.	71.	51.	1.56
+	2 COMBINED AT C611	5420.	5.43	2002.	513.	369.	18.85
+	ROUTED TO 611613	5404.	5.50	1992.	509.	367.	18.85
+	HYDROGRAPH AT S618	626.	4.67	137.	35.	25.	0.96
+	2 COMBINED AT C613R	5526.	5.47	2067.	529.	381.	19.81
+	HYDROGRAPH AT S619	928.	4.53	154.	39.	28.	0.83
+	ROUTED TO 612613	891.	4.70	153.	39.	28.	0.83
+	HYDROGRAPH AT S620	395.	4.53	81.	21.	15.	0.44
+	2 COMBINED AT C613L	1141.	4.70	228.	58.	41.	1.27

+	2 COMBINED AT	C613	5796.	5.43	2218.	569.	410.	21.08
+	ROUTED TO	613614	5761.	5.50	2206.	565.	407.	21.08
+	HYDROGRAPH AT	S621	890.	4.40	105.	26.	19.	0.92
+	2 COMBINED AT	C614	5756.	5.50	2251.	576.	415.	22.00
+	ROUTED TO	614615	5699.	5.63	2233.	571.	411.	22.00
+	HYDROGRAPH AT	S622	429.	4.87	100.	25.	18.	0.90
+	2 COMBINED AT	C615	5757.	5.60	2268.	580.	418.	22.90
+	2 COMBINED AT	WEST-4	10223.	5.40	4428.	1155.	832.	51.12
+	HYDROGRAPH AT	S700	760.	4.13	83.	21.	15.	0.61
+	HYDROGRAPH AT	S701	440.	4.43	107.	27.	20.	0.72
+	HYDROGRAPH AT	S702	372.	4.13	42.	11.	8.	0.26
+	HYDROGRAPH AT	S703	271.	4.33	31.	8.	6.	0.26
+	HYDROGRAPH AT	S704	617.	4.13	57.	14.	10.	0.41
+	ROUTED TO	704705	533.	4.37	57.	14.	10.	0.41
+	HYDROGRAPH AT	S705	1153.	4.13	142.	36.	26.	0.75
+	2 COMBINED AT	C705	1244.	4.23	191.	48.	35.	1.16
+	ROUTED TO	C705O	654.	4.63	191.	48.	35.	1.16
+	ROUTED TO	705OAF	651.	4.80	190.	48.	35.	1.16
+	HYDROGRAPH AT	S705AF	240.	4.33	33.	8.	6.	0.18
+	2 COMBINED AT	C705AF	779.	4.63	221.	56.	40.	1.34
+	5 COMBINED AT	WEST-5	1708.	4.37	429.	108.	78.	3.19
+	HYDROGRAPH AT	S706	1161.	4.10	132.	33.	24.	0.71
+	HYDROGRAPH AT	S707	1088.	4.10	135.	34.	25.	0.64
+	HYDROGRAPH AT	S728	335.	4.20	55.	14.	10.	0.28
+	5 COMBINED AT	WEST	10563.	5.33	4800.	1259.	907.	55.94
+	HYDROGRAPH AT	S708	1326.	4.10	130.	32.	23.	0.71
+	HYDROGRAPH AT	S709	818.	4.13	92.	23.	17.	0.44

+	ROUTED TO C709O	384.	4.47	92.	23.	17.	0.44
+	ROUTED TO 709710	383.	4.53	92.	23.	17.	0.44
+	HYDROGRAPH AT S710	290.	4.03	22.	6.	4.	0.11
+	2 COMBINED AT C710I	502.	4.07	114.	29.	21.	0.55
+	ROUTED TO C710O	372.	4.77	114.	29.	21.	0.55
+	HYDROGRAPH AT S711	446.	4.00	34.	9.	6.	0.16
+	ROUTED TO C711O	169.	4.17	34.	9.	6.	0.16
+	ROUTED TO 711712	169.	4.23	34.	9.	6.	0.16
+	HYDROGRAPH AT S712	201.	4.00	14.	4.	3.	0.07
+	2 COMBINED AT C712I	337.	4.00	49.	12.	9.	0.23
+	ROUTED TO C712O	228.	4.13	49.	12.	9.	0.23
+	ROUTED TO 712714	227.	4.20	49.	12.	9.	0.23
+	HYDROGRAPH AT S713	290.	4.03	22.	6.	4.	0.11
+	ROUTED TO C713O	155.	4.13	22.	6.	4.	0.11
+	ROUTED TO 713714	155.	4.17	22.	6.	4.	0.11
+	HYDROGRAPH AT S714	140.	4.03	10.	2.	2.	0.06
+	3 COMBINED AT C714	483.	4.10	80.	20.	14.	0.39
+	HYDROGRAPH AT S715	357.	4.13	44.	11.	8.	0.22
+	HYDROGRAPH AT S716	1528.	4.17	232.	58.	42.	1.13
+	ROUTED TO C716O	582.	4.73	232.	58.	42.	1.13
+	ROUTED TO 716717	581.	4.90	231.	58.	42.	1.13
+	HYDROGRAPH AT S717	701.	4.13	60.	15.	11.	0.29
+	2 COMBINED AT C717	903.	4.17	289.	73.	52.	1.41
+	ROUTED TO 717718	825.	4.50	288.	72.	52.	1.41
+	HYDROGRAPH AT S718	396.	4.60	90.	23.	16.	0.44
+	2 COMBINED AT C718	1123.	4.53	375.	94.	68.	1.86
+	HYDROGRAPH AT S719	234.	4.13	35.	9.	6.	0.15

	6 COMBINED AT							
+		EAST-1	2443.	4.47	745.	188.	135.	3.88
	HYDROGRAPH AT							
+		S720	666.	4.13	78.	20.	14.	0.37
	HYDROGRAPH AT							
+		S721	856.	4.03	75.	19.	14.	0.34
	ROUTED TO							
+		C721O	248.	4.30	75.	19.	14.	0.34
	ROUTED TO							
+		721722	245.	4.60	74.	19.	14.	0.34
	HYDROGRAPH AT							
+		S722	1251.	4.20	191.	48.	35.	0.95
	2 COMBINED AT							
+		C722	1265.	4.20	262.	66.	48.	1.29
	HYDROGRAPH AT							
+		S723	211.	4.03	19.	5.	3.	0.09
	HYDROGRAPH AT							
+		S724	1734.	4.17	278.	70.	50.	1.16
	HYDROGRAPH AT							
+		S725	1264.	4.27	262.	66.	48.	1.16
	5 COMBINED AT							
+		EAST-2	3874.	4.23	867.	219.	158.	4.06
	HYDROGRAPH AT							
+		S726	746.	4.03	58.	15.	11.	0.33
	ROUTED TO							
+		726727	657.	4.20	58.	15.	11.	0.33
	HYDROGRAPH AT							
+		S727	521.	4.20	88.	22.	16.	0.38
	2 COMBINED AT							
+		C727	1088.	4.20	145.	36.	26.	0.71
	4 COMBINED AT							
+		TOTAL	12449.	5.07	5952.	1567.	1129.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 25-Year, 24-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  10:14:49  *
*                                      *
****************************************
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```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU25-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 25-year, 24-hour storm event. A companion model is also created for the existing condition 25-year, 6-hour storm event. Both models (25-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 25-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       3.31  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 3.29 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 3.21 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 3.11 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 3.00 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 2.83 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	329.	12.53	74.	22.	16.	0.57		
+	ROUTED TO	100102	315.	12.80	74.	22.	16.	0.57		
+	HYDROGRAPH AT	S101	449.	12.40	72.	20.	15.	0.63		
+	2 COMBINED AT	C102R	623.	12.50	145.	43.	31.	1.20		
+	HYDROGRAPH AT	S102	299.	12.23	62.	19.	14.	0.45		
+	ROUTED TO	101102	286.	12.47	61.	19.	14.	0.45		
+	HYDROGRAPH AT	S103	216.	12.57	47.	14.	10.	0.40		
+	2 COMBINED AT	C102L	495.	12.53	109.	33.	24.	0.84		
+	2 COMBINED AT	C102	1100.	12.50	250.	74.	54.	2.05		

+	ROUTED TO	102103	1069.	12.77	250.	74.	54.	2.05
+	HYDROGRAPH AT	S104	674.	12.47	118.	35.	25.	0.90
+	2 COMBINED AT	C103R	1532.	12.67	363.	107.	78.	2.95
+	HYDROGRAPH AT	S105	317.	12.33	78.	23.	17.	0.59
+	2 COMBINED AT	C103	1781.	12.63	438.	129.	94.	3.54
+	ROUTED TO	103104	1755.	12.83	437.	129.	94.	3.54
+	HYDROGRAPH AT	S106	374.	12.23	64.	18.	13.	0.57
+	2 COMBINED AT	C104	1902.	12.80	497.	146.	106.	4.11
+	ROUTED TO	104105	1868.	13.03	497.	146.	106.	4.11
+	HYDROGRAPH AT	S107	560.	12.43	92.	24.	17.	0.94
+	2 COMBINED AT	C105L	2078.	13.00	583.	168.	122.	5.05
+	HYDROGRAPH AT	S200	675.	12.47	129.	41.	30.	0.96
+	ROUTED TO	200201	659.	12.50	129.	41.	30.	0.96
+	HYDROGRAPH AT	S201	245.	12.37	47.	15.	11.	0.35
+	2 COMBINED AT	C201	874.	12.47	175.	55.	40.	1.31
+	ROUTED TO	201203	856.	12.57	175.	55.	40.	1.31
+	HYDROGRAPH AT	S202	106.	12.23	17.	5.	4.	0.13
+	ROUTED TO	202203	103.	12.30	17.	5.	4.	0.13
+	HYDROGRAPH AT	S203	201.	12.30	53.	17.	12.	0.37
+	3 COMBINED AT	C203R	1089.	12.57	243.	77.	56.	1.81
+	HYDROGRAPH AT	S204	543.	12.57	123.	39.	28.	0.95
+	2 COMBINED AT	C203	1607.	12.57	361.	114.	82.	2.76
+	ROUTED TO	203204	1598.	12.60	361.	114.	82.	2.76
+	HYDROGRAPH AT	S205	336.	12.30	59.	18.	13.	0.41
+	2 COMBINED AT	C204	1804.	12.57	417.	131.	95.	3.17
+	ROUTED TO	204205	1774.	12.70	417.	131.	95.	3.17
+	HYDROGRAPH AT	S206	421.	12.40	116.	36.	26.	0.85

+	2 COMBINED AT	C205L	2121.	12.67	528.	165.	120.	4.03
+	HYDROGRAPH AT	S207	494.	12.67	132.	42.	30.	0.96
+	2 COMBINED AT	C205	2585.	12.67	652.	205.	148.	4.98
+	ROUTED TO	205206	2483.	13.07	652.	205.	148.	4.98
+	HYDROGRAPH AT	S208	537.	12.83	152.	46.	34.	1.10
+	2 COMBINED AT	C206	2906.	13.03	789.	246.	179.	6.09
+	ROUTED TO	206207	2890.	13.13	789.	246.	179.	6.09
+	HYDROGRAPH AT	S209	443.	12.47	75.	21.	16.	0.65
+	2 COMBINED AT	C207R	2999.	13.13	855.	265.	192.	6.74
+	HYDROGRAPH AT	S210	348.	12.20	48.	12.	9.	0.48
+	2 COMBINED AT	C207	3023.	13.10	895.	275.	200.	7.22
+	ROUTED TO	207105	2999.	13.20	895.	275.	200.	7.22
+	HYDROGRAPH AT	S211	333.	12.23	52.	14.	10.	0.49
+	2 COMBINED AT	C105R	3031.	13.20	939.	287.	208.	7.70
+	2 COMBINED AT	C105	4703.	13.17	1457.	436.	317.	12.75
+	HYDROGRAPH AT	S300	533.	12.13	85.	26.	19.	0.62
+	HYDROGRAPH AT	S301	971.	12.10	150.	48.	35.	0.99
+	2 COMBINED AT	C300	1487.	12.13	232.	74.	53.	1.61
+	ROUTED TO	300301	1437.	12.23	232.	74.	53.	1.61
+	HYDROGRAPH AT	S302	386.	12.33	61.	19.	14.	0.47
+	2 COMBINED AT	C301	1786.	12.23	291.	92.	66.	2.07
+	ROUTED TO	301302	1676.	12.53	291.	92.	66.	2.07
+	HYDROGRAPH AT	S303	443.	12.43	73.	20.	15.	0.71
+	2 COMBINED AT	C302	2078.	12.50	360.	111.	80.	2.78
+	ROUTED TO	302303	2037.	12.67	360.	111.	80.	2.78
+	HYDROGRAPH AT	S304	519.	12.23	87.	23.	17.	0.82
+	2 COMBINED AT	C303	2324.	12.63	442.	132.	96.	3.60

+	2 COMBINED AT	WEST-1	5594.	13.10	1842.	552.	401.	16.36
+	HYDROGRAPH AT	S400	1088.	12.27	160.	50.	36.	1.05
+	ROUTED TO	C400O	452.	12.63	160.	50.	36.	1.05
+	ROUTED TO	400401	449.	12.93	160.	50.	36.	1.05
+	HYDROGRAPH AT	S401	599.	12.13	75.	21.	15.	0.65
+	2 COMBINED AT	C401	733.	12.23	233.	70.	51.	1.69
+	ROUTED TO	401402	701.	12.53	233.	70.	51.	1.69
+	HYDROGRAPH AT	S402	815.	12.10	110.	34.	24.	0.74
+	2 COMBINED AT	C402	1035.	12.33	339.	103.	74.	2.43
+	ROUTED TO	402403	997.	12.67	338.	102.	74.	2.43
+	HYDROGRAPH AT	S403	670.	12.10	100.	30.	22.	0.56
+	2 COMBINED AT	C403	1223.	12.43	434.	131.	95.	2.99
+	ROUTED TO	403404	1220.	12.57	434.	131.	95.	2.99
+	HYDROGRAPH AT	S404	276.	12.20	31.	8.	6.	0.26
+	2 COMBINED AT	C404	1340.	12.40	463.	139.	101.	3.26
+	2 COMBINED AT	WEST-2	6466.	12.90	2246.	674.	490.	19.61
+	HYDROGRAPH AT	S500	639.	12.30	153.	49.	35.	1.05
+	ROUTED TO	500501	624.	12.47	153.	49.	35.	1.05
+	HYDROGRAPH AT	S501	499.	12.17	79.	24.	17.	0.61
+	2 COMBINED AT	C501	965.	12.33	229.	72.	52.	1.67
+	ROUTED TO	501502	953.	12.43	226.	69.	50.	1.67
+	HYDROGRAPH AT	S502	328.	12.30	49.	14.	10.	0.40
+	2 COMBINED AT	C502L	1245.	12.37	272.	82.	60.	2.07
+	HYDROGRAPH AT	S503	762.	12.23	138.	42.	31.	0.99
+	2 COMBINED AT	C502I	1909.	12.33	405.	123.	89.	3.07
+	ROUTED TO	C502O	1696.	12.50	405.	123.	89.	3.07
+	ROUTED TO	502505	1662.	12.73	394.	113.	82.	3.07

+	HYDROGRAPH AT S504	225.	12.20	46.	14.	10.	0.33
+	2 COMBINED AT C505L	1777.	12.70	437.	127.	91.	3.39
+	HYDROGRAPH AT S505	142.	12.17	17.	5.	4.	0.14
+	ROUTED TO C503O	81.	12.33	17.	5.	4.	0.14
+	ROUTED TO 503505	78.	12.80	16.	4.	3.	0.14
+	HYDROGRAPH AT S506	159.	12.17	21.	6.	5.	0.15
+	ROUTED TO C504O	78.	12.47	21.	6.	5.	0.15
+	ROUTED TO 504505	77.	13.10	21.	6.	5.	0.15
+	HYDROGRAPH AT S507	669.	12.10	80.	22.	16.	0.67
+	3 COMBINED AT C505R	681.	12.10	117.	33.	23.	0.96
+	2 COMBINED AT C505	2029.	12.63	547.	158.	114.	4.35
+	ROUTED TO 505509	1971.	12.97	527.	139.	100.	4.35
+	HYDROGRAPH AT S508	311.	12.07	39.	11.	8.	0.29
+	2 COMBINED AT C509L	1990.	12.97	562.	150.	108.	4.65
+	HYDROGRAPH AT S509	200.	12.03	24.	8.	5.	0.17
+	ROUTED TO C506O	84.	12.27	24.	8.	5.	0.17
+	ROUTED TO 506508	84.	12.47	24.	8.	5.	0.17
+	HYDROGRAPH AT S510	147.	12.10	23.	7.	5.	0.13
+	2 COMBINED AT C508R	215.	12.10	48.	15.	11.	0.30
+	HYDROGRAPH AT S511	413.	12.07	55.	17.	12.	0.38
+	ROUTED TO C507O	91.	12.63	55.	17.	12.	0.38
+	ROUTED TO 507508	90.	12.90	54.	17.	12.	0.38
+	HYDROGRAPH AT S512	245.	12.10	42.	13.	9.	0.21
+	2 COMBINED AT C508L	303.	12.13	96.	30.	22.	0.60
+	2 COMBINED AT C508	517.	12.13	143.	45.	32.	0.90
+	ROUTED TO 508509	469.	12.63	139.	44.	32.	0.90
+	HYDROGRAPH AT S513	657.	12.13	99.	28.	21.	0.78

+	2 COMBINED AT	C509R	790.	12.43	234.	71.	52.	1.67
+	2 COMBINED AT	C509	2454.	12.90	779.	216.	156.	6.32
+	ROUTED TO	509510	2436.	12.97	778.	215.	155.	6.32
+	HYDROGRAPH AT	S514	706.	12.13	110.	33.	24.	0.65
+	2 COMBINED AT	C510	2544.	12.97	876.	245.	177.	6.97
+	ROUTED TO	510511	2499.	13.30	873.	244.	177.	6.97
+	HYDROGRAPH AT	S515	1393.	12.10	198.	58.	42.	1.10
+	2 COMBINED AT	C511	2554.	13.27	1047.	296.	214.	8.07
+	ROUTED TO	511512	2521.	13.57	1041.	294.	213.	8.07
+	HYDROGRAPH AT	S516	511.	12.13	91.	29.	21.	0.54
+	2 COMBINED AT	C512	2555.	13.53	1116.	320.	232.	8.61
+	2 COMBINED AT	WEST-3	8402.	12.87	3230.	954.	695.	28.22
+	HYDROGRAPH AT	S600	1057.	12.60	216.	65.	47.	2.02
+	ROUTED TO	600601	1033.	12.63	216.	65.	47.	2.02
+	HYDROGRAPH AT	S601	753.	12.40	146.	47.	34.	0.90
+	2 COMBINED AT	C601	1618.	12.57	357.	110.	80.	2.92
+	ROUTED TO	601602	1601.	12.67	357.	110.	80.	2.92
+	HYDROGRAPH AT	S603	688.	12.27	105.	33.	24.	0.67
+	2 COMBINED AT	C602L	1873.	12.60	457.	142.	103.	3.58
+	HYDROGRAPH AT	S602	1092.	12.60	253.	80.	58.	1.88
+	2 COMBINED AT	C602	2904.	12.60	697.	219.	158.	5.47
+	ROUTED TO	602603	2774.	12.83	653.	176.	127.	5.47
+	HYDROGRAPH AT	S606	412.	12.47	92.	29.	21.	0.66
+	2 COMBINED AT	C603L	3016.	12.80	735.	202.	145.	6.13
+	HYDROGRAPH AT	S605	635.	12.57	148.	47.	34.	1.09
+	HYDROGRAPH AT	S604	1144.	12.90	353.	112.	81.	2.66
+	3 COMBINED AT	C603	4426.	12.80	1178.	344.	248.	9.87

+	ROUTED TO 603604	4319.	12.97	1130.	300.	216.	9.87
+	HYDROGRAPH AT S609	257.	12.57	68.	21.	15.	0.56
+	2 COMBINED AT C604R	4474.	12.97	1188.	318.	229.	10.43
+	HYDROGRAPH AT S607	463.	12.57	119.	37.	27.	0.82
+	2 COMBINED AT C604	4763.	12.93	1292.	351.	253.	11.25
+	ROUTED TO 604605	4751.	13.00	1292.	351.	253.	11.25
+	HYDROGRAPH AT S608	474.	12.30	78.	24.	17.	0.51
+	2 COMBINED AT C605	4843.	12.97	1359.	372.	269.	11.76
+	ROUTED TO 605606	4793.	13.10	1351.	366.	264.	11.76
+	HYDROGRAPH AT S610	446.	12.23	94.	30.	21.	0.60
+	2 COMBINED AT C606L	4906.	13.10	1432.	392.	283.	12.36
+	HYDROGRAPH AT S612	277.	12.77	122.	38.	28.	0.81
+	2 COMBINED AT C606	5127.	13.10	1538.	426.	307.	13.17
+	ROUTED TO 606608	5123.	13.10	1535.	423.	305.	13.17
+	HYDROGRAPH AT S611	451.	12.33	78.	25.	18.	0.57
+	ROUTED TO 607608	425.	12.60	78.	25.	18.	0.57
+	HYDROGRAPH AT S613	1061.	12.70	257.	81.	58.	1.80
+	3 COMBINED AT C608	5953.	13.03	1823.	516.	372.	15.53
+	ROUTED TO 608609	5895.	13.17	1812.	507.	365.	15.53
+	HYDROGRAPH AT S614	568.	12.70	150.	47.	34.	1.08
+	2 COMBINED AT C609	6212.	13.17	1938.	547.	395.	16.61
+	ROUTED TO 609611	6091.	13.37	1909.	521.	375.	16.61
+	HYDROGRAPH AT S617	552.	12.20	86.	26.	19.	0.68
+	2 COMBINED AT C611R	6117.	13.37	1978.	542.	391.	17.29
+	HYDROGRAPH AT S615	696.	12.70	190.	62.	45.	1.05
+	ROUTED TO 610611	680.	12.90	190.	62.	45.	1.05
+	HYDROGRAPH AT S616	337.	12.40	64.	19.	13.	0.50

+	2 COMBINED AT C611L	857.	12.83	252.	80.	58.	1.56
+	2 COMBINED AT C611	6581.	13.37	2194.	613.	442.	18.85
+	ROUTED TO 611613	6553.	13.40	2184.	603.	435.	18.85
+	HYDROGRAPH AT S618	514.	12.60	120.	36.	26.	0.96
+	2 COMBINED AT C613R	6729.	13.40	2283.	633.	456.	19.81
+	HYDROGRAPH AT S619	704.	12.50	133.	41.	30.	0.83
+	ROUTED TO 612613	679.	12.67	133.	41.	30.	0.83
+	HYDROGRAPH AT S620	273.	12.53	69.	21.	16.	0.44
+	2 COMBINED AT C613L	929.	12.67	201.	63.	45.	1.27
+	2 COMBINED AT C613	7035.	13.37	2453.	687.	495.	21.08
+	ROUTED TO 613614	6992.	13.43	2441.	676.	487.	21.08
+	HYDROGRAPH AT S621	713.	12.33	89.	23.	17.	0.92
+	2 COMBINED AT C614	7000.	13.43	2510.	694.	500.	22.00
+	ROUTED TO 614615	6944.	13.53	2498.	684.	493.	22.00
+	HYDROGRAPH AT S622	362.	12.80	85.	22.	16.	0.90
+	2 COMBINED AT C615	7074.	13.53	2565.	701.	505.	22.90
+	2 COMBINED AT WEST-4	13428.	13.43	5462.	1561.	1132.	51.12
+	HYDROGRAPH AT S700	519.	12.13	67.	18.	13.	0.61
+	HYDROGRAPH AT S701	343.	12.33	90.	26.	19.	0.72
+	HYDROGRAPH AT S702	227.	12.10	35.	10.	7.	0.26
+	HYDROGRAPH AT S703	178.	12.30	24.	6.	4.	0.26
+	HYDROGRAPH AT S704	373.	12.10	47.	13.	9.	0.41
+	ROUTED TO 704705	344.	12.37	47.	13.	9.	0.41
+	HYDROGRAPH AT S705	825.	12.10	120.	37.	26.	0.75
+	2 COMBINED AT C705	1022.	12.17	166.	49.	36.	1.16
+	ROUTED TO C705O	587.	12.53	166.	49.	36.	1.16
+	ROUTED TO 705OAF	584.	12.73	166.	49.	36.	1.16

+	HYDROGRAPH AT	S705AF	168.	12.33	30.	8.	6.	0.18
+	2 COMBINED AT	C705AF	697.	12.57	196.	57.	41.	1.34
+	5 COMBINED AT	WEST-5	1640.	12.27	402.	114.	83.	3.19
+	HYDROGRAPH AT	S706	788.	12.10	112.	35.	25.	0.71
+	HYDROGRAPH AT	S707	721.	12.10	116.	37.	27.	0.64
+	HYDROGRAPH AT	S728	230.	12.17	47.	15.	11.	0.28
+	5 COMBINED AT	WEST	13903.	13.40	5971.	1718.	1246.	55.94
+	HYDROGRAPH AT	S708	908.	12.07	114.	30.	21.	0.71
+	HYDROGRAPH AT	S709	534.	12.10	89.	24.	17.	0.44
+	ROUTED TO	C709O	326.	12.40	89.	24.	17.	0.44
+	ROUTED TO	709710	324.	12.47	89.	24.	17.	0.44
+	HYDROGRAPH AT	S710	164.	12.00	20.	5.	4.	0.11
+	2 COMBINED AT	C710I	392.	12.07	109.	29.	21.	0.55
+	ROUTED TO	C710O	334.	12.67	109.	29.	21.	0.55
+	HYDROGRAPH AT	S711	246.	12.00	32.	9.	7.	0.16
+	ROUTED TO	C711O	147.	12.13	32.	9.	7.	0.16
+	ROUTED TO	711712	147.	12.23	32.	9.	7.	0.16
+	HYDROGRAPH AT	S712	105.	12.00	13.	4.	3.	0.07
+	2 COMBINED AT	C712I	239.	12.00	45.	13.	9.	0.23
+	ROUTED TO	C712O	196.	12.10	45.	13.	9.	0.23
+	ROUTED TO	712714	195.	12.20	45.	13.	9.	0.23
+	HYDROGRAPH AT	S713	163.	12.00	20.	5.	4.	0.11
+	ROUTED TO	C713O	115.	12.13	20.	5.	4.	0.11
+	ROUTED TO	713714	115.	12.13	20.	5.	4.	0.11
+	HYDROGRAPH AT	S714	79.	12.03	8.	2.	1.	0.06
+	3 COMBINED AT	C714	375.	12.10	73.	20.	14.	0.39
+	HYDROGRAPH AT	S715	244.	12.13	42.	11.	8.	0.22

+	HYDROGRAPH AT S716	1286.	12.13	211.	60.	43.	1.13
+	ROUTED TO C7160	545.	12.63	211.	60.	43.	1.13
+	ROUTED TO 716717	544.	12.77	211.	60.	43.	1.13
+	HYDROGRAPH AT S717	410.	12.10	57.	16.	11.	0.29
+	2 COMBINED AT C717	810.	12.17	267.	75.	54.	1.41
+	ROUTED TO 717718	737.	12.53	266.	74.	54.	1.41
+	HYDROGRAPH AT S718	285.	12.60	87.	23.	17.	0.44
+	2 COMBINED AT C718	1012.	12.53	350.	97.	70.	1.86
+	HYDROGRAPH AT S719	157.	12.13	35.	10.	7.	0.15
+	6 COMBINED AT EAST-1	2205.	12.13	705.	193.	139.	3.88
+	HYDROGRAPH AT S720	431.	12.10	73.	20.	15.	0.37
+	HYDROGRAPH AT S721	488.	12.03	64.	20.	15.	0.34
+	ROUTED TO C7210	203.	12.27	64.	20.	15.	0.34
+	ROUTED TO 721722	200.	12.60	64.	20.	15.	0.34
+	HYDROGRAPH AT S722	1017.	12.17	169.	48.	35.	0.95
+	2 COMBINED AT C722	1076.	12.17	232.	68.	49.	1.29
+	HYDROGRAPH AT S723	122.	12.03	17.	5.	4.	0.09
+	HYDROGRAPH AT S724	1412.	12.13	259.	80.	58.	1.16
+	HYDROGRAPH AT S725	1045.	12.23	232.	73.	53.	1.16
+	5 COMBINED AT EAST-2	3916.	12.13	795.	240.	174.	4.06
+	HYDROGRAPH AT S726	411.	12.03	48.	15.	10.	0.33
+	ROUTED TO 726727	380.	12.20	48.	15.	10.	0.33
+	HYDROGRAPH AT S727	360.	12.17	78.	25.	18.	0.38
+	2 COMBINED AT C727	737.	12.20	126.	39.	28.	0.71
+	4 COMBINED AT TOTAL	15347.	13.30	7247.	2095.	1520.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 10-Year, 6-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  10:13:48  *
*                                      *
****************************************
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****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*          (916) 756-1104              *
*                                      *
****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU10-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 10-year, 6-hour storm event. A companion model is also created for the existing condition 10-year, 24-hour storm event. Both models 10-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 10-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                    IPRNT          5  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                     NMIN          2  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1    0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      2    0  ENDING DATE
                   NDTIME       0918  ENDING TIME
                    ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                    STRM       2.18  PRECIPITATION DEPTH
                    TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        2.17  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        2.14  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        2.01  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        1.77  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	301.	4.67	66.	17.	12.	0.57		
+	ROUTED TO	100102	290.	4.97	66.	17.	12.	0.57		
+	HYDROGRAPH AT	S101	390.	4.53	63.	16.	11.	0.63		
+	2 COMBINED AT	C102R	482.	4.77	117.	30.	21.	1.20		
+	HYDROGRAPH AT	S102	290.	4.30	57.	14.	10.	0.45		
+	ROUTED TO	101102	280.	4.57	56.	14.	10.	0.45		
+	HYDROGRAPH AT	S103	194.	4.73	43.	11.	8.	0.40		
+	2 COMBINED AT	C102L	416.	4.67	93.	24.	17.	0.84		
+	2 COMBINED AT	C102	765.	4.77	191.	49.	35.	2.05		
+	ROUTED TO	102103	747.	5.00	190.	49.	35.	2.05		
+	HYDROGRAPH AT	S104	554.	4.63	102.	26.	19.	0.90		
+	2 COMBINED AT	C103R	1019.	4.90	268.	69.	50.	2.95		
+	HYDROGRAPH AT	S105	273.	4.47	69.	18.	13.	0.59		
+	2 COMBINED AT	C103	1157.	4.87	318.	82.	59.	3.54		
+	ROUTED TO	103104	1141.	5.10	318.	82.	59.	3.54		
+	HYDROGRAPH AT	S106	314.	4.30	57.	14.	10.	0.57		
+	2 COMBINED AT	C104	1204.	5.07	352.	91.	65.	4.11		
	ROUTED TO									

+		104105	1181.	5.37	352.	91.	65.	4.11
	HYDROGRAPH AT							
+		S107	385.	4.63	75.	19.	14.	0.94
	2 COMBINED AT							
+		C105L	1256.	5.33	393.	101.	73.	5.05
	HYDROGRAPH AT							
+		S200	566.	4.60	111.	28.	20.	0.96
	ROUTED TO							
+		200201	560.	4.70	111.	28.	20.	0.96
	HYDROGRAPH AT							
+		S201	258.	4.47	44.	11.	8.	0.35
	2 COMBINED AT							
+		C201	682.	4.67	144.	37.	26.	1.31
	ROUTED TO							
+		201203	664.	4.77	144.	37.	26.	1.31
	HYDROGRAPH AT							
+		S202	126.	4.27	16.	4.	3.	0.13
	ROUTED TO							
+		202203	120.	4.37	16.	4.	3.	0.13
	HYDROGRAPH AT							
+		S203	195.	4.40	48.	12.	9.	0.37
	3 COMBINED AT							
+		C203R	778.	4.77	192.	49.	35.	1.81
	HYDROGRAPH AT							
+		S204	439.	4.77	104.	27.	19.	0.95
	2 COMBINED AT							
+		C203	1003.	4.80	268.	68.	49.	2.76
	ROUTED TO							
+		203204	999.	4.83	268.	68.	49.	2.76
	HYDROGRAPH AT							
+		S205	351.	4.40	54.	14.	10.	0.41
	2 COMBINED AT							
+		C204	1118.	4.80	308.	79.	57.	3.17
	ROUTED TO							
+		204205	1105.	4.97	308.	79.	57.	3.17
	HYDROGRAPH AT							
+		S206	337.	4.57	99.	25.	18.	0.85
	2 COMBINED AT							
+		C205L	1291.	4.93	382.	98.	71.	4.03
	HYDROGRAPH AT							
+		S207	398.	4.87	111.	29.	21.	0.96
	2 COMBINED AT							
+		C205	1517.	4.93	462.	119.	86.	4.98
	ROUTED TO							
+		205206	1474.	5.43	461.	119.	86.	4.98
	HYDROGRAPH AT							
+		S208	413.	5.10	126.	33.	24.	1.10
	2 COMBINED AT							
+		C206	1704.	5.40	554.	144.	104.	6.09
	ROUTED TO							
+		206207	1698.	5.50	554.	144.	104.	6.09
	HYDROGRAPH AT							
+		S209	380.	4.63	66.	17.	12.	0.65
	2 COMBINED AT							

+		C207R	1745.	5.47	591.	153.	111.	6.74
	HYDROGRAPH AT							
+		S210	311.	4.27	44.	11.	8.	0.48
	2 COMBINED AT							
+		C207	1743.	5.43	610.	158.	114.	7.22
	ROUTED TO							
+		207105	1737.	5.57	609.	158.	114.	7.22
	HYDROGRAPH AT							
+		S211	292.	4.30	47.	12.	8.	0.49
	2 COMBINED AT							
+		C105R	1743.	5.53	631.	164.	118.	7.70
	2 COMBINED AT							
+		C105	2559.	5.47	920.	240.	173.	12.75
	HYDROGRAPH AT							
+		S300	525.	4.20	76.	19.	14.	0.62
	HYDROGRAPH AT							
+		S301	873.	4.17	130.	33.	24.	0.99
	2 COMBINED AT							
+		C300	1152.	4.20	192.	48.	35.	1.61
	ROUTED TO							
+		300301	1118.	4.33	192.	48.	35.	1.61
	HYDROGRAPH AT							
+		S302	405.	4.43	56.	14.	10.	0.47
	2 COMBINED AT							
+		C301	1277.	4.37	233.	59.	42.	2.07
	ROUTED TO							
+		301302	1229.	4.67	233.	59.	42.	2.07
	HYDROGRAPH AT							
+		S303	358.	4.63	63.	16.	11.	0.71
	2 COMBINED AT							
+		C302	1345.	4.67	270.	69.	49.	2.78
	ROUTED TO							
+		302303	1320.	4.83	270.	69.	49.	2.78
	HYDROGRAPH AT							
+		S304	372.	4.37	73.	18.	13.	0.82
	2 COMBINED AT							
+		C303	1454.	4.80	317.	81.	58.	3.60
	2 COMBINED AT							
+		WEST-1	3024.	5.33	1128.	294.	212.	16.36
	HYDROGRAPH AT							
+		S400	971.	4.37	141.	35.	26.	1.05
	ROUTED TO							
+		C400O	430.	4.80	140.	35.	26.	1.05
	ROUTED TO							
+		400401	428.	5.10	140.	35.	26.	1.05
	HYDROGRAPH AT							
+		S401	547.	4.20	66.	17.	12.	0.65
	2 COMBINED AT							
+		C401	600.	4.43	193.	49.	35.	1.69
	ROUTED TO							
+		401402	582.	4.77	193.	49.	35.	1.69
	HYDROGRAPH AT							
+		S402	831.	4.17	99.	25.	18.	0.74
	2 COMBINED AT							

+		C402	772.	4.67	274.	70.	50.	2.43
	ROUTED TO							
+		402403	737.	5.03	274.	70.	50.	2.43
	HYDROGRAPH AT							
+		S403	779.	4.13	93.	23.	17.	0.56
	2 COMBINED AT							
+		C403	941.	4.43	353.	90.	65.	2.99
	ROUTED TO							
+		403404	931.	4.57	353.	90.	65.	2.99
	HYDROGRAPH AT							
+		S404	318.	4.27	29.	7.	5.	0.26
	2 COMBINED AT							
+		C404	1045.	4.53	373.	95.	69.	3.26
	2 COMBINED AT							
+		WEST-2	3465.	5.30	1386.	363.	261.	19.61
	HYDROGRAPH AT							
+		S500	509.	4.47	129.	33.	24.	1.05
	ROUTED TO							
+		500501	502.	4.63	129.	33.	24.	1.05
	HYDROGRAPH AT							
+		S501	463.	4.23	71.	18.	13.	0.61
	2 COMBINED AT							
+		C501	719.	4.50	183.	47.	34.	1.67
	ROUTED TO							
+		501502	707.	4.60	180.	46.	33.	1.67
	HYDROGRAPH AT							
+		S502	340.	4.40	45.	11.	8.	0.40
	2 COMBINED AT							
+		C502L	860.	4.57	210.	54.	39.	2.07
	HYDROGRAPH AT							
+		S503	602.	4.33	118.	30.	21.	0.99
	2 COMBINED AT							
+		C502I	1216.	4.53	302.	77.	56.	3.07
	ROUTED TO							
+		C502O	1174.	4.63	302.	77.	56.	3.07
	ROUTED TO							
+		502505	1139.	5.00	291.	73.	53.	3.07
	HYDROGRAPH AT							
+		S504	218.	4.27	42.	11.	8.	0.33
	2 COMBINED AT							
+		C505L	1200.	4.97	321.	81.	59.	3.39
	HYDROGRAPH AT							
+		S505	192.	4.17	15.	4.	3.	0.14
	ROUTED TO							
+		C503O	84.	4.40	15.	4.	3.	0.14
	ROUTED TO							
+		503505	81.	4.87	15.	4.	3.	0.14
	HYDROGRAPH AT							
+		S506	198.	4.20	20.	5.	4.	0.15
	ROUTED TO							
+		C504O	79.	4.50	20.	5.	4.	0.15
	ROUTED TO							
+		504505	78.	5.10	20.	5.	4.	0.15
	HYDROGRAPH AT							

+	S507	653.	4.17	72.	18.	13.	0.67
3 COMBINED AT +	C505R	605.	4.17	101.	25.	18.	0.96
2 COMBINED AT +	C505	1353.	4.87	392.	100.	72.	4.35
ROUTED TO +	505509	1316.	5.17	372.	93.	67.	4.35
HYDROGRAPH AT +	S508	383.	4.10	35.	9.	6.	0.29
2 COMBINED AT +	C509L	1316.	5.13	395.	99.	72.	4.65
HYDROGRAPH AT +	S509	279.	4.07	22.	6.	4.	0.17
ROUTED TO +	C506O	85.	4.33	22.	6.	4.	0.17
ROUTED TO +	506508	85.	4.53	22.	6.	4.	0.17
HYDROGRAPH AT +	S510	180.	4.10	22.	6.	4.	0.13
2 COMBINED AT +	C508R	239.	4.13	44.	11.	8.	0.30
HYDROGRAPH AT +	S511	505.	4.10	50.	13.	9.	0.38
ROUTED TO +	C507O	91.	4.63	50.	13.	9.	0.38
ROUTED TO +	507508	90.	4.93	49.	13.	10.	0.38
HYDROGRAPH AT +	S512	292.	4.13	39.	10.	7.	0.21
2 COMBINED AT +	C508L	330.	4.17	86.	23.	16.	0.60
2 COMBINED AT +	C508	526.	4.17	126.	33.	24.	0.90
ROUTED TO +	508509	476.	4.67	122.	34.	24.	0.90
HYDROGRAPH AT +	S513	551.	4.23	86.	22.	16.	0.78
2 COMBINED AT +	C509R	757.	4.53	196.	52.	38.	1.67
2 COMBINED AT +	C509	1670.	5.03	548.	141.	102.	6.32
ROUTED TO +	509510	1662.	5.13	547.	141.	102.	6.32
HYDROGRAPH AT +	S514	748.	4.17	102.	26.	19.	0.65
2 COMBINED AT +	C510	1744.	5.10	625.	162.	117.	6.97
ROUTED TO +	510511	1714.	5.40	623.	162.	117.	6.97
HYDROGRAPH AT +	S515	1319.	4.17	177.	44.	32.	1.10
2 COMBINED AT +	C511	1744.	5.37	761.	199.	144.	8.07
ROUTED TO							

+	511512	1709.	5.67	757.	199.	143.	8.07
HYDROGRAPH AT +	S516	539.	4.20	83.	21.	15.	0.54
2 COMBINED AT +	C512	1797.	4.87	810.	215.	155.	8.61
2 COMBINED AT +	WEST-3	4484.	5.27	1966.	521.	375.	28.22
HYDROGRAPH AT +	S600	558.	4.97	151.	39.	28.	2.02
ROUTED TO +	600601	555.	5.03	151.	39.	28.	2.02
HYDROGRAPH AT +	S601	673.	4.53	128.	32.	23.	0.90
2 COMBINED AT +	C601	856.	4.87	254.	65.	47.	2.92
ROUTED TO +	601602	844.	5.07	254.	65.	47.	2.92
HYDROGRAPH AT +	S603	708.	4.33	94.	24.	17.	0.67
2 COMBINED AT +	C602L	964.	4.93	329.	85.	61.	3.58
HYDROGRAPH AT +	S602	717.	4.90	198.	51.	37.	1.88
2 COMBINED AT +	C602	1466.	4.90	486.	126.	90.	5.47
ROUTED TO +	602603	1412.	5.10	442.	111.	80.	5.47
HYDROGRAPH AT +	S606	380.	4.57	81.	21.	15.	0.66
2 COMBINED AT +	C603L	1550.	5.03	497.	125.	90.	6.13
HYDROGRAPH AT +	S605	497.	4.77	123.	32.	23.	1.09
HYDROGRAPH AT +	S604	755.	5.20	261.	68.	49.	2.66
3 COMBINED AT +	C603	2258.	5.07	779.	201.	145.	9.87
ROUTED TO +	603604	2174.	5.33	731.	184.	133.	9.87
HYDROGRAPH AT +	S609	243.	4.70	62.	16.	11.	0.56
2 COMBINED AT +	C604R	2234.	5.33	763.	193.	139.	10.43
HYDROGRAPH AT +	S607	391.	4.73	102.	26.	19.	0.82
2 COMBINED AT +	C604	2382.	5.30	832.	211.	152.	11.25
ROUTED TO +	604605	2378.	5.33	832.	211.	152.	11.25
HYDROGRAPH AT +	S608	497.	4.37	71.	18.	13.	0.51
2 COMBINED AT +	C605	2423.	5.33	878.	223.	161.	11.76
ROUTED TO							

+	605606	2400.	5.43	869.	220.	159.	11.76
+ HYDROGRAPH AT	S610	417.	4.30	84.	21.	15.	0.60
+ 2 COMBINED AT	C606L	2459.	5.43	924.	235.	169.	12.36
+ HYDROGRAPH AT	S612	480.	4.40	112.	29.	21.	0.81
+ 2 COMBINED AT	C606	2568.	5.40	1003.	256.	184.	13.17
+ ROUTED TO	606608	2562.	5.43	1000.	255.	184.	13.17
+ HYDROGRAPH AT	S611	465.	4.43	71.	18.	13.	0.57
+ ROUTED TO	607608	429.	4.70	71.	18.	13.	0.57
+ HYDROGRAPH AT	S613	747.	5.00	207.	53.	38.	1.80
+ 3 COMBINED AT	C608	3005.	5.37	1182.	303.	218.	15.53
+ ROUTED TO	608609	2981.	5.50	1171.	299.	216.	15.53
+ HYDROGRAPH AT	S614	443.	4.93	124.	32.	23.	1.08
+ 2 COMBINED AT	C609	3138.	5.47	1247.	320.	231.	16.61
+ ROUTED TO	609611	3090.	5.77	1219.	310.	223.	16.61
+ HYDROGRAPH AT	S617	488.	4.27	76.	19.	14.	0.68
+ 2 COMBINED AT	C611R	3092.	5.77	1254.	320.	231.	17.29
+ HYDROGRAPH AT	S615	619.	4.87	167.	43.	31.	1.05
+ ROUTED TO	610611	609.	5.07	167.	43.	31.	1.05
+ HYDROGRAPH AT	S616	318.	4.53	58.	15.	10.	0.50
+ 2 COMBINED AT	C611L	726.	5.00	214.	55.	40.	1.56
+ 2 COMBINED AT	C611	3369.	5.67	1402.	360.	260.	18.85
+ ROUTED TO	611613	3355.	5.77	1392.	357.	257.	18.85
+ HYDROGRAPH AT	S618	389.	4.87	100.	26.	19.	0.96
+ 2 COMBINED AT	C613R	3436.	5.73	1443.	370.	267.	19.81
+ HYDROGRAPH AT	S619	641.	4.63	118.	30.	22.	0.83
+ ROUTED TO	612613	617.	4.83	118.	30.	22.	0.83
+ HYDROGRAPH AT	S620	267.	4.63	62.	16.	12.	0.44
2 COMBINED AT							

+	C613L	781.	4.83	174.	44.	32.	1.27
2 COMBINED AT +	C613	3639.	5.70	1557.	401.	289.	21.08
ROUTED TO +	613614	3620.	5.83	1546.	397.	286.	21.08
HYDROGRAPH AT +	S621	528.	4.53	72.	18.	13.	0.92
2 COMBINED AT +	C614	3620.	5.80	1569.	403.	290.	22.00
ROUTED TO +	614615	3588.	5.93	1553.	398.	287.	22.00
HYDROGRAPH AT +	S622	241.	5.13	69.	17.	13.	0.90
2 COMBINED AT +	C615	3612.	5.93	1568.	402.	290.	22.90
2 COMBINED AT +	WEST-4	6521.	5.60	3078.	811.	584.	51.12
HYDROGRAPH AT +	S700	491.	4.20	59.	15.	11.	0.61
HYDROGRAPH AT +	S701	272.	4.53	78.	20.	14.	0.72
HYDROGRAPH AT +	S702	255.	4.13	32.	8.	6.	0.26
HYDROGRAPH AT +	S703	167.	4.40	22.	5.	4.	0.26
HYDROGRAPH AT +	S704	408.	4.17	42.	11.	8.	0.41
ROUTED TO +	704705	358.	4.43	42.	11.	8.	0.41
HYDROGRAPH AT +	S705	838.	4.17	110.	28.	20.	0.75
2 COMBINED AT +	C705	858.	4.33	144.	36.	26.	1.16
ROUTED TO +	C705O	543.	4.63	144.	36.	26.	1.16
ROUTED TO +	705OAF	539.	4.83	144.	36.	26.	1.16
HYDROGRAPH AT +	S705AF	171.	4.40	25.	6.	5.	0.18
2 COMBINED AT +	C705AF	634.	4.73	167.	42.	30.	1.34
5 COMBINED AT +	WEST-5	1163.	4.43	305.	78.	56.	3.19
HYDROGRAPH AT +	S706	842.	4.13	102.	26.	18.	0.71
HYDROGRAPH AT +	S707	812.	4.13	108.	27.	20.	0.64
HYDROGRAPH AT +	S728	236.	4.23	43.	11.	8.	0.28
5 COMBINED AT +	WEST	6715.	5.57	3337.	885.	638.	55.94
HYDROGRAPH AT +	S708	991.	4.13	100.	25.	18.	0.71
HYDROGRAPH AT							

+		S709	622.	4.13	72.	18.	13.	0.44
	ROUTED TO							
+		C709O	341.	4.47	72.	18.	13.	0.44
	ROUTED TO							
+		709710	339.	4.53	72.	18.	13.	0.44
	HYDROGRAPH AT							
+		S710	230.	4.03	18.	4.	3.	0.11
	2 COMBINED AT							
+		C710I	389.	4.10	89.	22.	16.	0.55
	ROUTED TO							
+		C710O	329.	4.70	89.	22.	16.	0.55
	HYDROGRAPH AT							
+		S711	361.	4.03	27.	7.	5.	0.16
	ROUTED TO							
+		C711O	154.	4.17	27.	7.	5.	0.16
	ROUTED TO							
+		711712	153.	4.23	27.	7.	5.	0.16
	HYDROGRAPH AT							
+		S712	163.	4.00	11.	3.	2.	0.07
	2 COMBINED AT							
+		C712I	289.	4.00	38.	10.	7.	0.23
	ROUTED TO							
+		C712O	205.	4.13	38.	10.	7.	0.23
	ROUTED TO							
+		712714	204.	4.20	38.	10.	7.	0.23
	HYDROGRAPH AT							
+		S713	233.	4.03	17.	4.	3.	0.11
	ROUTED TO							
+		C713O	128.	4.13	17.	4.	3.	0.11
	ROUTED TO							
+		713714	128.	4.17	17.	4.	3.	0.11
	HYDROGRAPH AT							
+		S714	105.	4.03	7.	2.	1.	0.06
	3 COMBINED AT							
+		C714	411.	4.10	62.	16.	11.	0.39
	HYDROGRAPH AT							
+		S715	268.	4.17	34.	8.	6.	0.22
	HYDROGRAPH AT							
+		S716	1153.	4.20	182.	46.	33.	1.13
	ROUTED TO							
+		C716O	527.	4.73	182.	46.	33.	1.13
	ROUTED TO							
+		716717	526.	4.87	182.	46.	33.	1.13
	HYDROGRAPH AT							
+		S717	553.	4.13	47.	12.	8.	0.29
	2 COMBINED AT							
+		C717	723.	4.20	227.	57.	41.	1.41
	ROUTED TO							
+		717718	650.	4.80	226.	57.	41.	1.41
	HYDROGRAPH AT							
+		S718	284.	4.67	70.	18.	13.	0.44
	2 COMBINED AT							
+		C718	890.	4.80	291.	74.	53.	1.86
	HYDROGRAPH AT							

+		S719	177.	4.17	28.	7.	5.	0.15
+	6 COMBINED AT	EAST-1	1875.	4.40	573.	145.	104.	3.88
+	HYDROGRAPH AT	S720	508.	4.13	62.	15.	11.	0.37
+	HYDROGRAPH AT	S721	680.	4.07	60.	15.	11.	0.34
+	ROUTED TO	C721O	219.	4.30	60.	15.	11.	0.34
+	ROUTED TO	721722	215.	4.60	60.	15.	11.	0.34
+	HYDROGRAPH AT	S722	925.	4.23	149.	37.	27.	0.95
+	2 COMBINED AT	C722	950.	4.27	206.	52.	37.	1.29
+	HYDROGRAPH AT	S723	167.	4.03	15.	4.	3.	0.09
+	HYDROGRAPH AT	S724	1342.	4.20	224.	56.	41.	1.16
+	HYDROGRAPH AT	S725	950.	4.33	210.	53.	38.	1.16
+	5 COMBINED AT	EAST-2	2984.	4.27	686.	173.	125.	4.06
+	HYDROGRAPH AT	S726	569.	4.07	44.	11.	8.	0.33
+	ROUTED TO	726727	479.	4.27	44.	11.	8.	0.33
+	HYDROGRAPH AT	S727	391.	4.20	71.	18.	13.	0.38
+	2 COMBINED AT	C727	806.	4.23	114.	29.	21.	0.71
+	4 COMBINED AT	TOTAL	7841.	5.37	4222.	1124.	810.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 10-Year, 24-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUN   1998           *
 *           VERSION 4.1             *
 *                                   *
 *  RUN DATE   10AUG01  TIME  10:13:25  *
 *                                   *
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*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU10-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future waterhsed condition 10-year, 24-hour storm event. A companion model is also created for the existing condition 10-year, 6-hour storm event. Both models (10-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 10-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                     STRM       2.73  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 2.71 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 2.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 2.57 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 2.47 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 2.34 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	213.	12.63	55.	17.	12.	0.57		
+	ROUTED TO	100102	207.	12.90	55.	17.	12.	0.57		
+	HYDROGRAPH AT	S101	284.	12.50	52.	15.	11.	0.63		
+	2 COMBINED AT	C102R	396.	12.70	106.	32.	23.	1.20		
+	HYDROGRAPH AT	S102	196.	12.30	46.	15.	11.	0.45		
+	ROUTED TO	101102	189.	12.57	46.	15.	11.	0.45		
+	HYDROGRAPH AT	S103	137.	12.70	35.	10.	7.	0.40		
	2 COMBINED AT									

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+                    C102L      320.  12.63      81.      25.      18.      0.84
     2 COMBINED AT
+                    C102       704.  12.67     185.      56.      40.      2.05
     ROUTED TO
+                  102103       691.  12.93     185.      56.      40.      2.05
     HYDROGRAPH AT
+                    S104       452.  12.57      89.      27.      19.      0.90
     2 COMBINED AT
+                   C103R       999.  12.80     270.      81.      59.      2.95
     HYDROGRAPH AT
+                    S105       207.  12.40      59.      18.      13.      0.59
     2 COMBINED AT
+                    C103      1165.  12.77     326.      98.      71.      3.54
     ROUTED TO
+                  103104      1148.  13.00     326.      98.      71.      3.54
     HYDROGRAPH AT
+                    S106       238.  12.27      47.      13.       9.      0.57
     2 COMBINED AT
+                    C104      1243.  12.97     369.     110.      80.      4.11
     ROUTED TO
+                  104105      1220.  13.23     369.     110.      80.      4.11
     HYDROGRAPH AT
+                    S107       344.  12.53      65.      17.      12.      0.94
     2 COMBINED AT
+                   C105L      1349.  13.20     428.     126.      91.      5.05
     HYDROGRAPH AT
+                    S200       438.  12.57      96.      31.      22.      0.96
     ROUTED TO
+                  200201       431.  12.63      96.      31.      22.      0.96
     HYDROGRAPH AT
+                    S201       158.  12.47      35.      11.       8.      0.35
     2 COMBINED AT
+                    C201       569.  12.60     130.      42.      30.      1.31
     ROUTED TO
+                  201203       556.  12.73     130.      42.      30.      1.31
     HYDROGRAPH AT
+                    S202        72.  12.27      13.       4.       3.      0.13
     ROUTED TO
+                  202203        69.  12.37      13.       4.       3.      0.13
     HYDROGRAPH AT
+                    S203       130.  12.37      40.      13.       9.      0.37
     3 COMBINED AT
+                   C203R       703.  12.70     181.      59.      42.      1.81
     HYDROGRAPH AT
+                    S204       342.  12.70      90.      29.      21.      0.95
     2 COMBINED AT
+                    C203      1028.  12.70     267.      86.      63.      2.76
     ROUTED TO
+                  203204      1021.  12.73     267.      86.      63.      2.76
     HYDROGRAPH AT
+                    S205       229.  12.37      45.      14.      10.      0.41
     2 COMBINED AT
+                    C204      1153.  12.70     310.     100.      72.      3.17
     ROUTED TO
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+	204205	1135.	12.87	310.	100.	72.	3.17
HYDROGRAPH AT +	S206	274.	12.47	88.	27.	20.	0.85
2 COMBINED AT +	C205L	1359.	12.87	393.	126.	91.	4.03
HYDROGRAPH AT +	S207	318.	12.80	98.	32.	23.	0.96
2 COMBINED AT +	C205	1654.	12.83	486.	156.	113.	4.98
ROUTED TO +	205206	1594.	13.37	485.	156.	113.	4.98
HYDROGRAPH AT +	S208	357.	13.00	115.	36.	26.	1.10
2 COMBINED AT +	C206	1857.	13.33	589.	188.	136.	6.09
ROUTED TO +	206207	1848.	13.43	589.	188.	136.	6.09
HYDROGRAPH AT +	S209	283.	12.57	55.	16.	12.	0.65
2 COMBINED AT +	C207R	1913.	13.40	635.	201.	146.	6.74
HYDROGRAPH AT +	S210	215.	12.23	34.	9.	6.	0.48
2 COMBINED AT +	C207	1925.	13.40	663.	209.	152.	7.22
ROUTED TO +	207105	1916.	13.50	662.	208.	152.	7.22
HYDROGRAPH AT +	S211	208.	12.27	37.	10.	7.	0.49
2 COMBINED AT +	C105R	1935.	13.47	693.	217.	158.	7.70
2 COMBINED AT +	C105	3023.	13.33	1066.	327.	237.	12.75
HYDROGRAPH AT +	S300	366.	12.17	64.	20.	15.	0.62
HYDROGRAPH AT +	S301	691.	12.13	115.	37.	27.	0.99
2 COMBINED AT +	C300	1041.	12.13	176.	57.	41.	1.61
ROUTED TO +	300301	1010.	12.27	176.	57.	41.	1.61
HYDROGRAPH AT +	S302	256.	12.40	46.	14.	10.	0.47
2 COMBINED AT +	C301	1226.	12.27	220.	71.	51.	2.07
ROUTED TO +	301302	1172.	12.57	220.	71.	51.	2.07
HYDROGRAPH AT +	S303	269.	12.57	51.	14.	10.	0.71
2 COMBINED AT +	C302	1425.	12.57	269.	84.	61.	2.78
ROUTED TO +	302303	1379.	12.70	268.	84.	61.	2.78
HYDROGRAPH AT							

+	S304	321.	12.30	62.	17.	12.	0.82
+ 2 COMBINED AT	C303	1581.	12.70	327.	100.	72.	3.60
+ 2 COMBINED AT	WEST-1	3673.	13.20	1341.	412.	300.	16.36
+ HYDROGRAPH AT	S400	367.	13.10	124.	39.	28.	1.05
+ ROUTED TO	C400O	294.	13.53	123.	39.	28.	1.05
+ ROUTED TO	400401	294.	13.83	123.	39.	28.	1.05
+ HYDROGRAPH AT	S401	404.	12.17	55.	16.	11.	0.65
+ 2 COMBINED AT	C401	424.	12.17	175.	54.	39.	1.69
+ ROUTED TO	401402	375.	12.60	175.	54.	39.	1.69
+ HYDROGRAPH AT	S402	597.	12.13	86.	27.	19.	0.74
+ 2 COMBINED AT	C402	674.	12.17	253.	79.	58.	2.43
+ ROUTED TO	402403	637.	12.53	253.	79.	58.	2.43
+ HYDROGRAPH AT	S403	517.	12.10	79.	24.	17.	0.56
+ 2 COMBINED AT	C403	888.	12.40	325.	102.	74.	2.99
+ ROUTED TO	403404	880.	12.53	325.	102.	74.	2.99
+ HYDROGRAPH AT	S404	197.	12.23	23.	6.	5.	0.26
+ 2 COMBINED AT	C404	985.	12.43	346.	108.	79.	3.26
+ 2 COMBINED AT	WEST-2	4135.	13.13	1637.	505.	368.	19.61
+ HYDROGRAPH AT	S500	419.	12.37	116.	38.	27.	1.05
+ ROUTED TO	500501	412.	12.57	116.	38.	27.	1.05
+ HYDROGRAPH AT	S501	324.	12.20	59.	18.	13.	0.61
+ 2 COMBINED AT	C501	636.	12.43	172.	55.	40.	1.67
+ ROUTED TO	501502	626.	12.53	169.	52.	37.	1.67
+ HYDROGRAPH AT	S502	212.	12.40	36.	11.	8.	0.40
+ 2 COMBINED AT	C502L	809.	12.47	203.	62.	45.	2.07
+ HYDROGRAPH AT	S503	507.	12.27	105.	33.	24.	0.99
+ 2 COMBINED AT	C502I	1242.	12.40	303.	94.	68.	3.07
ROUTED TO							

+	C502O	1193.	12.53	303.	94.	68.	3.07
ROUTED TO +	502505	1152.	12.87	292.	84.	60.	3.07
HYDROGRAPH AT +	S504	149.	12.23	35.	11.	8.	0.33
2 COMBINED AT +	C505L	1228.	12.83	325.	94.	68.	3.39
HYDROGRAPH AT +	S505	98.	12.20	12.	4.	3.	0.14
ROUTED TO +	C503O	70.	12.33	12.	4.	3.	0.14
ROUTED TO +	503505	68.	12.80	11.	3.	2.	0.14
HYDROGRAPH AT +	S506	117.	12.20	17.	5.	4.	0.15
ROUTED TO +	C504O	70.	12.43	17.	5.	4.	0.15
ROUTED TO +	504505	68.	13.07	17.	5.	4.	0.15
HYDROGRAPH AT +	S507	476.	12.13	60.	17.	12.	0.67
3 COMBINED AT +	C505R	485.	12.13	88.	25.	18.	0.96
2 COMBINED AT +	C505	1420.	12.80	408.	118.	85.	4.35
ROUTED TO +	505509	1378.	13.10	387.	101.	73.	4.35
HYDROGRAPH AT +	S508	223.	12.10	29.	9.	6.	0.29
2 COMBINED AT +	C509L	1392.	13.07	414.	109.	79.	4.65
HYDROGRAPH AT +	S509	147.	12.03	19.	6.	4.	0.17
ROUTED TO +	C506O	76.	12.27	19.	6.	4.	0.17
ROUTED TO +	506508	75.	12.47	19.	6.	4.	0.17
HYDROGRAPH AT +	S510	113.	12.10	19.	6.	4.	0.13
2 COMBINED AT +	C508R	177.	12.13	37.	12.	8.	0.30
HYDROGRAPH AT +	S511	299.	12.10	42.	13.	9.	0.38
ROUTED TO +	C507O	85.	12.60	42.	13.	9.	0.38
ROUTED TO +	507508	84.	12.97	41.	13.	10.	0.38
HYDROGRAPH AT +	S512	191.	12.13	33.	10.	8.	0.21
2 COMBINED AT +	C508L	243.	12.17	74.	24.	17.	0.60
2 COMBINED AT +	C508	419.	12.13	111.	35.	25.	0.90
ROUTED TO							

+	508509	383.	12.67	108.	34.	25.	0.90
HYDROGRAPH AT +	S513	449.	12.17	74.	22.	16.	0.78
2 COMBINED AT +	C509R	616.	12.53	180.	55.	40.	1.67
2 COMBINED AT +	C509	1756.	12.97	579.	160.	116.	6.32
ROUTED TO +	509510	1750.	13.07	578.	160.	115.	6.32
HYDROGRAPH AT +	S514	538.	12.13	87.	26.	19.	0.65
2 COMBINED AT +	C510	1828.	13.03	655.	183.	132.	6.97
ROUTED TO +	510511	1795.	13.40	652.	183.	132.	6.97
HYDROGRAPH AT +	S515	1082.	12.10	153.	45.	32.	1.10
2 COMBINED AT +	C511	1825.	13.37	786.	223.	161.	8.07
ROUTED TO +	511512	1797.	13.67	781.	221.	160.	8.07
HYDROGRAPH AT +	S516	376.	12.17	71.	23.	17.	0.54
2 COMBINED AT +	C512	1825.	13.63	838.	242.	175.	8.61
2 COMBINED AT +	WEST-3	5443.	13.10	2360.	710.	519.	28.22
HYDROGRAPH AT +	S600	615.	12.73	150.	47.	34.	2.02
ROUTED TO +	600601	608.	12.80	150.	47.	34.	2.02
HYDROGRAPH AT +	S601	530.	12.47	114.	37.	27.	0.90
2 COMBINED AT +	C601	990.	12.70	260.	82.	60.	2.92
ROUTED TO +	601602	975.	12.90	260.	82.	60.	2.92
HYDROGRAPH AT +	S603	499.	12.30	82.	26.	19.	0.67
2 COMBINED AT +	C602L	1117.	12.83	338.	108.	78.	3.58
HYDROGRAPH AT +	S602	702.	12.73	189.	61.	44.	1.88
2 COMBINED AT +	C602	1766.	12.77	516.	166.	120.	5.47
ROUTED TO +	602603	1695.	13.00	472.	125.	90.	5.47
HYDROGRAPH AT +	S606	270.	12.53	69.	22.	16.	0.66
2 COMBINED AT +	C603L	1855.	12.97	533.	145.	104.	6.13
HYDROGRAPH AT +	S605	409.	12.67	110.	36.	26.	1.09
HYDROGRAPH AT							

+		S604	736.	13.07	261.	85.	62.	2.66
	3 COMBINED AT							
+		C603	2757.	12.97	857.	252.	182.	9.87
	ROUTED TO							
+		603604	2681.	13.13	809.	212.	152.	9.87
	HYDROGRAPH AT							
+		S609	157.	12.70	49.	16.	11.	0.56
	2 COMBINED AT							
+		C604R	2772.	13.13	849.	225.	162.	10.43
	HYDROGRAPH AT							
+		S607	311.	12.67	91.	29.	21.	0.82
	2 COMBINED AT							
+		C604	2954.	13.13	927.	250.	180.	11.25
	ROUTED TO							
+		604605	2937.	13.17	927.	250.	180.	11.25
	HYDROGRAPH AT							
+		S608	333.	12.33	60.	19.	14.	0.51
	2 COMBINED AT							
+		C605	2993.	13.17	978.	267.	192.	11.76
	ROUTED TO							
+		605606	2951.	13.30	970.	261.	188.	11.76
	HYDROGRAPH AT							
+		S610	306.	12.27	72.	23.	17.	0.60
	2 COMBINED AT							
+		C606L	3024.	13.30	1031.	281.	203.	12.36
	HYDROGRAPH AT							
+		S612	383.	12.33	98.	30.	22.	0.81
	2 COMBINED AT							
+		C606	3142.	13.30	1115.	307.	222.	13.17
	ROUTED TO							
+		606608	3134.	13.33	1112.	305.	220.	13.17
	HYDROGRAPH AT							
+		S611	297.	12.43	58.	19.	14.	0.57
	ROUTED TO							
+		607608	279.	12.73	58.	19.	14.	0.57
	HYDROGRAPH AT							
+		S613	708.	12.83	195.	62.	45.	1.80
	3 COMBINED AT							
+		C608	3645.	13.30	1326.	375.	270.	15.53
	ROUTED TO							
+		608609	3603.	13.43	1315.	366.	264.	15.53
	HYDROGRAPH AT							
+		S614	370.	12.83	112.	36.	26.	1.08
	2 COMBINED AT							
+		C609	3793.	13.40	1407.	396.	286.	16.61
	ROUTED TO							
+		609611	3730.	13.60	1379.	370.	267.	16.61
	HYDROGRAPH AT							
+		S617	364.	12.23	64.	19.	14.	0.68
	2 COMBINED AT							
+		C611R	3745.	13.60	1427.	386.	279.	17.29
	HYDROGRAPH AT							
+		S615	500.	12.80	151.	50.	36.	1.05
	ROUTED TO							

+	610611	490.	13.00	151.	50.	36.	1.05
HYDROGRAPH AT +	S616	221.	12.50	47.	14.	10.	0.50
2 COMBINED AT +	C611L	616.	12.93	197.	64.	46.	1.56
2 COMBINED AT +	C611	4053.	13.57	1593.	442.	319.	18.85
ROUTED TO +	611613	4031.	13.63	1583.	432.	311.	18.85
HYDROGRAPH AT +	S618	332.	12.73	90.	27.	19.	0.96
2 COMBINED AT +	C613R	4142.	13.63	1654.	454.	327.	19.81
HYDROGRAPH AT +	S619	500.	12.60	104.	33.	24.	0.83
ROUTED TO +	612613	481.	12.83	104.	33.	24.	0.83
HYDROGRAPH AT +	S620	189.	12.63	54.	17.	12.	0.44
2 COMBINED AT +	C613L	652.	12.80	157.	49.	36.	1.27
2 COMBINED AT +	C613	4366.	13.60	1784.	496.	357.	21.08
ROUTED TO +	613614	4337.	13.73	1772.	485.	349.	21.08
HYDROGRAPH AT +	S621	443.	12.43	62.	16.	12.	0.92
2 COMBINED AT +	C614	4337.	13.73	1817.	497.	358.	22.00
ROUTED TO +	614615	4310.	13.87	1805.	487.	351.	22.00
HYDROGRAPH AT +	S622	210.	12.97	59.	15.	11.	0.90
2 COMBINED AT +	C615	4378.	13.87	1847.	498.	359.	22.90
2 COMBINED AT +	WEST-4	8562.	13.53	3944.	1135.	825.	51.12
HYDROGRAPH AT +	S700	351.	12.17	49.	13.	10.	0.61
HYDROGRAPH AT +	S701	221.	12.43	67.	20.	14.	0.72
HYDROGRAPH AT +	S702	163.	12.13	26.	8.	6.	0.26
HYDROGRAPH AT +	S703	109.	12.37	16.	4.	3.	0.26
HYDROGRAPH AT +	S704	253.	12.13	34.	10.	7.	0.41
ROUTED TO +	704705	231.	12.40	34.	10.	7.	0.41
HYDROGRAPH AT +	S705	617.	12.13	93.	29.	21.	0.75
2 COMBINED AT +	C705	709.	12.20	127.	38.	28.	1.16
ROUTED TO							

+	C705O	478.	12.53	127.	38.	28.	1.16
ROUTED TO +	705OAF	474.	12.73	127.	38.	28.	1.16
HYDROGRAPH AT +	S705AF	123.	12.40	22.	6.	4.	0.18
2 COMBINED AT +	C705AF	560.	12.67	148.	43.	31.	1.34
5 COMBINED AT +	WEST-5	1168.	12.37	300.	87.	63.	3.19
HYDROGRAPH AT +	S706	584.	12.10	88.	28.	20.	0.71
HYDROGRAPH AT +	S707	549.	12.10	92.	30.	22.	0.64
HYDROGRAPH AT +	S728	166.	12.20	37.	12.	9.	0.28
5 COMBINED AT +	WEST	8916.	13.43	4323.	1256.	913.	55.94
HYDROGRAPH AT +	S708	700.	12.10	85.	22.	16.	0.71
HYDROGRAPH AT +	S709	418.	12.13	68.	18.	13.	0.44
ROUTED TO +	C709O	279.	12.40	68.	18.	13.	0.44
ROUTED TO +	709710	278.	12.47	68.	18.	13.	0.44
HYDROGRAPH AT +	S710	130.	12.03	15.	4.	3.	0.11
2 COMBINED AT +	C710I	321.	12.13	83.	22.	16.	0.55
ROUTED TO +	C710O	286.	12.63	83.	22.	16.	0.55
HYDROGRAPH AT +	S711	200.	12.00	25.	7.	5.	0.16
ROUTED TO +	C711O	134.	12.13	25.	7.	5.	0.16
ROUTED TO +	711712	133.	12.20	25.	7.	5.	0.16
HYDROGRAPH AT +	S712	85.	12.00	10.	3.	2.	0.07
2 COMBINED AT +	C712I	210.	12.00	34.	10.	7.	0.23
ROUTED TO +	C712O	178.	12.10	34.	10.	7.	0.23
ROUTED TO +	712714	177.	12.20	34.	10.	7.	0.23
HYDROGRAPH AT +	S713	131.	12.00	15.	4.	3.	0.11
ROUTED TO +	C713O	93.	12.13	15.	4.	3.	0.11
ROUTED TO +	713714	92.	12.17	15.	4.	3.	0.11
HYDROGRAPH AT +	S714	60.	12.03	6.	1.	1.	0.06
3 COMBINED AT							

+	C714	316.	12.10	55.	15.	11.	0.39
HYDROGRAPH AT +	S715	188.	12.17	31.	8.	6.	0.22
HYDROGRAPH AT +	S716	988.	12.17	162.	46.	33.	1.13
ROUTED TO +	C716O	491.	12.60	162.	46.	33.	1.13
ROUTED TO +	716717	490.	12.73	162.	46.	33.	1.13
HYDROGRAPH AT +	S717	328.	12.13	44.	12.	8.	0.29
2 COMBINED AT +	C717	676.	12.20	204.	57.	41.	1.41
ROUTED TO +	717718	629.	12.73	204.	57.	41.	1.41
HYDROGRAPH AT +	S718	210.	12.67	66.	17.	13.	0.44
2 COMBINED AT +	C718	832.	12.73	267.	74.	53.	1.86
HYDROGRAPH AT +	S719	122.	12.17	28.	8.	6.	0.15
6 COMBINED AT +	EAST-1	1701.	12.17	536.	146.	105.	3.88
HYDROGRAPH AT +	S720	337.	12.13	56.	16.	11.	0.37
HYDROGRAPH AT +	S721	388.	12.03	51.	16.	12.	0.34
ROUTED TO +	C721O	175.	12.27	51.	16.	12.	0.34
ROUTED TO +	721722	171.	12.63	51.	16.	12.	0.34
HYDROGRAPH AT +	S722	768.	12.17	130.	37.	27.	0.95
2 COMBINED AT +	C722	820.	12.20	180.	53.	38.	1.29
HYDROGRAPH AT +	S723	98.	12.03	13.	4.	3.	0.09
HYDROGRAPH AT +	S724	1119.	12.13	206.	63.	46.	1.16
HYDROGRAPH AT +	S725	783.	12.27	184.	58.	42.	1.16
5 COMBINED AT +	EAST-2	3017.	12.17	626.	190.	137.	4.06
HYDROGRAPH AT +	S726	305.	12.03	37.	11.	8.	0.33
ROUTED TO +	726727	285.	12.23	37.	11.	8.	0.33
HYDROGRAPH AT +	S727	276.	12.20	62.	20.	14.	0.38
2 COMBINED AT +	C727	556.	12.23	99.	31.	22.	0.71
4 COMBINED AT +	TOTAL	10193.	12.67	5306.	1549.	1125.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 5-Year, 6-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  10:36:02  *
*                                      *
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*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU5-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 5-year, 6-hour storm event. A companion model is also created for the existing condition 5-year, 24-hour storm event. Both models (5-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 5-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.03 HOURS
                      TOTAL TIME BASE   33.30 HOURS

         ENGLISH UNITS
              DRAINAGE AREA          SQUARE MILES
              PRECIPITATION DEPTH    INCHES
              LENGTH, ELEVATION      FEET
              FLOW                   CUBIC FEET PER SECOND
              STORAGE VOLUME         ACRE-FEET
              SURFACE AREA           ACRES
              TEMPERATURE            DEGREES FAHRENHEIT

23 JD           INDEX STORM NO. 1
                      STRM       1.85  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI             PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        1.84  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        1.81  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        1.71  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        1.50  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	208.	4.77	52.	13.	10.	0.57		
+	ROUTED TO	100102	202.	5.03	52.	13.	10.	0.57		
+	HYDROGRAPH AT	S101	255.	4.63	48.	12.	9.	0.63		
+	2 COMBINED AT	C102R	320.	4.93	86.	22.	16.	1.20		
+	HYDROGRAPH AT	S102	204.	4.37	45.	11.	8.	0.45		
+	ROUTED TO	101102	199.	4.67	45.	11.	8.	0.45		
+	HYDROGRAPH AT	S103	129.	4.87	33.	8.	6.	0.40		
+	2 COMBINED AT	C102L	280.	4.80	71.	18.	13.	0.84		
+	2 COMBINED AT	C102	485.	4.90	137.	35.	25.	2.05		
+	ROUTED TO	102103	476.	5.17	137.	35.	25.	2.05		
+	HYDROGRAPH AT	S104	367.	4.77	78.	20.	14.	0.90		
+	2 COMBINED AT	C103R	641.	5.07	189.	49.	35.	2.95		
+	HYDROGRAPH AT	S105	183.	4.57	54.	14.	10.	0.59		
+	2 COMBINED AT	C103	726.	5.03	224.	58.	42.	3.54		
+	ROUTED TO	103104	715.	5.30	224.	58.	42.	3.54		
+	HYDROGRAPH AT	S106	204.	4.40	43.	11.	8.	0.57		
+	2 COMBINED AT	C104	748.	5.27	246.	64.	46.	4.11		
+	ROUTED TO	104105	732.	5.60	246.	64.	46.	4.11		

+	HYDROGRAPH AT	S107	220.	4.83	53.	13.	10.	0.94
+	2 COMBINED AT	C105L	764.	5.60	268.	70.	50.	5.05
+	HYDROGRAPH AT	S200	391.	4.70	86.	22.	16.	0.96
+	ROUTED TO	200201	387.	4.80	86.	22.	16.	0.96
+	HYDROGRAPH AT	S201	181.	4.53	35.	9.	6.	0.35
+	2 COMBINED AT	C201	467.	4.77	111.	28.	20.	1.31
+	ROUTED TO	201203	457.	4.90	111.	28.	20.	1.31
+	HYDROGRAPH AT	S202	89.	4.30	13.	3.	2.	0.13
+	ROUTED TO	202203	85.	4.40	13.	3.	2.	0.13
+	HYDROGRAPH AT	S203	138.	4.47	38.	10.	7.	0.37
+	3 COMBINED AT	C203R	529.	4.87	146.	38.	27.	1.81
+	HYDROGRAPH AT	S204	296.	4.90	80.	21.	15.	0.95
+	2 COMBINED AT	C203	659.	4.90	199.	51.	37.	2.76
+	ROUTED TO	203204	658.	4.97	199.	51.	37.	2.76
+	HYDROGRAPH AT	S205	251.	4.43	44.	11.	8.	0.41
+	2 COMBINED AT	C204	739.	4.90	229.	59.	43.	3.17
+	ROUTED TO	204205	733.	5.07	229.	59.	43.	3.17
+	HYDROGRAPH AT	S206	228.	4.67	76.	20.	14.	0.85
+	2 COMBINED AT	C205L	857.	5.03	284.	74.	53.	4.03
+	HYDROGRAPH AT	S207	273.	5.00	86.	22.	16.	0.96
+	2 COMBINED AT	C205	1008.	5.07	345.	90.	65.	4.98
+	ROUTED TO	205206	988.	5.50	344.	90.	65.	4.98
+	HYDROGRAPH AT	S208	310.	5.13	97.	25.	18.	1.10
+	2 COMBINED AT	C206	1154.	5.47	413.	108.	78.	6.09
+	ROUTED TO	206207	1149.	5.53	413.	108.	78.	6.09
+	HYDROGRAPH AT	S209	251.	4.73	50.	13.	9.	0.65
+	2 COMBINED AT	C207R	1189.	5.50	437.	115.	83.	6.74

+	HYDROGRAPH AT	S210	197.	4.33	33.	8.	6.	0.48
+	2 COMBINED AT	C207	1191.	5.50	447.	118.	85.	7.22
+	ROUTED TO	207105	1186.	5.63	447.	118.	85.	7.22
+	HYDROGRAPH AT	S211	188.	4.37	35.	9.	6.	0.49
+	2 COMBINED AT	C105R	1192.	5.60	459.	121.	87.	7.70
+	2 COMBINED AT	C105	1669.	5.63	653.	173.	124.	12.75
+	HYDROGRAPH AT	S300	366.	4.23	60.	15.	11.	0.62
+	HYDROGRAPH AT	S301	625.	4.20	103.	26.	19.	0.99
+	2 COMBINED AT	C300	800.	4.23	149.	38.	27.	1.61
+	ROUTED TO	300301	776.	4.37	148.	38.	27.	1.61
+	HYDROGRAPH AT	S302	285.	4.50	45.	11.	8.	0.47
+	2 COMBINED AT	C301	869.	4.43	178.	45.	32.	2.07
+	ROUTED TO	301302	841.	4.70	177.	45.	32.	2.07
+	HYDROGRAPH AT	S303	226.	4.77	46.	12.	8.	0.71
+	2 COMBINED AT	C302	869.	4.73	197.	50.	36.	2.78
+	ROUTED TO	302303	852.	4.93	197.	50.	36.	2.78
+	HYDROGRAPH AT	S304	224.	4.47	53.	13.	10.	0.82
+	2 COMBINED AT	C303	922.	4.90	226.	58.	42.	3.60
+	2 COMBINED AT	WEST-1	1961.	5.53	803.	213.	153.	16.36
+	HYDROGRAPH AT	S400	694.	4.43	111.	28.	20.	1.05
+	ROUTED TO	C400O	375.	4.83	110.	28.	20.	1.05
+	ROUTED TO	400401	372.	5.13	110.	28.	20.	1.05
+	HYDROGRAPH AT	S401	358.	4.27	50.	13.	9.	0.65
+	2 COMBINED AT	C401	453.	4.63	146.	37.	27.	1.69
+	ROUTED TO	401402	445.	5.03	146.	37.	27.	1.69
+	HYDROGRAPH AT	S402	593.	4.20	78.	20.	14.	0.74
+	2 COMBINED AT	C402	516.	4.97	206.	53.	38.	2.43

+	ROUTED TO 402403	495.	5.33	206.	53.	38.	2.43
+	HYDROGRAPH AT S403	593.	4.17	76.	19.	14.	0.56
+	2 COMBINED AT C403	684.	4.47	267.	69.	49.	2.99
+	ROUTED TO 403404	677.	4.63	267.	69.	49.	2.99
+	HYDROGRAPH AT S404	219.	4.30	22.	5.	4.	0.26
+	2 COMBINED AT C404	757.	4.57	280.	72.	52.	3.26
+	2 COMBINED AT WEST-2	2269.	5.57	998.	265.	191.	19.61
+	HYDROGRAPH AT S500	355.	4.53	101.	26.	19.	1.05
+	ROUTED TO 500501	351.	4.73	101.	26.	19.	1.05
+	HYDROGRAPH AT S501	319.	4.30	56.	14.	10.	0.61
+	2 COMBINED AT C501	487.	4.60	139.	36.	26.	1.67
+	ROUTED TO 501502	478.	4.70	136.	35.	25.	1.67
+	HYDROGRAPH AT S502	113.	5.17	34.	9.	6.	0.40
+	2 COMBINED AT C502L	491.	4.80	156.	40.	29.	2.07
+	HYDROGRAPH AT S503	410.	4.40	92.	23.	17.	0.99
+	2 COMBINED AT C502I	708.	4.67	220.	57.	41.	3.07
+	ROUTED TO C502O	708.	4.70	220.	57.	41.	3.07
+	ROUTED TO 502505	684.	5.07	210.	53.	38.	3.07
+	HYDROGRAPH AT S504	154.	4.33	34.	9.	6.	0.33
+	2 COMBINED AT C505L	730.	5.03	232.	59.	42.	3.39
+	HYDROGRAPH AT S505	135.	4.23	12.	3.	2.	0.14
+	ROUTED TO C503O	74.	4.40	12.	3.	2.	0.14
+	ROUTED TO 503505	72.	4.90	11.	3.	2.	0.14
+	HYDROGRAPH AT S506	144.	4.23	16.	4.	3.	0.15
+	ROUTED TO C504O	72.	4.50	16.	4.	3.	0.15
+	ROUTED TO 504505	71.	5.17	16.	4.	3.	0.15
+	HYDROGRAPH AT S507	434.	4.20	54.	14.	10.	0.67

+	3 COMBINED AT C505R	402.	4.23	75.	19.	14.	0.96
+	2 COMBINED AT C505	850.	4.93	281.	72.	52.	4.35
+	ROUTED TO 505509	791.	5.33	261.	65.	47.	4.35
+	HYDROGRAPH AT S508	273.	4.13	28.	7.	5.	0.29
+	2 COMBINED AT C509L	786.	5.33	277.	70.	50.	4.65
+	HYDROGRAPH AT S509	215.	4.07	18.	5.	3.	0.17
+	ROUTED TO C506O	80.	4.30	18.	5.	3.	0.17
+	ROUTED TO 506508	79.	4.50	18.	5.	3.	0.17
+	HYDROGRAPH AT S510	139.	4.13	18.	5.	3.	0.13
+	2 COMBINED AT C508R	194.	4.17	36.	9.	6.	0.30
+	HYDROGRAPH AT S511	364.	4.13	40.	10.	7.	0.38
+	ROUTED TO C507O	86.	4.67	40.	10.	7.	0.38
+	ROUTED TO 507508	85.	4.97	39.	11.	8.	0.38
+	HYDROGRAPH AT S512	227.	4.17	32.	8.	6.	0.21
+	2 COMBINED AT C508L	262.	4.17	70.	18.	13.	0.60
+	2 COMBINED AT C508	423.	4.20	101.	26.	19.	0.90
+	ROUTED TO 508509	390.	4.73	98.	27.	20.	0.90
+	HYDROGRAPH AT S513	364.	4.30	66.	17.	12.	0.78
+	2 COMBINED AT C509R	580.	4.63	151.	41.	29.	1.67
+	2 COMBINED AT C509	1005.	5.23	391.	102.	73.	6.32
+	ROUTED TO 509510	999.	5.33	390.	102.	73.	6.32
+	HYDROGRAPH AT S514	562.	4.20	82.	21.	15.	0.65
+	2 COMBINED AT C510	1034.	5.30	452.	118.	85.	6.97
+	ROUTED TO 510511	1014.	5.60	449.	118.	85.	6.97
+	HYDROGRAPH AT S515	1015.	4.17	142.	36.	26.	1.10
+	2 COMBINED AT C511	1185.	4.53	558.	148.	107.	8.07
+	ROUTED TO 511512	1165.	5.03	554.	148.	106.	8.07

+	HYDROGRAPH AT S516	397.	4.23	68.	17.	12.	0.54
+	2 COMBINED AT C512	1257.	4.97	595.	160.	115.	8.61
+	2 COMBINED AT WEST-3	2982.	5.50	1434.	386.	278.	28.22
+	HYDROGRAPH AT S600	345.	5.13	108.	28.	20.	2.02
+	ROUTED TO 600601	341.	5.23	108.	28.	20.	2.02
+	HYDROGRAPH AT S601	482.	4.63	102.	26.	19.	0.90
+	2 COMBINED AT C601	539.	4.97	185.	48.	35.	2.92
+	ROUTED TO 601602	537.	5.17	185.	48.	35.	2.92
+	HYDROGRAPH AT S603	518.	4.40	76.	19.	14.	0.67
+	2 COMBINED AT C602L	670.	4.80	244.	63.	46.	3.58
+	HYDROGRAPH AT S602	473.	5.03	149.	39.	28.	1.88
+	2 COMBINED AT C602	984.	4.97	363.	95.	68.	5.47
+	ROUTED TO 602603	934.	5.20	319.	80.	58.	5.47
+	HYDROGRAPH AT S606	267.	4.67	64.	16.	12.	0.66
+	2 COMBINED AT C603L	1036.	5.13	362.	91.	66.	6.13
+	HYDROGRAPH AT S605	340.	4.90	95.	25.	18.	1.09
+	HYDROGRAPH AT S604	547.	5.17	195.	51.	37.	2.66
+	3 COMBINED AT C603	1577.	5.13	584.	151.	109.	9.87
+	ROUTED TO 603604	1514.	5.47	536.	135.	97.	9.87
+	HYDROGRAPH AT S609	164.	4.83	48.	12.	9.	0.56
+	2 COMBINED AT C604R	1558.	5.47	561.	141.	102.	10.43
+	HYDROGRAPH AT S607	272.	4.87	80.	21.	15.	0.82
+	2 COMBINED AT C604	1663.	5.43	613.	155.	112.	11.25
+	ROUTED TO 604605	1661.	5.47	613.	155.	112.	11.25
+	HYDROGRAPH AT S608	360.	4.43	57.	14.	10.	0.51
+	2 COMBINED AT C605	1699.	5.43	648.	165.	119.	11.76
+	ROUTED TO 605606	1684.	5.57	641.	162.	117.	11.76

+	HYDROGRAPH AT	S610	298.	4.37	68.	17.	12.	0.60
+	2 COMBINED AT	C606L	1733.	5.53	684.	174.	125.	12.36
+	HYDROGRAPH AT	S612	331.	4.47	87.	22.	16.	0.81
+	2 COMBINED AT	C606	1820.	5.50	744.	190.	137.	13.17
+	ROUTED TO	606608	1816.	5.53	741.	189.	136.	13.17
+	HYDROGRAPH AT	S611	326.	4.53	57.	14.	10.	0.57
+	ROUTED TO	607608	303.	4.83	56.	14.	10.	0.57
+	HYDROGRAPH AT	S613	508.	5.13	158.	41.	29.	1.80
+	3 COMBINED AT	C608	2158.	5.47	883.	227.	163.	15.53
+	ROUTED TO	608609	2136.	5.63	872.	223.	161.	15.53
+	HYDROGRAPH AT	S614	303.	5.07	96.	25.	18.	1.08
+	2 COMBINED AT	C609	2254.	5.63	932.	239.	173.	16.61
+	ROUTED TO	609611	2210.	5.90	904.	230.	166.	16.61
+	HYDROGRAPH AT	S617	332.	4.33	59.	15.	11.	0.68
+	2 COMBINED AT	C611R	2217.	5.90	929.	237.	171.	17.29
+	HYDROGRAPH AT	S615	451.	4.97	134.	35.	25.	1.05
+	ROUTED TO	610611	446.	5.20	134.	35.	25.	1.05
+	HYDROGRAPH AT	S616	218.	4.63	45.	11.	8.	0.50
+	2 COMBINED AT	C611L	523.	5.13	168.	43.	31.	1.56
+	2 COMBINED AT	C611	2451.	5.83	1046.	269.	194.	18.85
+	ROUTED TO	611613	2436.	5.90	1036.	266.	191.	18.85
+	HYDROGRAPH AT	S618	253.	5.03	76.	20.	14.	0.96
+	2 COMBINED AT	C613R	2493.	5.90	1072.	275.	199.	19.81
+	HYDROGRAPH AT	S619	455.	4.73	94.	24.	17.	0.83
+	ROUTED TO	612613	441.	5.00	94.	24.	17.	0.83
+	HYDROGRAPH AT	S620	190.	4.73	50.	13.	9.	0.44
+	2 COMBINED AT	C613L	555.	4.97	136.	35.	25.	1.27

+	2 COMBINED AT C613	2665.	5.83	1161.	300.	216.	21.08
+	ROUTED TO 613614	2646.	5.97	1149.	295.	213.	21.08
+	HYDROGRAPH AT S621	312.	4.70	51.	13.	9.	0.92
+	2 COMBINED AT C614	2646.	5.97	1159.	298.	215.	22.00
+	ROUTED TO 614615	2620.	6.10	1146.	294.	212.	22.00
+	HYDROGRAPH AT S622	171.	5.13	49.	12.	9.	0.90
+	2 COMBINED AT C615	2623.	6.10	1152.	295.	213.	22.90
+	2 COMBINED AT WEST-4	4543.	5.90	2292.	610.	440.	51.12
+	HYDROGRAPH AT S700	317.	4.23	45.	11.	8.	0.61
+	HYDROGRAPH AT S701	175.	4.63	59.	15.	11.	0.72
+	HYDROGRAPH AT S702	178.	4.17	25.	6.	5.	0.26
+	HYDROGRAPH AT S703	105.	4.50	16.	4.	3.	0.26
+	HYDROGRAPH AT S704	275.	4.20	33.	8.	6.	0.41
+	ROUTED TO 704705	248.	4.50	33.	8.	6.	0.41
+	HYDROGRAPH AT S705	617.	4.17	87.	22.	16.	0.75
+	2 COMBINED AT C705	595.	4.37	111.	28.	20.	1.16
+	ROUTED TO C705O	437.	4.63	111.	28.	20.	1.16
+	ROUTED TO 705OAF	432.	4.83	111.	28.	20.	1.16
+	HYDROGRAPH AT S705AF	123.	4.47	20.	5.	4.	0.18
+	2 COMBINED AT C705AF	503.	4.77	128.	32.	23.	1.34
+	5 COMBINED AT WEST-5	791.	4.60	217.	56.	40.	3.19
+	HYDROGRAPH AT S706	613.	4.17	81.	20.	15.	0.71
+	HYDROGRAPH AT S707	617.	4.13	87.	22.	16.	0.64
+	HYDROGRAPH AT S728	172.	4.27	35.	9.	6.	0.28
+	5 COMBINED AT WEST	4647.	5.90	2481.	666.	480.	55.94
+	HYDROGRAPH AT S708	758.	4.13	78.	20.	14.	0.71
+	HYDROGRAPH AT S709	482.	4.17	57.	14.	10.	0.44

+	ROUTED TO	C709O	292.	4.47	57.	14.	10.	0.44
+	ROUTED TO	709710	290.	4.53	57.	14.	10.	0.44
+	HYDROGRAPH AT	S710	186.	4.03	14.	4.	3.	0.11
+	2 COMBINED AT	C710I	314.	4.30	71.	18.	13.	0.55
+	ROUTED TO	C710O	282.	4.70	71.	18.	13.	0.55
+	HYDROGRAPH AT	S711	297.	4.03	22.	6.	4.	0.16
+	ROUTED TO	C711O	143.	4.17	22.	6.	4.	0.16
+	ROUTED TO	711712	143.	4.27	22.	6.	4.	0.16
+	HYDROGRAPH AT	S712	135.	4.00	9.	2.	2.	0.07
+	2 COMBINED AT	C712I	255.	4.00	31.	8.	6.	0.23
+	ROUTED TO	C712O	188.	4.13	31.	8.	6.	0.23
+	ROUTED TO	712714	187.	4.23	31.	8.	6.	0.23
+	HYDROGRAPH AT	S713	193.	4.03	14.	3.	3.	0.11
+	ROUTED TO	C713O	107.	4.17	14.	3.	3.	0.11
+	ROUTED TO	713714	107.	4.20	14.	3.	3.	0.11
+	HYDROGRAPH AT	S714	81.	4.07	5.	1.	1.	0.06
+	3 COMBINED AT	C714	349.	4.13	50.	13.	9.	0.39
+	HYDROGRAPH AT	S715	201.	4.20	27.	7.	5.	0.22
+	HYDROGRAPH AT	S716	876.	4.23	146.	37.	26.	1.13
+	ROUTED TO	C716O	478.	4.73	146.	37.	26.	1.13
+	ROUTED TO	716717	477.	4.87	146.	37.	26.	1.13
+	HYDROGRAPH AT	S717	445.	4.17	38.	9.	7.	0.29
+	2 COMBINED AT	C717	587.	4.20	181.	45.	33.	1.41
+	ROUTED TO	717718	567.	4.83	181.	45.	33.	1.41
+	HYDROGRAPH AT	S718	205.	4.77	56.	14.	10.	0.44
+	2 COMBINED AT	C718	733.	4.87	231.	58.	42.	1.86
+	HYDROGRAPH AT	S719	137.	4.20	22.	6.	4.	0.15

	6 COMBINED AT						
+	EAST-1	1477.	4.43	449.	114.	82.	3.88
	HYDROGRAPH AT						
+	S720	391.	4.17	50.	12.	9.	0.37
	HYDROGRAPH AT						
+	S721	553.	4.07	50.	12.	9.	0.34
	ROUTED TO						
+	C721O	191.	4.30	49.	12.	9.	0.34
	ROUTED TO						
+	721722	186.	4.63	49.	12.	9.	0.34
	HYDROGRAPH AT						
+	S722	692.	4.27	119.	30.	22.	0.95
	2 COMBINED AT						
+	C722	729.	4.33	165.	42.	30.	1.29
	HYDROGRAPH AT						
+	S723	134.	4.07	12.	3.	2.	0.09
	HYDROGRAPH AT						
+	S724	1071.	4.20	185.	46.	33.	1.16
	HYDROGRAPH AT						
+	S725	732.	4.37	172.	44.	31.	1.16
	5 COMBINED AT						
+	EAST-2	2349.	4.33	555.	140.	101.	4.06
	HYDROGRAPH AT						
+	S726	436.	4.07	35.	9.	6.	0.33
	ROUTED TO						
+	726727	360.	4.27	35.	9.	6.	0.33
	HYDROGRAPH AT						
+	S727	302.	4.23	59.	15.	11.	0.38
	2 COMBINED AT						
+	C727	608.	4.30	92.	23.	17.	0.71
	4 COMBINED AT						
+	TOTAL	5499.	4.73	3182.	857.	618.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 5-Year, 24-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  11:19:09  *
*                                      *
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*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU5-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 5-year, 24-hour storm event. A companion model is also created for the existing condition 5-year, 6-hour storm event. Both models (5-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 5-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME        0918  ENDING TIME
                     ICENT          19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM        2.32  PRECIPITATION DEPTH
                      TRDA        0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 2.31 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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35 JD          INDEX STORM NO. 3
                  STRM        2.25  PRECIPITATION DEPTH
                  TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 2.18 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 2.10 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 1.99 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	140.	12.73	42.	13.	10.	0.57		
+	ROUTED TO	100102	136.	13.03	42.	13.	10.	0.57		
+	HYDROGRAPH AT	S101	178.	12.60	38.	11.	8.	0.63		
+	2 COMBINED AT	C102R	257.	12.87	78.	24.	17.	1.20		
+	HYDROGRAPH AT	S102	130.	12.37	36.	12.	8.	0.45		
+	ROUTED TO	101102	126.	12.70	36.	11.	8.	0.45		
+	HYDROGRAPH AT	S103	70.	13.10	25.	8.	6.	0.40		
+	2 COMBINED AT	C102L	179.	12.90	61.	19.	14.	0.84		
+	2 COMBINED AT	C102	427.	12.90	136.	42.	31.	2.05		

	ROUTED TO							
+		102103	420.	13.13	136.	42.	31.	2.05
	HYDROGRAPH AT							
+		S104	309.	12.67	69.	21.	15.	0.90
	2 COMBINED AT							
+		C103R	615.	12.97	200.	62.	45.	2.95
	HYDROGRAPH AT							
+		S105	139.	12.50	45.	14.	10.	0.59
	2 COMBINED AT							
+		C103	724.	12.93	243.	75.	55.	3.54
	ROUTED TO							
+		103104	714.	13.20	242.	75.	55.	3.54
	HYDROGRAPH AT							
+		S106	150.	12.33	34.	10.	7.	0.57
	2 COMBINED AT							
+		C104	772.	13.17	273.	84.	61.	4.11
	ROUTED TO							
+		104105	758.	13.50	273.	84.	61.	4.11
	HYDROGRAPH AT							
+		S107	132.	13.10	44.	12.	9.	0.94
	2 COMBINED AT							
+		C105L	857.	13.47	312.	94.	68.	5.05
	HYDROGRAPH AT							
+		S200	286.	12.67	72.	24.	17.	0.96
	ROUTED TO							
+		200201	281.	12.73	72.	24.	17.	0.96
	HYDROGRAPH AT							
+		S201	103.	12.57	26.	9.	6.	0.35
	2 COMBINED AT							
+		C201	369.	12.70	98.	33.	24.	1.31
	ROUTED TO							
+		201203	362.	12.87	98.	33.	24.	1.31
	HYDROGRAPH AT							
+		S202	49.	12.30	10.	3.	2.	0.13
	ROUTED TO							
+		202203	47.	12.43	10.	3.	2.	0.13
	HYDROGRAPH AT							
+		S203	86.	12.47	30.	10.	7.	0.37
	3 COMBINED AT							
+		C203R	459.	12.87	136.	46.	33.	1.81
	HYDROGRAPH AT							
+		S204	217.	12.83	67.	22.	16.	0.95
	2 COMBINED AT							
+		C203	661.	12.83	200.	67.	48.	2.76
	ROUTED TO							
+		203204	659.	12.90	200.	67.	48.	2.76
	HYDROGRAPH AT							
+		S205	159.	12.43	35.	11.	8.	0.41
	2 COMBINED AT							
+		C204	748.	12.87	233.	77.	56.	3.17
	ROUTED TO							
+		204205	739.	13.03	233.	77.	56.	3.17
	HYDROGRAPH AT							
+		S206	182.	12.57	67.	21.	16.	0.85

+	2 COMBINED AT	C205L	887.	13.00	295.	97.	71.	4.03
+	HYDROGRAPH AT	S207	209.	12.93	74.	25.	18.	0.96
+	2 COMBINED AT	C205	1078.	13.00	364.	121.	88.	4.98
+	ROUTED TO	205206	1049.	13.43	364.	121.	88.	4.98
+	HYDROGRAPH AT	S208	260.	13.07	89.	28.	20.	1.10
+	2 COMBINED AT	C206	1241.	13.40	442.	145.	106.	6.09
+	ROUTED TO	206207	1236.	13.47	442.	145.	106.	6.09
+	HYDROGRAPH AT	S209	180.	12.70	40.	12.	9.	0.65
+	2 COMBINED AT	C207R	1294.	13.43	474.	155.	113.	6.74
+	HYDROGRAPH AT	S210	130.	12.30	24.	6.	5.	0.48
+	2 COMBINED AT	C207	1309.	13.43	492.	160.	116.	7.22
+	ROUTED TO	207105	1303.	13.53	492.	160.	116.	7.22
+	HYDROGRAPH AT	S211	128.	12.33	27.	7.	5.	0.49
+	2 COMBINED AT	C105R	1322.	13.53	512.	165.	120.	7.70
+	2 COMBINED AT	C105	2031.	13.53	776.	246.	179.	12.75
+	HYDROGRAPH AT	S300	246.	12.20	49.	16.	11.	0.62
+	HYDROGRAPH AT	S301	492.	12.17	90.	30.	22.	0.99
+	2 COMBINED AT	C300	723.	12.17	137.	45.	33.	1.61
+	ROUTED TO	300301	701.	12.33	136.	45.	33.	1.61
+	HYDROGRAPH AT	S302	170.	12.50	35.	11.	8.	0.47
+	2 COMBINED AT	C301	837.	12.33	169.	56.	40.	2.07
+	ROUTED TO	301302	803.	12.60	169.	56.	40.	2.07
+	HYDROGRAPH AT	S303	159.	12.70	35.	10.	7.	0.71
+	2 COMBINED AT	C302	940.	12.63	202.	65.	47.	2.78
+	ROUTED TO	302303	916.	12.80	202.	65.	47.	2.78
+	HYDROGRAPH AT	S304	197.	12.37	45.	12.	9.	0.82
+	2 COMBINED AT	C303	1044.	12.80	242.	76.	55.	3.60

+	2 COMBINED AT WEST-1	2446.	13.43	974.	310.	226.	16.36
+	HYDROGRAPH AT S400	582.	12.33	100.	32.	23.	1.05
+	ROUTED TO C400O	344.	12.67	100.	32.	23.	1.05
+	ROUTED TO 400401	341.	12.97	100.	32.	23.	1.05
+	HYDROGRAPH AT S401	267.	12.20	41.	12.	8.	0.65
+	2 COMBINED AT C401	433.	12.57	139.	43.	31.	1.69
+	ROUTED TO 401402	425.	12.93	139.	43.	31.	1.69
+	HYDROGRAPH AT S402	447.	12.13	68.	21.	15.	0.74
+	2 COMBINED AT C402	502.	12.17	203.	63.	46.	2.43
+	ROUTED TO 402403	475.	13.30	203.	63.	46.	2.43
+	HYDROGRAPH AT S403	413.	12.13	64.	20.	14.	0.56
+	2 COMBINED AT C403	680.	12.40	264.	82.	60.	2.99
+	ROUTED TO 403404	670.	12.53	264.	82.	60.	2.99
+	HYDROGRAPH AT S404	143.	12.27	18.	5.	3.	0.26
+	2 COMBINED AT C404	748.	12.50	280.	87.	63.	3.26
+	2 COMBINED AT WEST-2	2845.	13.43	1209.	383.	279.	19.61
+	HYDROGRAPH AT S500	281.	12.43	89.	30.	22.	1.05
+	ROUTED TO 500501	278.	12.67	89.	30.	22.	1.05
+	HYDROGRAPH AT S501	211.	12.27	44.	14.	10.	0.61
+	2 COMBINED AT C501	425.	12.53	131.	43.	31.	1.67
+	ROUTED TO 501502	418.	12.67	128.	40.	29.	1.67
+	HYDROGRAPH AT S502	137.	12.47	26.	8.	6.	0.40
+	2 COMBINED AT C502L	531.	12.60	153.	48.	34.	2.07
+	HYDROGRAPH AT S503	344.	12.33	81.	26.	19.	0.99
+	2 COMBINED AT C502I	817.	12.50	229.	72.	52.	3.07
+	ROUTED TO C502O	816.	12.53	229.	72.	52.	3.07
+	ROUTED TO 502505	781.	12.90	218.	63.	45.	3.07

+	HYDROGRAPH AT S504	101.	12.30	27.	9.	6.	0.33
+	2 COMBINED AT C505L	839.	12.90	243.	71.	51.	3.39
+	HYDROGRAPH AT S505	67.	12.23	9.	3.	2.	0.14
+	ROUTED TO C503O	61.	12.30	9.	3.	2.	0.14
+	ROUTED TO 503505	52.	12.80	8.	2.	1.	0.14
+	HYDROGRAPH AT S506	87.	12.23	13.	4.	3.	0.15
+	ROUTED TO C504O	60.	12.43	13.	4.	3.	0.15
+	ROUTED TO 504505	58.	13.07	13.	4.	3.	0.15
+	HYDROGRAPH AT S507	334.	12.17	46.	13.	9.	0.67
+	3 COMBINED AT C505R	342.	12.17	66.	19.	14.	0.96
+	2 COMBINED AT C505	995.	12.83	304.	88.	64.	4.35
+	ROUTED TO 505509	950.	13.17	284.	73.	53.	4.35
+	HYDROGRAPH AT S508	161.	12.10	23.	7.	5.	0.29
+	2 COMBINED AT C509L	960.	13.17	304.	79.	57.	4.65
+	HYDROGRAPH AT S509	109.	12.07	15.	5.	3.	0.17
+	ROUTED TO C506O	70.	12.23	15.	5.	3.	0.17
+	ROUTED TO 506508	69.	12.47	15.	5.	3.	0.17
+	HYDROGRAPH AT S510	90.	12.13	15.	5.	3.	0.13
+	2 COMBINED AT C508R	147.	12.17	30.	9.	7.	0.30
+	HYDROGRAPH AT S511	221.	12.13	33.	10.	7.	0.38
+	ROUTED TO C507O	81.	12.57	33.	10.	7.	0.38
+	ROUTED TO 507508	81.	12.97	32.	11.	8.	0.38
+	HYDROGRAPH AT S512	154.	12.13	27.	9.	6.	0.21
+	2 COMBINED AT C508L	202.	12.17	60.	19.	14.	0.60
+	2 COMBINED AT C508	349.	12.17	89.	29.	21.	0.90
+	ROUTED TO 508509	319.	12.70	86.	28.	20.	0.90
+	HYDROGRAPH AT S513	303.	12.23	57.	17.	12.	0.78

+	2 COMBINED AT C509R	492.	12.63	141.	44.	32.	1.67
+	2 COMBINED AT C509	1227.	13.17	431.	120.	87.	6.32
+	ROUTED TO 509510	1206.	13.23	430.	119.	86.	6.32
+	HYDROGRAPH AT S514	423.	12.13	70.	21.	15.	0.65
+	2 COMBINED AT C510	1244.	13.23	491.	138.	100.	6.97
+	ROUTED TO 510511	1204.	13.50	488.	138.	100.	6.97
+	HYDROGRAPH AT S515	869.	12.13	124.	37.	27.	1.10
+	2 COMBINED AT C511	1220.	12.37	595.	171.	123.	8.07
+	ROUTED TO 511512	1182.	12.83	590.	169.	122.	8.07
+	HYDROGRAPH AT S516	277.	12.20	58.	19.	14.	0.54
+	2 COMBINED AT C512	1288.	12.80	635.	186.	134.	8.61
+	2 COMBINED AT WEST-3	3725.	13.40	1750.	538.	395.	28.22
+	HYDROGRAPH AT S600	349.	12.90	104.	34.	25.	2.02
+	ROUTED TO 600601	347.	13.00	104.	34.	25.	2.02
+	HYDROGRAPH AT S601	383.	12.57	91.	30.	22.	0.90
+	2 COMBINED AT C601	588.	12.90	191.	63.	45.	2.92
+	ROUTED TO 601602	580.	13.07	191.	63.	45.	2.92
+	HYDROGRAPH AT S603	364.	12.33	65.	21.	15.	0.67
+	2 COMBINED AT C602L	686.	12.83	252.	83.	60.	3.58
+	HYDROGRAPH AT S602	457.	12.87	142.	47.	34.	1.88
+	2 COMBINED AT C602	1111.	12.83	385.	127.	92.	5.47
+	ROUTED TO 602603	1056.	13.07	341.	89.	64.	5.47
+	HYDROGRAPH AT S606	178.	12.63	52.	17.	13.	0.66
+	2 COMBINED AT C603L	1172.	13.03	386.	104.	75.	6.13
+	HYDROGRAPH AT S605	267.	12.80	83.	28.	20.	1.09
+	HYDROGRAPH AT S604	535.	13.07	197.	66.	48.	2.66
+	3 COMBINED AT C603	1827.	13.03	627.	187.	135.	9.87

+	ROUTED TO 603604	1750.	13.37	579.	150.	108.	9.87
+	HYDROGRAPH AT S609	96.	12.83	35.	12.	9.	0.56
+	2 COMBINED AT C604R	1809.	13.33	607.	160.	115.	10.43
+	HYDROGRAPH AT S607	212.	12.80	70.	23.	17.	0.82
+	2 COMBINED AT C604	1937.	13.33	667.	179.	129.	11.25
+	ROUTED TO 604605	1932.	13.37	667.	179.	129.	11.25
+	HYDROGRAPH AT S608	238.	12.40	48.	15.	11.	0.51
+	2 COMBINED AT C605	1976.	13.37	706.	192.	139.	11.76
+	ROUTED TO 605606	1955.	13.47	699.	187.	135.	11.76
+	HYDROGRAPH AT S610	215.	12.33	57.	19.	14.	0.60
+	2 COMBINED AT C606L	2013.	13.47	747.	203.	146.	12.36
+	HYDROGRAPH AT S612	276.	12.37	79.	25.	18.	0.81
+	2 COMBINED AT C606	2107.	13.43	813.	224.	162.	13.17
+	ROUTED TO 606608	2101.	13.47	810.	221.	160.	13.17
+	HYDROGRAPH AT S611	197.	12.50	44.	15.	11.	0.57
+	ROUTED TO 607608	185.	12.87	44.	15.	11.	0.57
+	HYDROGRAPH AT S613	482.	12.97	151.	49.	36.	1.80
+	3 COMBINED AT C608	2512.	13.40	972.	276.	199.	15.53
+	ROUTED TO 608609	2486.	13.57	962.	268.	193.	15.53
+	HYDROGRAPH AT S614	228.	13.07	85.	28.	21.	1.08
+	2 COMBINED AT C609	2633.	13.53	1030.	291.	210.	16.61
+	ROUTED TO 609611	2585.	13.83	1003.	266.	192.	16.61
+	HYDROGRAPH AT S617	133.	12.63	48.	15.	11.	0.68
+	2 COMBINED AT C611R	2637.	13.80	1038.	278.	201.	17.29
+	HYDROGRAPH AT S615	372.	12.90	123.	41.	30.	1.05
+	ROUTED TO 610611	366.	13.10	123.	41.	30.	1.05
+	HYDROGRAPH AT S616	145.	12.60	36.	11.	8.	0.50

+	2 COMBINED AT	C611L	454.	13.07	157.	52.	38.	1.56
+	2 COMBINED AT	C611	2890.	13.77	1169.	323.	233.	18.85
+	ROUTED TO	611613	2873.	13.83	1159.	313.	226.	18.85
+	HYDROGRAPH AT	S618	217.	12.87	67.	21.	15.	0.96
+	2 COMBINED AT	C613R	2954.	13.83	1210.	329.	238.	19.81
+	HYDROGRAPH AT	S619	364.	12.67	83.	27.	19.	0.83
+	ROUTED TO	612613	352.	12.90	83.	27.	19.	0.83
+	HYDROGRAPH AT	S620	135.	12.70	43.	14.	10.	0.44
+	2 COMBINED AT	C613L	475.	12.90	125.	40.	29.	1.27
+	2 COMBINED AT	C613	3141.	13.77	1312.	363.	262.	21.08
+	ROUTED TO	613614	3121.	13.93	1301.	353.	254.	21.08
+	HYDROGRAPH AT	S621	267.	12.57	43.	11.	8.	0.92
+	2 COMBINED AT	C614	3127.	13.90	1328.	360.	259.	22.00
+	ROUTED TO	614615	3105.	14.03	1317.	352.	253.	22.00
+	HYDROGRAPH AT	S622	134.	13.07	40.	11.	8.	0.90
+	2 COMBINED AT	C615	3144.	14.03	1342.	358.	258.	22.90
+	2 COMBINED AT	WEST-4	6007.	13.77	2875.	838.	610.	51.12
+	HYDROGRAPH AT	S700	232.	12.20	36.	10.	7.	0.61
+	HYDROGRAPH AT	S701	145.	12.53	51.	15.	11.	0.72
+	HYDROGRAPH AT	S702	117.	12.17	20.	6.	4.	0.26
+	HYDROGRAPH AT	S703	65.	12.47	11.	3.	2.	0.26
+	HYDROGRAPH AT	S704	170.	12.17	25.	7.	5.	0.41
+	ROUTED TO	704705	156.	12.47	25.	7.	5.	0.41
+	HYDROGRAPH AT	S705	478.	12.13	76.	23.	17.	0.75
+	2 COMBINED AT	C705	490.	12.17	100.	31.	22.	1.16
+	ROUTED TO	C705O	390.	12.50	100.	31.	22.	1.16
+	ROUTED TO	705OAF	385.	12.73	100.	31.	22.	1.16

+	HYDROGRAPH AT	S705AF	93.	12.43	17.	4.	3.	0.18
+	2 COMBINED AT	C705AF	455.	12.67	117.	35.	25.	1.34
+	5 COMBINED AT	WEST-5	847.	12.43	227.	67.	48.	3.19
+	HYDROGRAPH AT	S706	445.	12.13	71.	22.	16.	0.71
+	HYDROGRAPH AT	S707	433.	12.13	76.	25.	18.	0.64
+	HYDROGRAPH AT	S728	122.	12.23	30.	10.	7.	0.28
+	5 COMBINED AT	WEST	6212.	13.70	3159.	931.	678.	55.94
+	HYDROGRAPH AT	S708	557.	12.10	67.	18.	13.	0.71
+	HYDROGRAPH AT	S709	338.	12.13	53.	14.	10.	0.44
+	ROUTED TO	C709O	244.	12.37	53.	14.	10.	0.44
+	ROUTED TO	709710	243.	12.47	53.	14.	10.	0.44
+	HYDROGRAPH AT	S710	107.	12.03	12.	3.	2.	0.11
+	2 COMBINED AT	C710I	274.	12.33	65.	17.	13.	0.55
+	ROUTED TO	C710O	254.	12.60	65.	17.	13.	0.55
+	HYDROGRAPH AT	S711	167.	12.00	20.	6.	4.	0.16
+	ROUTED TO	C711O	125.	12.13	20.	6.	4.	0.16
+	ROUTED TO	711712	125.	12.20	20.	6.	4.	0.16
+	HYDROGRAPH AT	S712	71.	12.00	8.	2.	2.	0.07
+	2 COMBINED AT	C712I	190.	12.00	27.	8.	6.	0.23
+	ROUTED TO	C712O	162.	12.10	27.	8.	6.	0.23
+	ROUTED TO	712714	162.	12.20	27.	8.	6.	0.23
+	HYDROGRAPH AT	S713	108.	12.00	12.	3.	2.	0.11
+	ROUTED TO	C713O	76.	12.13	12.	3.	2.	0.11
+	ROUTED TO	713714	74.	12.17	12.	3.	2.	0.11
+	HYDROGRAPH AT	S714	46.	12.03	4.	1.	1.	0.06
+	3 COMBINED AT	C714	271.	12.13	44.	12.	9.	0.39
+	HYDROGRAPH AT	S715	150.	12.17	24.	6.	5.	0.22

+	HYDROGRAPH AT S716	775.	12.20	129.	37.	27.	1.13
+	ROUTED TO C7160	451.	12.57	129.	37.	27.	1.13
+	ROUTED TO 716717	450.	12.73	129.	37.	27.	1.13
+	HYDROGRAPH AT S717	270.	12.13	34.	9.	7.	0.29
+	2 COMBINED AT C717	563.	12.23	163.	46.	33.	1.41
+	ROUTED TO 717718	537.	12.80	162.	45.	33.	1.41
+	HYDROGRAPH AT S718	159.	12.73	51.	13.	10.	0.44
+	2 COMBINED AT C718	691.	12.80	211.	58.	42.	1.86
+	HYDROGRAPH AT S719	99.	12.17	23.	6.	5.	0.15
+	6 COMBINED AT EAST-1	1345.	12.17	422.	115.	83.	3.88
+	HYDROGRAPH AT S720	272.	12.13	45.	12.	9.	0.37
+	HYDROGRAPH AT S721	317.	12.03	42.	14.	10.	0.34
+	ROUTED TO C7210	156.	12.27	42.	14.	10.	0.34
+	ROUTED TO 721722	150.	12.83	42.	13.	10.	0.34
+	HYDROGRAPH AT S722	594.	12.20	104.	30.	22.	0.95
+	2 COMBINED AT C722	639.	12.23	146.	43.	31.	1.29
+	HYDROGRAPH AT S723	80.	12.03	11.	3.	2.	0.09
+	HYDROGRAPH AT S724	913.	12.17	170.	52.	38.	1.16
+	HYDROGRAPH AT S725	610.	12.30	152.	48.	35.	1.16
+	5 COMBINED AT EAST-2	2379.	12.20	509.	155.	112.	4.06
+	HYDROGRAPH AT S726	231.	12.07	29.	9.	7.	0.33
+	ROUTED TO 726727	206.	12.27	29.	9.	7.	0.33
+	HYDROGRAPH AT S727	216.	12.20	51.	16.	12.	0.38
+	2 COMBINED AT C727	419.	12.27	80.	25.	18.	0.71
+	4 COMBINED AT TOTAL	6979.	13.60	3945.	1167.	849.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 2-Year, 6-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  10:14:30  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU2-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 2-year, 6-hour storm event. A companion model is also created for the existing condition 2-year, 24-hour storm event. Both models (2-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 2-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.03 HOURS
                      TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       1.36  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

27 JD        INDEX STORM NO. 2
                STRM        1.35  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 3
                STRM        1.33  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

29 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

32 JD        INDEX STORM NO. 4
                STRM        1.25  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

33 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

36 JD        INDEX STORM NO. 5
                STRM        1.10  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

37 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	93.	5.10	31.	8.	6.	0.57		
+	ROUTED TO	100102	91.	5.43	31.	8.	6.	0.57		
+	HYDROGRAPH AT	S101	97.	4.97	26.	7.	5.	0.63		
+	2 COMBINED AT	C102R	132.	5.27	47.	12.	9.	1.20		
+	HYDROGRAPH AT	S102	97.	4.53	28.	7.	5.	0.45		
+	ROUTED TO	101102	95.	4.87	28.	7.	5.	0.45		
+	HYDROGRAPH AT	S103	58.	5.13	19.	5.	4.	0.40		
+	2 COMBINED AT	C102L	127.	5.03	42.	11.	8.	0.84		
+	2 COMBINED AT	C102	193.	5.23	72.	19.	14.	2.05		
+	ROUTED TO	102103	189.	5.60	72.	19.	14.	2.05		
+	HYDROGRAPH AT	S104	160.	5.07	45.	12.	8.	0.90		
+	2 COMBINED AT	C103R	241.	5.50	96.	26.	18.	2.95		
+	HYDROGRAPH AT	S105	83.	4.77	32.	8.	6.	0.59		
+	2 COMBINED AT	C103	275.	5.47	114.	31.	22.	3.54		
+	ROUTED TO	103104	272.	5.80	114.	31.	22.	3.54		
+	HYDROGRAPH AT	S106	78.	4.60	24.	6.	4.	0.57		
+	2 COMBINED AT	C104	283.	5.77	123.	33.	24.	4.11		
+	ROUTED TO	104105	280.	6.13	122.	33.	24.	4.11		

+	HYDROGRAPH AT	S107	73.	5.17	23.	6.	4.	0.94
+	2 COMBINED AT	C105L	283.	6.10	126.	34.	25.	5.05
+	HYDROGRAPH AT	S200	184.	5.00	53.	14.	10.	0.96
+	ROUTED TO	200201	182.	5.10	53.	14.	10.	0.96
+	HYDROGRAPH AT	S201	83.	4.77	21.	5.	4.	0.35
+	2 COMBINED AT	C201	225.	5.03	70.	18.	13.	1.31
+	ROUTED TO	201203	223.	5.20	70.	18.	13.	1.31
+	HYDROGRAPH AT	S202	41.	4.47	8.	2.	1.	0.13
+	ROUTED TO	202203	39.	4.60	8.	2.	1.	0.13
+	HYDROGRAPH AT	S203	65.	4.67	24.	6.	5.	0.37
+	3 COMBINED AT	C203R	267.	5.17	93.	24.	17.	1.81
+	HYDROGRAPH AT	S204	146.	5.13	49.	13.	9.	0.95
+	2 COMBINED AT	C203	348.	5.17	128.	34.	24.	2.76
+	ROUTED TO	203204	348.	5.23	128.	34.	24.	2.76
+	HYDROGRAPH AT	S205	124.	4.60	27.	7.	5.	0.41
+	2 COMBINED AT	C204	390.	5.17	147.	39.	28.	3.17
+	ROUTED TO	204205	388.	5.33	147.	39.	28.	3.17
+	HYDROGRAPH AT	S206	120.	4.80	46.	12.	9.	0.85
+	2 COMBINED AT	C205L	452.	5.30	179.	48.	34.	4.03
+	HYDROGRAPH AT	S207	150.	5.17	53.	14.	10.	0.96
+	2 COMBINED AT	C205	549.	5.30	221.	59.	42.	4.98
+	ROUTED TO	205206	541.	5.77	221.	59.	42.	4.98
+	HYDROGRAPH AT	S208	179.	5.13	58.	15.	11.	1.10
+	2 COMBINED AT	C206	623.	5.70	261.	70.	50.	6.09
+	ROUTED TO	206207	620.	5.80	261.	70.	50.	6.09
+	HYDROGRAPH AT	S209	99.	5.10	28.	7.	5.	0.65
+	2 COMBINED AT	C207R	642.	5.80	273.	73.	53.	6.74

+	HYDROGRAPH AT S210	69.	4.53	17.	4.	3.	0.48
+	2 COMBINED AT C207	642.	5.80	275.	74.	53.	7.22
+	ROUTED TO 207105	640.	5.97	274.	74.	53.	7.22
+	HYDROGRAPH AT S211	69.	4.60	19.	5.	3.	0.49
+	2 COMBINED AT C105R	642.	5.97	278.	75.	54.	7.70
+	2 COMBINED AT C105	837.	6.03	380.	104.	75.	12.75
+	HYDROGRAPH AT S300	170.	4.33	37.	9.	7.	0.62
+	HYDROGRAPH AT S301	317.	4.30	67.	17.	12.	0.99
+	2 COMBINED AT C300	395.	4.33	94.	24.	17.	1.61
+	ROUTED TO 300301	387.	4.53	94.	24.	17.	1.61
+	HYDROGRAPH AT S302	130.	4.70	27.	7.	5.	0.47
+	2 COMBINED AT C301	425.	4.60	111.	28.	20.	2.07
+	ROUTED TO 301302	415.	4.90	110.	28.	20.	2.07
+	HYDROGRAPH AT S303	82.	5.13	24.	6.	4.	0.71
+	2 COMBINED AT C302	414.	4.93	118.	30.	22.	2.78
+	ROUTED TO 302303	396.	5.20	116.	30.	22.	2.78
+	HYDROGRAPH AT S304	74.	4.73	26.	7.	5.	0.82
+	2 COMBINED AT C303	409.	5.20	125.	32.	23.	3.60
+	2 COMBINED AT WEST-1	1031.	5.97	482.	131.	95.	16.36
+	HYDROGRAPH AT S400	348.	4.60	70.	18.	13.	1.05
+	ROUTED TO C400O	263.	4.83	69.	18.	13.	1.05
+	ROUTED TO 400401	260.	5.17	69.	18.	13.	1.05
+	HYDROGRAPH AT S401	142.	4.40	28.	7.	5.	0.65
+	2 COMBINED AT C401	286.	5.03	83.	21.	15.	1.69
+	ROUTED TO 401402	279.	5.53	83.	21.	15.	1.69
+	HYDROGRAPH AT S402	299.	4.27	50.	13.	9.	0.74
+	2 COMBINED AT C402	283.	5.50	115.	30.	21.	2.43

	ROUTED TO							
+		402403	277.	5.87	115.	30.	21.	2.43
	HYDROGRAPH AT							
+		S403	338.	4.20	50.	12.	9.	0.56
	2 COMBINED AT							
+		C403	328.	4.70	153.	40.	29.	2.99
	ROUTED TO							
+		403404	320.	4.87	152.	40.	29.	2.99
	HYDROGRAPH AT							
+		S404	96.	4.47	13.	3.	2.	0.26
	2 COMBINED AT							
+		C404	341.	4.87	157.	41.	30.	3.26
	2 COMBINED AT							
+		WEST-2	1200.	6.03	598.	163.	118.	19.61
	HYDROGRAPH AT							
+		S500	174.	4.73	63.	17.	12.	1.05
	ROUTED TO							
+		500501	172.	4.97	63.	17.	12.	1.05
	HYDROGRAPH AT							
+		S501	140.	4.43	33.	8.	6.	0.61
	2 COMBINED AT							
+		C501	234.	4.83	85.	23.	16.	1.67
	ROUTED TO							
+		501502	228.	4.97	82.	21.	15.	1.67
	HYDROGRAPH AT							
+		S502	98.	4.70	20.	5.	4.	0.40
	2 COMBINED AT							
+		C502L	261.	4.93	92.	24.	17.	2.07
	HYDROGRAPH AT							
+		S503	189.	4.57	55.	14.	10.	0.99
	2 COMBINED AT							
+		C502I	354.	4.90	129.	34.	24.	3.07
	ROUTED TO							
+		C502O	354.	4.90	129.	34.	24.	3.07
	ROUTED TO							
+		502505	339.	5.27	119.	30.	22.	3.07
	HYDROGRAPH AT							
+		S504	75.	4.47	21.	5.	4.	0.33
	2 COMBINED AT							
+		C505L	365.	5.27	133.	34.	24.	3.39
	HYDROGRAPH AT							
+		S505	58.	4.33	7.	2.	1.	0.14
	ROUTED TO							
+		C503O	51.	4.43	7.	2.	1.	0.14
	ROUTED TO							
+		503505	40.	5.00	6.	2.	1.	0.14
	HYDROGRAPH AT							
+		S506	73.	4.33	10.	3.	2.	0.15
	ROUTED TO							
+		C504O	55.	4.53	10.	3.	2.	0.15
	ROUTED TO							
+		504505	53.	5.13	10.	3.	2.	0.15
	HYDROGRAPH AT							
+		S507	180.	4.33	31.	8.	6.	0.67

+	3 COMBINED AT C505R	164.	4.37	41.	10.	8.	0.96
+	2 COMBINED AT C505	420.	5.27	156.	40.	29.	4.35
+	ROUTED TO 505509	382.	5.87	136.	34.	25.	4.35
+	HYDROGRAPH AT S508	127.	4.20	17.	4.	3.	0.29
+	2 COMBINED AT C509L	382.	5.90	144.	36.	26.	4.65
+	HYDROGRAPH AT S509	111.	4.10	11.	3.	2.	0.17
+	ROUTED TO C506O	68.	4.30	11.	3.	2.	0.17
+	ROUTED TO 506508	68.	4.53	11.	3.	2.	0.17
+	HYDROGRAPH AT S510	80.	4.17	12.	3.	2.	0.13
+	2 COMBINED AT C508R	130.	4.30	23.	6.	4.	0.30
+	HYDROGRAPH AT S511	177.	4.20	25.	6.	5.	0.38
+	ROUTED TO C507O	77.	4.67	25.	6.	5.	0.38
+	ROUTED TO 507508	76.	5.03	25.	7.	5.	0.38
+	HYDROGRAPH AT S512	135.	4.20	22.	6.	4.	0.21
+	2 COMBINED AT C508L	165.	4.30	46.	12.	9.	0.60
+	2 COMBINED AT C508	274.	4.33	66.	17.	12.	0.90
+	ROUTED TO 508509	254.	4.87	63.	18.	13.	0.90
+	HYDROGRAPH AT S513	155.	4.43	38.	10.	7.	0.78
+	2 COMBINED AT C509R	323.	4.87	88.	25.	18.	1.67
+	2 COMBINED AT C509	486.	5.80	211.	56.	40.	6.32
+	ROUTED TO 509510	483.	5.90	210.	56.	40.	6.32
+	HYDROGRAPH AT S514	301.	4.23	53.	13.	10.	0.65
+	2 COMBINED AT C510	497.	5.90	248.	66.	48.	6.97
+	ROUTED TO 510511	489.	6.20	246.	67.	48.	6.97
+	HYDROGRAPH AT S515	574.	4.23	91.	23.	16.	1.10
+	2 COMBINED AT C511	571.	4.50	313.	85.	62.	8.07
+	ROUTED TO 511512	559.	5.03	310.	85.	61.	8.07

+	HYDROGRAPH AT	S516	217.	4.30	45.	12.	8.	0.54
+	2 COMBINED AT	C512	630.	4.97	336.	94.	67.	8.61
+	2 COMBINED AT	WEST-3	1571.	5.97	867.	241.	174.	28.22
+	HYDROGRAPH AT	S600	195.	5.13	65.	17.	12.	2.02
+	ROUTED TO	600601	194.	5.27	65.	17.	12.	2.02
+	HYDROGRAPH AT	S601	251.	4.80	66.	17.	12.	0.90
+	2 COMBINED AT	C601	330.	5.07	117.	30.	22.	2.92
+	ROUTED TO	601602	327.	5.27	117.	30.	22.	2.92
+	HYDROGRAPH AT	S603	268.	4.53	49.	12.	9.	0.67
+	2 COMBINED AT	C602L	404.	5.10	154.	40.	29.	3.58
+	HYDROGRAPH AT	S602	270.	5.17	95.	25.	18.	1.88
+	2 COMBINED AT	C602	610.	5.17	237.	62.	45.	5.47
+	ROUTED TO	602603	562.	5.37	193.	48.	35.	5.47
+	HYDROGRAPH AT	S606	124.	4.93	39.	10.	7.	0.66
+	2 COMBINED AT	C603L	624.	5.33	221.	56.	40.	6.13
+	HYDROGRAPH AT	S605	170.	5.13	59.	16.	11.	1.09
+	HYDROGRAPH AT	S604	338.	5.20	126.	33.	24.	2.66
+	3 COMBINED AT	C603	996.	5.30	382.	99.	71.	9.87
+	ROUTED TO	603604	939.	5.63	334.	84.	60.	9.87
+	HYDROGRAPH AT	S609	68.	5.17	27.	7.	5.	0.56
+	2 COMBINED AT	C604R	971.	5.63	352.	89.	64.	10.43
+	HYDROGRAPH AT	S607	129.	5.17	49.	13.	9.	0.82
+	2 COMBINED AT	C604	1036.	5.60	386.	98.	71.	11.25
+	ROUTED TO	604605	1034.	5.63	386.	98.	71.	11.25
+	HYDROGRAPH AT	S608	182.	4.60	37.	9.	7.	0.51
+	2 COMBINED AT	C605	1064.	5.63	408.	104.	75.	11.76
+	ROUTED TO	605606	1052.	5.77	402.	101.	73.	11.76

+	HYDROGRAPH AT	S610	152.	4.50	43.	11.	8.	0.60
+	2 COMBINED AT	C606L	1087.	5.77	430.	109.	79.	12.36
+	HYDROGRAPH AT	S612	163.	4.67	55.	14.	10.	0.81
+	2 COMBINED AT	C606	1139.	5.73	465.	119.	86.	13.17
+	ROUTED TO	606608	1135.	5.77	463.	118.	85.	13.17
+	HYDROGRAPH AT	S611	153.	4.70	35.	9.	6.	0.57
+	ROUTED TO	607608	140.	5.13	35.	9.	6.	0.57
+	HYDROGRAPH AT	S613	298.	5.13	97.	25.	18.	1.80
+	3 COMBINED AT	C608	1349.	5.70	563.	145.	104.	15.53
+	ROUTED TO	608609	1333.	5.87	554.	141.	102.	15.53
+	HYDROGRAPH AT	S614	174.	5.13	60.	16.	11.	1.08
+	2 COMBINED AT	C609	1412.	5.83	597.	153.	110.	16.61
+	ROUTED TO	609611	1374.	6.13	569.	144.	104.	16.61
+	HYDROGRAPH AT	S617	144.	4.47	35.	9.	6.	0.68
+	2 COMBINED AT	C611R	1383.	6.13	585.	149.	107.	17.29
+	HYDROGRAPH AT	S615	268.	5.13	89.	23.	17.	1.05
+	ROUTED TO	610611	261.	5.37	89.	23.	17.	1.05
+	HYDROGRAPH AT	S616	95.	4.87	27.	7.	5.	0.50
+	2 COMBINED AT	C611L	291.	5.37	106.	28.	20.	1.56
+	2 COMBINED AT	C611	1523.	6.10	663.	170.	123.	18.85
+	ROUTED TO	611613	1510.	6.17	653.	166.	120.	18.85
+	HYDROGRAPH AT	S618	127.	5.13	43.	11.	8.	0.96
+	2 COMBINED AT	C613R	1538.	6.17	675.	173.	124.	19.81
+	HYDROGRAPH AT	S619	231.	5.00	60.	15.	11.	0.83
+	ROUTED TO	612613	218.	5.27	60.	15.	11.	0.83
+	HYDROGRAPH AT	S620	97.	5.00	32.	8.	6.	0.44
+	2 COMBINED AT	C613L	264.	5.30	84.	22.	16.	1.27

+	2 COMBINED AT	C613	1636.	6.13	730.	188.	135.	21.08
+	ROUTED TO	613614	1620.	6.27	718.	184.	132.	21.08
+	HYDROGRAPH AT	S621	94.	5.10	23.	6.	4.	0.92
+	2 COMBINED AT	C614	1614.	6.30	719.	184.	133.	22.00
+	ROUTED TO	614615	1591.	6.43	709.	180.	130.	22.00
+	HYDROGRAPH AT	S622	77.	5.13	22.	6.	4.	0.90
+	2 COMBINED AT	C615	1585.	6.43	710.	181.	130.	22.90
+	2 COMBINED AT	WEST-4	2678.	6.33	1462.	394.	284.	51.12
+	HYDROGRAPH AT	S700	119.	4.37	24.	6.	4.	0.61
+	HYDROGRAPH AT	S701	78.	4.87	33.	9.	6.	0.72
+	HYDROGRAPH AT	S702	84.	4.27	16.	4.	3.	0.26
+	HYDROGRAPH AT	S703	35.	4.80	8.	2.	1.	0.26
+	HYDROGRAPH AT	S704	110.	4.30	19.	5.	3.	0.41
+	ROUTED TO	704705	102.	4.73	19.	5.	3.	0.41
+	HYDROGRAPH AT	S705	320.	4.23	56.	14.	10.	0.75
+	2 COMBINED AT	C705	290.	4.27	66.	17.	12.	1.16
+	ROUTED TO	C705O	241.	4.67	66.	17.	12.	1.16
+	ROUTED TO	705OAF	240.	4.93	66.	17.	12.	1.16
+	HYDROGRAPH AT	S705AF	57.	4.67	12.	3.	2.	0.18
+	2 COMBINED AT	C705AF	275.	4.87	75.	19.	14.	1.34
+	5 COMBINED AT	WEST-5	335.	4.80	106.	28.	20.	3.19
+	HYDROGRAPH AT	S706	323.	4.20	53.	13.	10.	0.71
+	HYDROGRAPH AT	S707	356.	4.20	59.	15.	11.	0.64
+	HYDROGRAPH AT	S728	94.	4.37	23.	6.	4.	0.28
+	5 COMBINED AT	WEST	2733.	6.30	1581.	432.	311.	55.94
+	HYDROGRAPH AT	S708	399.	4.20	47.	12.	8.	0.71
+	HYDROGRAPH AT	S709	271.	4.23	37.	9.	7.	0.44

+	ROUTED TO	C709O	200.	4.50	37.	9.	7.	0.44
+	ROUTED TO	709710	199.	4.57	37.	9.	7.	0.44
+	HYDROGRAPH AT	S710	120.	4.07	9.	2.	2.	0.11
+	2 COMBINED AT	C710I	207.	4.50	45.	11.	8.	0.55
+	ROUTED TO	C710O	194.	4.70	45.	11.	8.	0.55
+	HYDROGRAPH AT	S711	202.	4.03	15.	4.	3.	0.16
+	ROUTED TO	C711O	125.	4.17	15.	4.	3.	0.16
+	ROUTED TO	711712	125.	4.23	15.	4.	3.	0.16
+	HYDROGRAPH AT	S712	93.	4.00	6.	1.	1.	0.07
+	2 COMBINED AT	C712I	198.	4.03	20.	5.	4.	0.23
+	ROUTED TO	C712O	153.	4.17	20.	5.	4.	0.23
+	ROUTED TO	712714	152.	4.27	20.	5.	4.	0.23
+	HYDROGRAPH AT	S713	128.	4.03	9.	2.	2.	0.11
+	ROUTED TO	C713O	68.	4.20	9.	2.	2.	0.11
+	ROUTED TO	713714	67.	4.23	9.	2.	2.	0.11
+	HYDROGRAPH AT	S714	44.	4.07	3.	1.	1.	0.06
+	3 COMBINED AT	C714	246.	4.20	32.	8.	6.	0.39
+	HYDROGRAPH AT	S715	106.	4.27	17.	4.	3.	0.22
+	HYDROGRAPH AT	S716	490.	4.33	94.	24.	17.	1.13
+	ROUTED TO	C716O	349.	4.73	94.	24.	17.	1.13
+	ROUTED TO	716717	347.	4.87	94.	24.	17.	1.13
+	HYDROGRAPH AT	S717	282.	4.20	24.	6.	4.	0.29
+	2 COMBINED AT	C717	392.	4.50	116.	29.	21.	1.41
+	ROUTED TO	717718	387.	5.03	115.	29.	21.	1.41
+	HYDROGRAPH AT	S718	90.	5.20	34.	9.	6.	0.44
+	2 COMBINED AT	C718	456.	5.13	143.	37.	27.	1.86
+	HYDROGRAPH AT	S719	79.	4.27	15.	4.	3.	0.15

	6 COMBINED AT							
+		EAST-1	853.	4.63	270.	69.	50.	3.88
	HYDROGRAPH AT							
+		S720	223.	4.20	33.	8.	6.	0.37
	HYDROGRAPH AT							
+		S721	354.	4.07	34.	8.	6.	0.34
	ROUTED TO							
+		C721O	147.	4.33	34.	8.	6.	0.34
	ROUTED TO							
+		721722	140.	4.90	33.	8.	6.	0.34
	HYDROGRAPH AT							
+		S722	368.	4.37	75.	19.	14.	0.95
	2 COMBINED AT							
+		C722	426.	4.53	106.	27.	19.	1.29
	HYDROGRAPH AT							
+		S723	89.	4.07	8.	2.	1.	0.09
	HYDROGRAPH AT							
+		S724	679.	4.27	128.	32.	23.	1.16
	HYDROGRAPH AT							
+		S725	428.	4.50	117.	30.	22.	1.16
	5 COMBINED AT							
+		EAST-2	1428.	4.43	365.	93.	67.	4.06
	HYDROGRAPH AT							
+		S726	227.	4.10	22.	6.	4.	0.33
	ROUTED TO							
+		726727	186.	4.40	22.	6.	4.	0.33
	HYDROGRAPH AT							
+		S727	179.	4.33	41.	10.	7.	0.38
	2 COMBINED AT							
+		C727	332.	4.40	61.	16.	11.	0.71
	4 COMBINED AT							
+		TOTAL	3021.	4.97	2009.	552.	398.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition 2-Year, 24-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998           *
*            VERSION 4.1            *
*                                   *
*  RUN DATE   10AUG01  TIME  10:14:05  *
*                                   *
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*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FU2-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 2-year, 24-hour storm event. A companion model is also created for the existing condition 2-year, 6-hour storm event. Both models (2-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 2-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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21 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

          ENGLISH UNITS
               DRAINAGE AREA          SQUARE MILES
               PRECIPITATION DEPTH    INCHES
               LENGTH, ELEVATION      FEET
               FLOW                   CUBIC FEET PER SECOND
               STORAGE VOLUME         ACRE-FEET
               SURFACE AREA           ACRES
               TEMPERATURE            DEGREES FAHRENHEIT

23 JD          INDEX STORM NO. 1
                      STRM       1.70  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

24 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 1.69 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 1.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 1.60 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 1.54 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 1.46 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	52.	13.10	21.	7.	5.	0.57		
+	ROUTED TO	100102	51.	13.47	21.	7.	5.	0.57		
+	HYDROGRAPH AT	S101	51.	12.90	16.	5.	4.	0.63		
+	2 COMBINED AT	C102R	89.	13.30	37.	13.	9.	1.20		
+	HYDROGRAPH AT	S102	52.	12.53	20.	7.	5.	0.45		
+	ROUTED TO	101102	51.	12.97	20.	7.	5.	0.45		
+	HYDROGRAPH AT	S103	31.	13.13	12.	4.	3.	0.40		
+	2 COMBINED AT	C102L	81.	13.03	31.	11.	8.	0.84		
+	2 COMBINED AT	C102	163.	13.20	67.	23.	17.	2.05		

+	ROUTED TO 102103	161.	13.63	67.	23.	17.	2.05
+	HYDROGRAPH AT S104	117.	12.93	36.	12.	8.	0.90
+	2 COMBINED AT C103R	234.	13.40	100.	34.	25.	2.95
+	HYDROGRAPH AT S105	52.	12.77	23.	8.	6.	0.59
+	2 COMBINED AT C103	276.	13.33	122.	41.	30.	3.54
+	ROUTED TO 103104	274.	13.67	122.	41.	30.	3.54
+	HYDROGRAPH AT S106	42.	12.57	14.	4.	3.	0.57
+	2 COMBINED AT C104	293.	13.63	134.	45.	33.	4.11
+	ROUTED TO 104105	290.	14.00	134.	45.	33.	4.11
+	HYDROGRAPH AT S107	43.	13.10	14.	4.	3.	0.94
+	2 COMBINED AT C105L	309.	13.97	144.	48.	35.	5.05
+	HYDROGRAPH AT S200	127.	12.87	43.	15.	11.	0.96
+	ROUTED TO 200201	126.	12.97	43.	15.	11.	0.96
+	HYDROGRAPH AT S201	46.	12.73	16.	6.	4.	0.35
+	2 COMBINED AT C201	166.	12.93	58.	21.	15.	1.31
+	ROUTED TO 201203	165.	13.10	58.	21.	15.	1.31
+	HYDROGRAPH AT S202	21.	12.43	6.	2.	1.	0.13
+	ROUTED TO 202203	21.	12.60	6.	2.	1.	0.13
+	HYDROGRAPH AT S203	38.	12.70	18.	6.	5.	0.37
+	3 COMBINED AT C203R	213.	13.07	81.	29.	21.	1.81
+	HYDROGRAPH AT S204	95.	13.07	38.	14.	10.	0.95
+	2 COMBINED AT C203	305.	13.07	118.	42.	30.	2.76
+	ROUTED TO 203204	303.	13.13	118.	42.	30.	2.76
+	HYDROGRAPH AT S205	67.	12.60	20.	7.	5.	0.41
+	2 COMBINED AT C204	348.	13.07	137.	48.	35.	3.17
+	ROUTED TO 204205	345.	13.23	137.	48.	35.	3.17
+	HYDROGRAPH AT S206	81.	12.77	36.	13.	9.	0.85

+	2 COMBINED AT C205L	414.	13.23	171.	60.	44.	4.03
+	HYDROGRAPH AT S207	101.	13.10	43.	15.	11.	0.96
+	2 COMBINED AT C205	507.	13.20	211.	75.	54.	4.98
+	ROUTED TO 205206	497.	13.70	211.	75.	54.	4.98
+	HYDROGRAPH AT S208	132.	13.07	49.	17.	12.	1.10
+	2 COMBINED AT C206	584.	13.63	254.	89.	65.	6.09
+	ROUTED TO 206207	582.	13.77	254.	89.	65.	6.09
+	HYDROGRAPH AT S209	54.	13.03	18.	6.	4.	0.65
+	2 COMBINED AT C207R	609.	13.73	268.	94.	69.	6.74
+	HYDROGRAPH AT S210	28.	12.53	8.	2.	2.	0.48
+	2 COMBINED AT C207	615.	13.73	273.	96.	70.	7.22
+	ROUTED TO 207105	612.	13.90	272.	96.	70.	7.22
+	HYDROGRAPH AT S211	32.	12.57	10.	3.	2.	0.49
+	2 COMBINED AT C105R	620.	13.87	279.	98.	71.	7.70
+	2 COMBINED AT C105	866.	13.93	399.	139.	101.	12.75
+	HYDROGRAPH AT S300	98.	12.30	27.	9.	7.	0.62
+	HYDROGRAPH AT S301	229.	12.23	55.	19.	14.	0.99
+	2 COMBINED AT C300	320.	12.27	81.	28.	20.	1.61
+	ROUTED TO 300301	310.	12.47	81.	28.	20.	1.61
+	HYDROGRAPH AT S302	66.	12.70	19.	6.	5.	0.47
+	2 COMBINED AT C301	360.	12.50	99.	34.	25.	2.07
+	ROUTED TO 301302	349.	12.83	99.	34.	25.	2.07
+	HYDROGRAPH AT S303	37.	13.10	13.	4.	3.	0.71
+	2 COMBINED AT C302	375.	12.87	110.	38.	28.	2.78
+	ROUTED TO 302303	368.	13.10	110.	38.	28.	2.78
+	HYDROGRAPH AT S304	48.	12.63	17.	5.	4.	0.82
+	2 COMBINED AT C303	404.	13.10	125.	43.	31.	3.60

+	2 COMBINED AT	WEST-1	1064.	13.83	502.	175.	128.	16.36
+	HYDROGRAPH AT	S400	278.	12.50	60.	20.	14.	1.05
+	ROUTED TO	C400O	238.	12.67	60.	20.	14.	1.05
+	ROUTED TO	400401	232.	12.97	60.	20.	14.	1.05
+	HYDROGRAPH AT	S401	83.	12.33	18.	6.	4.	0.65
+	2 COMBINED AT	C401	273.	12.93	77.	25.	18.	1.69
+	ROUTED TO	401402	261.	13.43	77.	25.	18.	1.69
+	HYDROGRAPH AT	S402	210.	12.23	40.	13.	10.	0.74
+	2 COMBINED AT	C402	286.	13.43	114.	38.	27.	2.43
+	ROUTED TO	402403	278.	13.77	114.	38.	27.	2.43
+	HYDROGRAPH AT	S403	254.	12.17	43.	13.	10.	0.56
+	2 COMBINED AT	C403	316.	12.63	154.	50.	37.	2.99
+	ROUTED TO	403404	306.	12.80	154.	50.	37.	2.99
+	HYDROGRAPH AT	S404	56.	12.43	8.	2.	2.	0.26
+	2 COMBINED AT	C404	338.	12.40	162.	52.	38.	3.26
+	2 COMBINED AT	WEST-2	1288.	13.90	635.	219.	160.	19.61
+	HYDROGRAPH AT	S500	116.	12.73	53.	19.	14.	1.05
+	ROUTED TO	500501	116.	13.00	53.	19.	14.	1.05
+	HYDROGRAPH AT	S501	77.	12.40	23.	8.	6.	0.61
+	2 COMBINED AT	C501	172.	12.80	74.	26.	19.	1.67
+	ROUTED TO	501502	167.	12.97	71.	23.	17.	1.67
+	HYDROGRAPH AT	S502	46.	12.70	13.	4.	3.	0.40
+	2 COMBINED AT	C502L	204.	12.93	83.	27.	20.	2.07
+	HYDROGRAPH AT	S503	110.	12.70	44.	15.	11.	0.99
+	2 COMBINED AT	C502I	305.	12.90	125.	42.	30.	3.07
+	ROUTED TO	C502O	305.	12.90	125.	42.	30.	3.07
+	ROUTED TO	502505	289.	13.30	115.	33.	24.	3.07

+	HYDROGRAPH AT S504	42.	12.47	15.	5.	4.	0.33
+	2 COMBINED AT C505L	314.	13.30	129.	38.	27.	3.39
+	HYDROGRAPH AT S505	23.	12.33	4.	1.	1.	0.14
+	ROUTED TO C503O	21.	12.40	4.	1.	1.	0.14
+	ROUTED TO 503505	17.	13.20	3.	1.	1.	0.14
+	HYDROGRAPH AT S506	42.	12.30	7.	2.	2.	0.15
+	ROUTED TO C504O	41.	12.37	7.	2.	2.	0.15
+	ROUTED TO 504505	36.	12.97	7.	2.	2.	0.15
+	HYDROGRAPH AT S507	121.	12.27	22.	7.	5.	0.67
+	3 COMBINED AT C505R	126.	12.30	33.	10.	7.	0.96
+	2 COMBINED AT C505	374.	13.27	158.	47.	34.	4.35
+	ROUTED TO 505509	330.	13.93	137.	35.	25.	4.35
+	HYDROGRAPH AT S508	69.	12.17	12.	4.	3.	0.29
+	2 COMBINED AT C509L	333.	13.93	147.	39.	28.	4.65
+	HYDROGRAPH AT S509	52.	12.10	8.	3.	2.	0.17
+	ROUTED TO C506O	46.	12.20	8.	3.	2.	0.17
+	ROUTED TO 506508	44.	12.43	8.	3.	2.	0.17
+	HYDROGRAPH AT S510	56.	12.13	10.	3.	2.	0.13
+	2 COMBINED AT C508R	87.	12.30	19.	6.	4.	0.30
+	HYDROGRAPH AT S511	102.	12.17	18.	6.	4.	0.38
+	ROUTED TO C507O	64.	12.50	19.	6.	4.	0.38
+	ROUTED TO 507508	63.	12.87	18.	6.	5.	0.38
+	HYDROGRAPH AT S512	99.	12.17	19.	6.	4.	0.21
+	2 COMBINED AT C508L	129.	12.27	37.	12.	9.	0.60
+	2 COMBINED AT C508	215.	12.27	55.	18.	13.	0.90
+	ROUTED TO 508509	196.	12.87	53.	18.	13.	0.90
+	HYDROGRAPH AT S513	108.	12.37	29.	9.	7.	0.78

+	2 COMBINED AT C509R	268.	12.87	80.	27.	19.	1.67
+	2 COMBINED AT C509	429.	13.87	218.	63.	45.	6.32
+	ROUTED TO 509510	425.	13.97	217.	62.	45.	6.32
+	HYDROGRAPH AT S514	246.	12.20	46.	14.	10.	0.65
+	2 COMBINED AT C510	478.	12.97	257.	75.	54.	6.97
+	ROUTED TO 510511	470.	13.27	254.	75.	54.	6.97
+	HYDROGRAPH AT S515	531.	12.17	81.	24.	18.	1.10
+	2 COMBINED AT C511	591.	12.27	321.	97.	70.	8.07
+	ROUTED TO 511512	572.	12.80	317.	95.	69.	8.07
+	HYDROGRAPH AT S516	139.	12.27	36.	12.	9.	0.54
+	2 COMBINED AT C512	656.	12.73	344.	106.	77.	8.61
+	2 COMBINED AT WEST-3	1692.	13.87	928.	306.	227.	28.22
+	HYDROGRAPH AT S600	147.	13.03	56.	20.	14.	2.02
+	ROUTED TO 600601	146.	13.17	56.	20.	14.	2.02
+	HYDROGRAPH AT S601	185.	12.73	56.	19.	14.	0.90
+	2 COMBINED AT C601	293.	12.97	109.	38.	28.	2.92
+	ROUTED TO 601602	291.	13.17	109.	38.	28.	2.92
+	HYDROGRAPH AT S603	174.	12.50	39.	13.	10.	0.67
+	2 COMBINED AT C602L	369.	13.00	147.	51.	37.	3.58
+	HYDROGRAPH AT S602	211.	13.07	83.	30.	21.	1.88
+	2 COMBINED AT C602	568.	13.03	226.	80.	58.	5.47
+	ROUTED TO 602603	519.	13.27	182.	46.	33.	5.47
+	HYDROGRAPH AT S606	76.	12.87	30.	11.	8.	0.66
+	2 COMBINED AT C603L	579.	13.23	209.	56.	41.	6.13
+	HYDROGRAPH AT S605	117.	13.07	48.	17.	12.	1.09
+	HYDROGRAPH AT S604	288.	13.07	116.	41.	30.	2.66
+	3 COMBINED AT C603	934.	13.17	358.	110.	80.	9.87

+	ROUTED TO	603604	875.	13.50	310.	78.	56.	9.87
+	HYDROGRAPH AT	S609	39.	13.13	19.	7.	5.	0.56
+	2 COMBINED AT	C604R	906.	13.50	327.	85.	61.	10.43
+	HYDROGRAPH AT	S607	91.	13.10	40.	14.	10.	0.82
+	2 COMBINED AT	C604	975.	13.47	361.	97.	70.	11.25
+	ROUTED TO	604605	974.	13.53	361.	97.	70.	11.25
+	HYDROGRAPH AT	S608	109.	12.57	28.	10.	7.	0.51
+	2 COMBINED AT	C605	1008.	13.50	385.	105.	76.	11.76
+	ROUTED TO	605606	995.	13.67	378.	100.	72.	11.76
+	HYDROGRAPH AT	S610	98.	12.47	34.	12.	9.	0.60
+	2 COMBINED AT	C606L	1035.	13.63	407.	110.	79.	12.36
+	HYDROGRAPH AT	S612	128.	12.53	47.	16.	11.	0.81
+	2 COMBINED AT	C606	1094.	13.60	447.	124.	89.	13.17
+	ROUTED TO	606608	1091.	13.63	444.	121.	87.	13.17
+	HYDROGRAPH AT	S611	85.	12.67	26.	9.	7.	0.57
+	ROUTED TO	607608	80.	13.33	26.	9.	7.	0.57
+	HYDROGRAPH AT	S613	242.	13.03	87.	30.	22.	1.80
+	3 COMBINED AT	C608	1306.	13.57	541.	156.	112.	15.53
+	ROUTED TO	608609	1287.	13.77	532.	147.	106.	15.53
+	HYDROGRAPH AT	S614	121.	13.07	49.	17.	13.	1.08
+	2 COMBINED AT	C609	1362.	13.73	573.	162.	117.	16.61
+	ROUTED TO	609611	1324.	14.03	546.	142.	102.	16.61
+	HYDROGRAPH AT	S617	84.	12.43	25.	8.	6.	0.68
+	2 COMBINED AT	C611R	1338.	14.03	562.	148.	107.	17.29
+	HYDROGRAPH AT	S615	209.	13.07	80.	28.	20.	1.05
+	ROUTED TO	610611	205.	13.40	80.	28.	20.	1.05
+	HYDROGRAPH AT	S616	51.	12.87	18.	6.	4.	0.50

+	2 COMBINED AT C611L	241.	13.37	97.	33.	24.	1.56
+	2 COMBINED AT C611	1489.	14.00	643.	178.	128.	18.85
+	ROUTED TO 611613	1475.	14.07	633.	168.	121.	18.85
+	HYDROGRAPH AT S618	85.	13.10	33.	11.	8.	0.96
+	2 COMBINED AT C613R	1512.	14.07	658.	177.	128.	19.81
+	HYDROGRAPH AT S619	175.	12.90	51.	17.	12.	0.83
+	ROUTED TO 612613	168.	13.43	51.	17.	12.	0.83
+	HYDROGRAPH AT S620	63.	12.97	25.	9.	6.	0.44
+	2 COMBINED AT C613L	220.	13.40	76.	25.	18.	1.27
+	2 COMBINED AT C613	1627.	14.03	720.	199.	143.	21.08
+	ROUTED TO 613614	1608.	14.20	709.	188.	136.	21.08
+	HYDROGRAPH AT S621	53.	12.93	13.	4.	3.	0.92
+	2 COMBINED AT C614	1611.	14.20	714.	190.	137.	22.00
+	ROUTED TO 614615	1581.	14.43	704.	184.	133.	22.00
+	HYDROGRAPH AT S622	36.	13.10	11.	3.	2.	0.90
+	2 COMBINED AT C615	1585.	14.43	708.	186.	134.	22.90
+	2 COMBINED AT WEST-4	2800.	14.37	1534.	463.	340.	51.12
+	HYDROGRAPH AT S700	65.	12.33	15.	4.	3.	0.61
+	HYDROGRAPH AT S701	52.	12.83	25.	8.	6.	0.72
+	HYDROGRAPH AT S702	48.	12.23	11.	4.	3.	0.26
+	HYDROGRAPH AT S703	11.	12.83	3.	1.	1.	0.26
+	HYDROGRAPH AT S704	51.	12.27	11.	3.	2.	0.41
+	ROUTED TO 704705	47.	12.77	11.	3.	2.	0.41
+	HYDROGRAPH AT S705	257.	12.20	48.	15.	11.	0.75
+	2 COMBINED AT C705	260.	12.20	58.	19.	13.	1.16
+	ROUTED TO C705O	200.	12.43	58.	19.	13.	1.16
+	ROUTED TO 705OAF	197.	12.73	58.	19.	13.	1.16

+	HYDROGRAPH AT S705AF	48.	12.57	10.	2.	2.	0.18
+	2 COMBINED AT C705AF	241.	12.67	68.	21.	15.	1.34
+	5 COMBINED AT WEST-5	376.	12.60	116.	36.	26.	3.19
+	HYDROGRAPH AT S706	232.	12.17	43.	14.	10.	0.71
+	HYDROGRAPH AT S707	258.	12.17	51.	17.	12.	0.64
+	HYDROGRAPH AT S728	62.	12.33	19.	6.	5.	0.28
+	5 COMBINED AT WEST	2871.	14.37	1686.	519.	380.	55.94
+	HYDROGRAPH AT S708	330.	12.13	40.	11.	8.	0.71
+	HYDROGRAPH AT S709	213.	12.17	33.	9.	6.	0.44
+	ROUTED TO C709O	164.	12.40	33.	9.	6.	0.44
+	ROUTED TO 709710	162.	12.47	33.	9.	6.	0.44
+	HYDROGRAPH AT S710	70.	12.03	8.	2.	2.	0.11
+	2 COMBINED AT C710I	179.	12.40	40.	11.	8.	0.55
+	ROUTED TO C710O	167.	12.60	40.	11.	8.	0.55
+	HYDROGRAPH AT S711	114.	12.03	13.	4.	3.	0.16
+	ROUTED TO C711O	109.	12.07	13.	4.	3.	0.16
+	ROUTED TO 711712	107.	12.13	13.	4.	3.	0.16
+	HYDROGRAPH AT S712	49.	12.00	5.	1.	1.	0.07
+	2 COMBINED AT C712I	148.	12.03	18.	5.	4.	0.23
+	ROUTED TO C712O	129.	12.13	18.	5.	4.	0.23
+	ROUTED TO 712714	127.	12.23	18.	5.	4.	0.23
+	HYDROGRAPH AT S713	72.	12.03	8.	2.	1.	0.11
+	ROUTED TO C713O	47.	12.17	8.	2.	1.	0.11
+	ROUTED TO 713714	47.	12.20	8.	2.	1.	0.11
+	HYDROGRAPH AT S714	24.	12.07	2.	1.	0.	0.06
+	3 COMBINED AT C714	190.	12.23	27.	8.	6.	0.39
+	HYDROGRAPH AT S715	87.	12.20	15.	4.	3.	0.22

+	HYDROGRAPH AT	S716	460.	12.23	84.	24.	18.	1.13
+	ROUTED TO	C716O	327.	12.57	84.	24.	18.	1.13
+	ROUTED TO	716717	326.	12.70	84.	24.	18.	1.13
+	HYDROGRAPH AT	S717	180.	12.17	21.	6.	4.	0.29
+	2 COMBINED AT	C717	386.	12.27	104.	30.	22.	1.41
+	ROUTED TO	717718	378.	12.90	104.	29.	21.	1.41
+	HYDROGRAPH AT	S718	88.	12.93	31.	8.	6.	0.44
+	2 COMBINED AT	C718	462.	12.90	133.	37.	27.	1.86
+	HYDROGRAPH AT	S719	64.	12.20	14.	4.	3.	0.15
+	6 COMBINED AT	EAST-1	823.	12.60	262.	72.	52.	3.88
+	HYDROGRAPH AT	S720	172.	12.17	28.	8.	6.	0.37
+	HYDROGRAPH AT	S721	208.	12.07	29.	9.	7.	0.34
+	ROUTED TO	C721O	113.	12.30	29.	9.	7.	0.34
+	ROUTED TO	721722	109.	12.83	29.	9.	7.	0.34
+	HYDROGRAPH AT	S722	336.	12.27	67.	20.	14.	0.95
+	2 COMBINED AT	C722	378.	12.30	95.	29.	21.	1.29
+	HYDROGRAPH AT	S723	53.	12.07	7.	2.	1.	0.09
+	HYDROGRAPH AT	S724	594.	12.20	115.	36.	26.	1.16
+	HYDROGRAPH AT	S725	368.	12.37	105.	34.	24.	1.16
+	5 COMBINED AT	EAST-2	1464.	12.23	341.	106.	76.	4.06
+	HYDROGRAPH AT	S726	116.	12.10	17.	5.	4.	0.33
+	ROUTED TO	726727	101.	12.50	17.	5.	4.	0.33
+	HYDROGRAPH AT	S727	133.	12.27	36.	12.	8.	0.38
+	2 COMBINED AT	C727	220.	12.47	52.	17.	12.	0.71
+	4 COMBINED AT	TOTAL	3494.	12.53	2195.	676.	494.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 100-Year, 6-Hour HEC-1 Model Output

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1****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*              JUN   1998              *                    *   HYDROLOGIC ENGINEERING CENTER      *
*            VERSION 4.1               *                    *         609 SECOND STREET            *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE   09AUG01  TIME  14:33:25  *                    *          (916) 756-1104              *
*                                      *                    *                                      *
****************************************                    ****************************************

X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1                                          HEC-1 INPUT                                                PAGE  1

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID     N. Peoria Area Drainage Master Plan                    File:FR100-6.IH1
  2           ID        For Maricopa County FCD 99-45                  Original:05-04-00     MCG
  3           ID        By Stantec Consulting, Inc. P82000146           Revised:05-02-01     MMZ
  4           ID
  5           ID     The N. Peoria ADMP study limits consists of several small tributary
  6           ID     watersheds to the Agua Fria River.  This model is for the future
  7           ID     condition 100-year, 6-hour storm event.  A companion model is also created
  8           ID     for the future condition 100-year, 24-hour storm event.  Both models
  9           ID     100-year, 6- and 24-hour) should be referenced for the determination of
 10           ID     storm event produces the highest peak discharge.
 11           ID
 12           ID     Modeling of the watersheds is performed using the following:
 13           ID        100-year, 6-hour rainfall with FCDMC design rainfall distributions
 14           ID        100-year, 2-hour retention
 15           ID        Green & Ampt Loss Rate Method
 16           ID        NMIN = 2 minutes
 17           ID        Clark Unit Hydrograph
 18           ID        Modified Puls channel storage routing
 19           ID
 20           ID     Watershed delineation performed using USGS 7.5 Minute Series Quadrangles
              *
              *DIAGRAM
              *
 21           IT       2                    1000
 22           IO       5
 23           IN      15
              *
              *       Depth-area reduction factors taken from Table 2.2 of FCDMC Drainage
              *       Design Manual
              *       6-hr rainfall distributions per Table 2.4 and Figure 2.17 of the Manual
              *
 24           JD    3.35    0.01
 25           PC   0.000   0.008   0.016   0.025   0.033   0.041   0.050   0.058   0.066   0.074
 26           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931   0.950
 27           PC   0.962   0.972   0.983   0.991   1.000
 28           JD    3.33    0.50
 29           JD    3.28    2.80
 30           PC   0.000   0.009   0.016   0.025   0.034   0.042   0.051   0.059   0.067   0.076
 31           PC   0.087   0.100   0.120   0.163   0.252   0.451   0.694   0.837   0.900   0.938
 32           PC   0.950   0.963   0.975   0.988   1.000
 33           JD    3.09    16.0
 34           PC   0.000   0.015   0.020   0.030   0.048   0.063   0.076   0.090   0.105   0.119
 35           PC   0.135   0.152   0.175   0.222   0.304   0.472   0.670   0.796   0.868   0.912
 36           PC   0.946   0.960   0.973   0.987   1.000
 37           JD    2.71    90.0
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 38          PC   0.000   0.021   0.035   0.051   0.071   0.087   0.105   0.125   0.143   0.160
 39          PC   0.179   0.201   0.232   0.281   0.364   0.500   0.658   0.773   0.841   0.888
 40          PC   0.927   0.945   0.964   0.982   1.000
             *
             *  ****************************************************************************
             *                 Begin Major Basin 100 (Unnamed Wash 1)
             *  ****************************************************************************
             *
1                                          HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 41          KK    S100
 42          KM   Sub-Basin   S100
 43          KM
 44          KM      The Clark Unit Hydrograph is used for this basin.
 45          KM          The Natural time-area relation is used for this basin.
 46          KM
 47          KM      Time of Concentration for this sub-basin is based on the following:
 48          KM          6-Hour Rainfall, Pattern No.  1.08
 49          KM          An rainfall areal reduction factor of 0.993
 50          KM
 51          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 52          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 53          KM   .44 .43 .43 .14 .11 .09 .05 .04 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
 54          KM
 55          KM          L=   1.811 miles, S=  149 feet/mile, Kb= .09
 56          KM
 57          BA   0.574
 58          LG    0.21    0.33    4.65    0.33   26.00
 59          UC   0.638   0.495
 60          UA       0       3       5       8      12      20      43      75      90      96
 61          UA     100
             *

 62          KK   S100O
 63          KM   VOLUME RETAINED WITHIN SUB-BASIN S100
 64          DT  DIV100     6.3
 65          DI       0    3000
 66          DQ       0    3000
             *

 67          KK  100102
 68          KM        Normal depth route from S100 to C102R
 69          KM        Source: Field Reconnaissance
 70          RS       7    FLOW      -1
 71          RC     .05    .039     .06    6535   .0138
 72          RX    1000  1012.7  1037.5  1047.7    1060  1072.4  1087.8  1098.8
 73          RY   104.8   102.3   102.3   100.1     100   102.7   103.5   106.7
             *

 74          KK    S101
 75          KM   Sub-Basin   S101
 76          KM
 77          KM      The Clark Unit Hydrograph is used for this basin.
 78          KM          The Natural time-area relation is used for this basin.
 79          KM
 80          KM      Time of Concentration for this sub-basin is based on the following:
 81          KM          6-Hour Rainfall, Pattern No.  1.13
 82          KM          An rainfall areal reduction factor of 0.992
 83          KM
 84          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 85          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 86          KM   .42 .41 .41 .13 .10 .09 .05 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
 87          KM
 88          KM          L=   1.544 miles, S=  155 feet/mile, Kb= .08
1                                          HEC-1 INPUT                                          PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 89          KM
 90          BA   0.631
 91          LG    0.26    0.37    5.30    0.25   15.00
 92          UC   0.521   0.330
 93          UA       0       3       5       8      12      20      43      75      90      96
 94          UA     100
             *

 95          KK   C102R
 96          KM        Combine routed hydrograph from S100 w/runoff from S101
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 97          HC       2
             *

 98          KK    S102
 99          KM   Sub-Basin   S102
100          KM
101          KM      The Clark Unit Hydrograph is used for this basin.
102          KM          The Urban time-area relation is used for this basin.
103          KM
104          KM      Time of Concentration for this sub-basin is based on the following:
105          KM          6-Hour Rainfall, Pattern No.  1.00
106          KM          An rainfall areal reduction factor of 0.994
107          KM
108          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
109          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
110          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
111          KM
112          KM          L=   1.487 miles, S=  108 feet/mile, Kb= .07
113          KM
114          BA   0.449
115          LG    0.22     0.30     4.45     0.38    32.00
116          UC   0.521    0.389
117          UA       0        5       16       30       65       77       84       90       94       97
118          UA     100
             *

119          KK   S102O
120          KM   VOLUME RETAINED WITHIN SUB-BASIN S102
121          DT  DIV100     14.4
122          DI       0     3000
123          DQ       0     3000
             *

124          KK  101102
125          KM        Normal depth route from S102 to C102
126          KM        Source: Field Reconnaissance
127          RS       7    FLOW      -1
128          RC    .045      .04     .045     7254  0.0138
129          RX     100      106      114      120      134      143      155      164
130          RY     110      107      103      100      100      103      107      110
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

131          KK    S103
132          KM   Sub-Basin   S103
133          KM
134          KM      The Clark Unit Hydrograph is used for this basin.
135          KM          The Natural time-area relation is used for this basin.
136          KM
137          KM      Time of Concentration for this sub-basin is based on the following:
138          KM          6-Hour Rainfall, Pattern No.  1.00
139          KM          An rainfall areal reduction factor of 0.995
140          KM
141          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
142          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
143          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
144          KM
145          KM          L=   1.321 miles, S=   76 feet/mile, Kb= .09
146          KM
147          BA   0.395
148          LG    0.24     0.38     5.60     0.22    17.00
149          UC   0.679    0.511
150          UA       0        3        5        8       12       20       43       75       90       96
151          UA     100
             *

152          KK   C102L
153          KM        Combine routed hydrgraph from S102 with runoff from S103
154          HC       2
             *

155          KK    C102
156          KM        Combine hydrgraphs from C102L and C102R
157          HC       2
             *

158          KK  102103
159          KM        Normal depth route from C102 to C103R
```

```
 160          KM        Source: Field Reconnaissance
 161          RS       8    FLOW      -1
 162          RC     .05     .039     .06    8068  0.0124
 163          RX    1000     1029  1057.9    1072  1089.6  1099.4  1109.9  1173.1
 164          RY     106    103.9   101.8   100.3     100   102.2   103.3   110.0
              *

 165          KK    S104
 166          KM   Sub-Basin   S104
 167          KM
 168          KM      The Clark Unit Hydrograph is used for this basin.
 169          KM          The Natural time-area relation is used for this basin.
 170          KM
 171          KM      Time of Concentration for this sub-basin is based on the following:
 172          KM          6-Hour Rainfall, Pattern No.  1.34
 173          KM          An rainfall areal reduction factor of 0.988
 174          KM
 175          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 176          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1                                                HEC-1 INPUT                                                    PAGE  5

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 177          KM   .38 .38 .37 .15 .13 .12 .07 .07 .07 .02 .02 .02 .01 .01 .01 .01 .01 .01
 178          KM
 179          KM          L=   1.624 miles, S=  111 feet/mile, Kb= .08
 180          KM
 181          BA   0.900
 182          LG    0.21    0.35    5.60    0.22   23.00
 183          UC   0.629   0.346
 184          UA       0       3       5       8      12      20      43      75      90      96
 185          UA     100
              *

 186          KK   S104O
 187          KM   VOLUME RETAINED WITHIN SUB-BASIN S104
 188          DT  DIV104    20.2
 189          DI       0    3000
 190          DQ       0    3000
              *

 191          KK   C103R
 192          KM        Combine routed hydrograph from 102103 w/runoff from S104
 193          HC       2
              *

 194          KK    S105
 195          KM   Sub-Basin   S105
 196          KM
 197          KM      The Clark Unit Hydrograph is used for this basin.
 198          KM          The Urban time-area relation is used for this basin.
 199          KM
 200          KM      Time of Concentration for this sub-basin is based on the following:
 201          KM          6-Hour Rainfall, Pattern No.  1.10
 202          KM          An rainfall areal reduction factor of 0.992
 203          KM
 204          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 205          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 206          KM   .44 .44 .43 .15 .12 .11 .05 .05 .05 .02 .02 .02 .01 .01 .01 .01 .01 .01
 207          KM
 208          KM          L=   1.976 miles, S=   96 feet/mile, Kb= .07
 209          KM
 210          BA   0.594
 211          LG    0.24    0.31    5.60    0.23   23.00
 212          UC   0.671   0.551
 213          UA       0       5      16      30      65      77      84      90      94      97
 214          UA     100
              *

 215          KK   S105O
 216          KM   VOLUME RETAINED WITHIN SUB-BASIN S105
 217          DT  DIV105    16.1
 218          DI       0    3000
 219          DQ       0    3000
              *
1                                                HEC-1 INPUT                                                    PAGE  6

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 220          KK    C103
```

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221          KM        Combine hydrograph from C103R w/runoff from S105
222          HC       2
             *

223          KK  103104
224          KM        Normal depth route from C103 to C104
225          KM        Source: Field Reconnaissance
226          RS       5    FLOW      -1
227          RC    .053    .053    .053    8625  0.0162
228          RX   998.5  1001.5    1003    1011    1033    1047  1050.6  1067.2
229          RY   108.4   106.4   105.4     100   100.5   104.4   105.4   110.0
             *

230          KK    S106
231          KM   Sub-Basin   S106
232          KM
233          KM      The Clark Unit Hydrograph is used for this basin.
234          KM          The Urban time-area relation is used for this basin.
235          KM
236          KM      Time of Concentration for this sub-basin is based on the following:
237          KM          6-Hour Rainfall, Pattern No.  1.07
238          KM          An rainfall areal reduction factor of 0.993
239          KM
240          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
241          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
242          KM   .44 .43 .43 .14 .10 .09 .04 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
243          KM
244          KM          L=   1.770 miles, S=  158 feet/mile, Kb= .07
245          KM
246          BA   0.567
247          LG    0.27    0.28    5.20    0.26   11.00
248          UC   0.504   0.377
249          UA       0       5      16      30      65      77      84      90      94      97
250          UA     100
             *

251          KK    C104
252          KM        Combine routed hydrograph 103104 w/runoff from S106
253          HC       2
             *

254          KK  104105
255          KM        Normal depth route from C104 to C105
256          KM        Source: Field Reconnaissance
257          RS       6    FLOW      -1
258          RC    .053    .053    .053    6956  0.0115
259          RX    1000  1002.3  1004.6  1019.3  1041.1  1069.4  1111.7  1128.8
260          RY     108   107.5     107   100.2     100   103.4   102.3   107.3
             *
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

261          KK    S107
262          KM   Sub-Basin   S107
263          KM
264          KM      The Clark Unit Hydrograph is used for this basin.
265          KM          The Natural time-area relation is used for this basin.
266          KM
267          KM      Time of Concentration for this sub-basin is based on the following:
268          KM          6-Hour Rainfall, Pattern No.  1.36
269          KM          An rainfall areal reduction factor of 0.988
270          KM
271          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
272          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
273          KM   .36 .36 .35 .14 .11 .10 .06 .06 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
274          KM
275          KM          L=   2.593 miles, S=  204 feet/mile, Kb= .06
276          KM
277          BA   0.936
278          LG    0.25    0.28    4.90    0.29    3.00
279          UC   0.571   0.442
280          UA       0       3       5       8      12      20      43      75      90      96
281          UA     100
             *

282          KK   C105L
283          KM        Combine routed hydrograph from 104105 w/runoff from S107
284          HC       2
             *
```

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                 *  ****************************************************************************
                 *                 Begin Major Basin 200 (Unnamed Wash 2)
                 *  ****************************************************************************
                 *

285              KK    S200
286              KM   Sub-Basin   S200
287              KM
288              KM      The Clark Unit Hydrograph is used for this basin.
289              KM          The Natural time-area relation is used for this basin.
290              KM
291              KM      Time of Concentration for this sub-basin is based on the following:
292              KM          6-Hour Rainfall, Pattern No.  1.38
293              KM          An rainfall areal reduction factor of 0.988
294              KM
295              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
296              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
297              KM   .36 .35 .35 .14 .11 .10 .06 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
298              KM
299              KM          L=   1.665 miles, S=  192 feet/mile, Kb= .10
300              KM
301              BA   0.959
302              LG    0.25    0.35    4.25    0.44   35.00
303              UC   0.621   0.336
304              UA      0       3       5       8      12      20      43      75      90      96
305              UA    100
                 *
1                                                HEC-1 INPUT                                          PAGE  8

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

306              KK  200201
307              KM        Normal depth route from hydrograph S200 to C201
308              KM        Source: Field Reconnaissance
309              RS       1    FLOW      -1
310              RC     .05     .03     .05    3952  0.0228
311              RX    1000    1001    1002    1005    1026    1032    1034    1036
312              RY     105     104     103     100     100     103     104     105
                 *

313              KK    S201
314              KM   Sub-Basin   S201
315              KM
316              KM      The Clark Unit Hydrograph is used for this basin.
317              KM          The Natural time-area relation is used for this basin.
318              KM
319              KM      Time of Concentration for this sub-basin is based on the following:
320              KM          6-Hour Rainfall, Pattern No.  1.00
321              KM          An rainfall areal reduction factor of 0.995
322              KM
323              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
324              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
325              KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
326              KM
327              KM          L=   1.182 miles, S=  195 feet/mile, Kb= .11
328              KM
329              BA   0.350
330              LG    0.25    0.35    4.25    0.44   35.00
331              UC   0.483   0.343
332              UA      0       3       5       8      12      20      43      75      90      96
333              UA    100
                 *

334              KK    C201
335              KM        Combine routed hydrograph 200201 w/runoff from S201
336              HC       2
                 *

337              KK  201203
338              KM        Normal depth route from C201 to C203R
339              KM        Source: Field Reconnaissance
340              RS       2    FLOW      -1
341              RC    .055    .039    .055    3233  0.0155
342              RX    1000  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1107.6
343              RY     105   101.1     102   100.3     100     102     103   104.2
                 *

344              KK    S202
345              KM   Sub-Basin   S202
346              KM
```

```
 347          KM      The Clark Unit Hydrograph is used for this basin.
 348          KM          The Natural time-area relation is used for this basin.
 349          KM
 350          KM      Time of Concentration for this sub-basin is based on the following:
 351          KM          6-Hour Rainfall, Pattern No.  1.00
1                                        HEC-1 INPUT                                                    PAGE  9

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 352          KM          An rainfall areal reduction factor of 0.998
 353          KM
 354          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 355          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 356          KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
 357          KM
 358          KM          L=   0.689 miles, S=  271 feet/mile, Kb= .12
 359          KM
 360          BA   0.127
 361          LG    0.25    0.35    4.25    0.44   35.00
 362          UC   0.308   0.241
 363          UA       0       3       5       8      12      20      43      75      90      96
 364          UA     100
              *

 365          KK  202203
 366          KM        Normal depth route from S202 to C203R
 367          KM         Source: Field Reconnaissance
 368          RS       3    FLOW      -1
 369          RC     .05     .03     .05    2353   .0170
 370          RX    1000  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1107.6
 371          RY   103.6   101.1     102   100.3     100     102    103.   104.2
              *

 372          KK    S203
 373          KM   Sub-Basin   S203
 374          KM
 375          KM      The Clark Unit Hydrograph is used for this basin.
 376          KM          The Urban time-area relation is used for this basin.
 377          KM
 378          KM      Time of Concentration for this sub-basin is based on the following:
 379          KM          6-Hour Rainfall, Pattern No.  1.00
 380          KM          An rainfall areal reduction factor of 0.995
 381          KM
 382          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 383          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 384          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
 385          KM
 386          KM          L=   1.683 miles, S=  154 feet/mile, Kb= .09
 387          KM
 388          BA   0.373
 389          LG    0.28    0.29    4.25    0.43   37.00
 390          UC   0.588   0.545
 391          UA       0       5      16      30      65      77      84      90      94      97
 392          UA     100
              *

 393          KK   S203O
 394          KM   VOLUME RETAINED WITHIN SUB-BASIN S203
 395          DT  DIV203    15.2
 396          DI       0    3000
 397          DQ       0    3000
              *
1                                        HEC-1 INPUT                                                    PAGE 10

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          KK   C203R
 399          KM        Combine routed hydrographs 201203 and 202203 with runoff from S203
 400          HC       3
              *

 401          KK    S204
 402          KM   Sub-Basin   S204
 403          KM
 404          KM      The Clark Unit Hydrograph is used for this basin.
 405          KM          The Natural time-area relation is used for this basin.
 406          KM
 407          KM      Time of Concentration for this sub-basin is based on the following:
 408          KM          6-Hour Rainfall, Pattern No.  1.37
 409          KM          An rainfall areal reduction factor of 0.988
```

```
410          KM
411          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
412          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
413          KM   .36 .35 .35 .14 .11 .09 .06 .06 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
414          KM
415          KM          L=   1.959 miles, S=  174 feet/mile, Kb= .10
416          KM
417          BA   0.951
418          LG    0.25    0.35    4.25    0.44   32.00
419          UC   0.729   0.459
420          UA       0       3       5       8      12      20      43      75      90      96
421          UA     100
             *

422          KK   S204O
423          KM   VOLUME RETAINED WITHIN SUB-BASIN S204
424          DT  DIV204     1.5
425          DI       0    3000
426          DQ       0    3000
             *

427          KK    C203
428          KM        Combine hydrograph from C203R with runoff from S204
429          HC       2
             *

430          KK  203204
431          KM        Normal depth route from C203 to C204
432          KM        Source: Field Reconnaissance
433          RS       1    FLOW      -1
434          RC    .055    .039    .055    1325  0.0151
435          RX   989.2  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1120.2
436          RY     110   101.1     102   100.3     100     102     103   110.0
             *
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

437          KK    S205
438          KM   Sub-Basin   S205
439          KM
440          KM      The Clark Unit Hydrograph is used for this basin.
441          KM          The Natural time-area relation is used for this basin.
442          KM
443          KM      Time of Concentration for this sub-basin is based on the following:
444          KM          6-Hour Rainfall, Pattern No.  1.00
445          KM          An rainfall areal reduction factor of 0.995
446          KM
447          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
448          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
449          KM   .46 .46 .46 .14 .11 .10 .04 .04 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
450          KM
451          KM          L=   1.485 miles, S=  175 feet/mile, Kb= .07
452          KM
453          BA   0.413
454          LG    0.21    0.31    4.60    0.34   34.00
455          UC   0.421   0.322
456          UA       0       3       5       8      12      20      43      75      90      96
457          UA     100
             *

458          KK   S205O
459          KM   VOLUME RETAINED WITHIN SUB-BASIN S205
460          DT  DIV205    14.2
461          DI       0    3000
462          DQ       0    3000
             *

463          KK    C204
464          KM        Combine routed hydrograph 203204 w/runoff from S205
465          HC       2
             *

466          KK  204205
467          KM        Normal depth route from C204 to C205L
468          KM        Source: Field Reconnaissance
469          RS       4    FLOW      -1
470          RC     .05    .039     .05    5007  0.0140
471          RX    1000  1010.6  1053.2  1064.9  1094.7  1103.1  1105.9  1113.8
472          RY   105.6   102.5   103.3   100.4     100     103     104   106.8
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                 *
473              KK    S206
474              KM   Sub-Basin   S206
475              KM
476              KM      The Clark Unit Hydrograph is used for this basin.
477              KM          The Urban time-area relation is used for this basin.
478              KM
479              KM      Time of Concentration for this sub-basin is based on the following:
480              KM          6-Hour Rainfall, Pattern No.  1.31
481              KM          An rainfall areal reduction factor of 0.989
482              KM
1                                          HEC-1 INPUT                                          PAGE 12

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

483              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
484              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
485              KM   .39 .38 .38 .15 .12 .11 .07 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
486              KM
487              KM          L=   2.296 miles, S=  118 feet/mile, Kb= .08
488              KM
489              BA   0.853
490              LG    0.29    0.28    4.65    0.33   30.00
491              UC   0.783   0.601
492              UA       0       5      16      30      65      77      84      90      94      97
493              UA     100
                 *

494              KK   S206O
495              KM   VOLUME RETAINED WITHIN SUB-BASIN S206
496              DT  DIV206    42.2
497              DI       0    3000
498              DQ       0    3000
                 *

499              KK   C205L
500              KM        Combine routed hydrograph 204205 w/runoff from S206
501              HC       2
                 *

502              KK    S207
503              KM   Sub-Basin   S207
504              KM
505              KM      The Clark Unit Hydrograph is used for this basin.
506              KM          The Natural time-area relation is used for this basin.
507              KM
508              KM      Time of Concentration for this sub-basin is based on the following:
509              KM          6-Hour Rainfall, Pattern No.  1.38
510              KM          An rainfall areal reduction factor of 0.988
511              KM
512              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
513              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
514              KM   .36 .36 .36 .14 .12 .11 .07 .06 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
515              KM
516              KM          L=   2.315 miles, S=  117 feet/mile, Kb= .08
517              KM
518              BA   0.957
519              LG    0.27    0.32    4.35    0.41   35.00
520              UC   0.813   0.590
521              UA       0       3       5       8      12      20      43      75      90      96
522              UA     100
                 *

523              KK   S207O
524              KM   VOLUME RETAINED WITHIN SUB-BASIN S207
525              DT  DIV207    20.0
526              DI       0    3000
527              DQ       0    3000
                 *
1                                          HEC-1 INPUT                                          PAGE 13

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

528              KK    C205
529              KM        Combine hydrograph from C205L w/runoff from S207
530              HC       2
                 *

531              KK  205206
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```
532          KM        Normal depth route from C205 to C206
533          KM        Source: Field Reconnaissance
534          RS      10    FLOW      -1
535          RC     .05    .039     .05   11893  0.0063
536          RX    1000  1002.5    1005  1019.1  1052.5  1070.5  1120.8  1146.9
537          RY   110.1   107.6   105.1     100   100.2   104.6   103.7   109.5
             *

538          KK    S208
539          KM   Sub-Basin   S208
540          KM
541          KM      The Clark Unit Hydrograph is used for this basin.
542          KM          The Natural time-area relation is used for this basin.
543          KM
544          KM      Time of Concentration for this sub-basin is based on the following:
545          KM          6-Hour Rainfall, Pattern No.  1.46
546          KM          An rainfall areal reduction factor of 0.986
547          KM
548          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
549          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
550          KM   .35 .35 .35 .16 .14 .13 .08 .08 .08 .03 .03 .03 .01 .01 .01 .01 .01 .01
551          KM
552          KM          L=   2.205 miles, S=   93 feet/mile, Kb= .10
553          KM
554          BA   1.103
555          LG    0.25    0.32    5.30    0.25   29.00
556          UC   1.008   0.665
557          UA       0       3       5       8      12      20      43      75      90      96
558          UA     100
             *

559          KK   S208O
560          KM   VOLUME RETAINED WITHIN SUB-BASIN S208
561          DT  DIV208    12.9
562          DI       0    3000
563          DQ       0    3000
             *

564          KK    C206
565          KM        Combine routed hydrograph 205206 w/runoff from S208
566          HC       2
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

567          KK  206207
568          KM        Normal depth route from C206 to C207R
569          KM        Source: Field Reconnaissance
570          RS       3    FLOW      -1
571          RC    .055    .039    .055    4972  0.0312
572          RX    1000  1007.4  1014.8  1022.2  1057.6  1068.1  1088.2  1094.2
573          RY     106     104     102     100   100.2   102.2   102.9   105.9
             *

574          KK    S209
575          KM   Sub-Basin   S209
576          KM
577          KM      The Clark Unit Hydrograph is used for this basin.
578          KM          The Natural time-area relation is used for this basin.
579          KM
580          KM      Time of Concentration for this sub-basin is based on the following:
581          KM          6-Hour Rainfall, Pattern No.  1.15
582          KM          An rainfall areal reduction factor of 0.992
583          KM
584          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
585          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
586          KM   .42 .41 .41 .14 .10 .09 .05 .05 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
587          KM
588          KM          L=   1.358 miles, S=  133 feet/mile, Kb= .10
589          KM
590          BA   0.650
591          LG    0.23    0.34    5.00    0.28   16.00
592          UC   0.604   0.345
593          UA       0       3       5       8      12      20      43      75      90      96
594          UA     100
             *

595          KK   C207R
596          KM        Combine routed hydrograph 206207 w/runoff from S209
```

```
597          HC       2
             *

598          KK    S210
599          KM   Sub-Basin   S210
600          KM
601          KM      The Clark Unit Hydrograph is used for this basin.
602          KM          The Urban time-area relation is used for this basin.
603          KM
604          KM      Time of Concentration for this sub-basin is based on the following:
605          KM          6-Hour Rainfall, Pattern No.  1.00
606          KM          An rainfall areal reduction factor of 0.994
607          KM
608          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
609          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
610          KM   .45 .44 .44 .13 .09 .08 .03 .03 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
611          KM
612          KM          L=   1.274 miles, S=  181 feet/mile, Kb= .09
613          KM
614          BA   0.481
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

615          LG    0.22    0.31    5.00    0.28    4.00
616          UC   0.458   0.287
617          UA       0       5      16      30      65      77      84      90      94      97
618          UA     100
             *

619          KK    C207
620          KM        Combine hydrograph from C207R w/runoff from S210
621          HC       2
             *

622          KK  207105
623          KM        Normal depth route from C207 to C105
624          KM        Source: Field Reconnaissance
625          RS       3    FLOW      -1
626          RC    .055    .039    .055    7176  0.0167
627          RX    1000    1003    1006    1009  1038.5  1041.5  1047.5  1053.5
628          RY     109     106     103     100     100     102     106     110
             *

629          KK    S211
630          KM   Sub-Basin   S211
631          KM
632          KM      The Clark Unit Hydrograph is used for this basin.
633          KM          The Urban time-area relation is used for this basin.
634          KM
635          KM      Time of Concentration for this sub-basin is based on the following:
636          KM          6-Hour Rainfall, Pattern No.  1.00
637          KM          An rainfall areal reduction factor of 0.994
638          KM
639          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
640          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
641          KM   .45 .45 .44 .13 .10 .08 .04 .03 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
642          KM
643          KM          L=   1.359 miles, S=  162 feet/mile, Kb= .09
644          KM
645          BA   0.488
646          LG    0.25    0.30    5.20    0.26    7.00
647          UC   0.496   0.327
648          UA       0       5      16      30      65      77      84      90      94      97
649          UA     100
             *

650          KK   C105R
651          KM        Combine routed hydrograph 207105 w/runoff from S211
652          HC       2
             *

653          KK    C105
654          KM        Combine hydrographs from C105L and C105R
655          HC       2
             *
             *  ****************************************************************************
             *                Begin Major Basin 300 (Unnamed Wash 3)
             *  ****************************************************************************
             *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 656          KK    S300
 657          KM   Sub-Basin   S300
 658          KM
 659          KM      The Clark Unit Hydrograph is used for this basin.
 660          KM          The Urban time-area relation is used for this basin.
 661          KM
 662          KM      Time of Concentration for this sub-basin is based on the following:
 663          KM          6-Hour Rainfall, Pattern No.  1.12
 664          KM          An rainfall areal reduction factor of 0.992
 665          KM
 666          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 667          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 668          KM   .43 .42 .42 .14 .11 .10 .05 .05 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
 669          KM
 670          KM          L=   1.776 miles, S=  129 feet/mile, Kb= .04
 671          KM
 672          BA   0.615
 673          LG    0.28    0.28    4.55    0.37   32.00
 674          UC   0.375   0.260
 675          UA       0       5      16      30      65      77      84      90      94      97
 676          UA     100
              *

 677          KK   S300O
 678          KM   VOLUME RETAINED WITHIN SUB-BASIN S300
 679          DT  DIV300    32.6
 680          DI       0    3000
 681          DQ       0    3000
              *

 682          KK    S301
 683          KM   Sub-Basin   S301
 684          KM
 685          KM      The Clark Unit Hydrograph is used for this basin.
 686          KM          The Urban time-area relation is used for this basin.
 687          KM
 688          KM      Time of Concentration for this sub-basin is based on the following:
 689          KM          6-Hour Rainfall, Pattern No.  1.40
 690          KM          An rainfall areal reduction factor of 0.987
 691          KM
 692          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 693          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 694          KM   .36 .36 .36 .15 .13 .12 .07 .07 .07 .04 .04 .04 .02 .02 .02 .01 .01 .01
 695          KM
 696          KM          L=   2.001 miles, S=  190 feet/mile, Kb= .04
 697          KM
 698          BA   0.994
 699          LG    0.29    0.26    4.25    0.45   42.00
 700          UC   0.367   0.212
 701          UA       0       5      16      30      65      77      84      90      94      97
 702          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 17

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 703          KK   S301O
 704          KM   VOLUME RETAINED WITHIN SUB-BASIN S301
 705          DT  DIV301    37.9
 706          DI       0    3000
 707          DQ       0    3000
              *

 708          KK    C300
 709          KM        Combine runoff from S300 and S301
 710          HC       2
              *

 711          KK  300301
 712          KM        Normal depth route from C300 to C301
 713          KM        Source: Field Reconnaissance
 714          RS       5    FLOW      -1
 715          RC    .051    .044    .051    5117  0.0137
 716          RX    1000    1001    1002    1010    1047    1059  1060.5    1062
 717          RY     110     109     108     100     100     108     109     110
              *
```

```
718          KK    S302
719          KM   Sub-Basin   S302
720          KM
721          KM      The Clark Unit Hydrograph is used for this basin.
722          KM          The Natural time-area relation is used for this basin.
723          KM
724          KM      Time of Concentration for this sub-basin is based on the following:
725          KM          6-Hour Rainfall, Pattern No.  1.00
726          KM          An rainfall areal reduction factor of 0.994
727          KM
728          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
729          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
730          KM   .46 .45 .45 .14 .10 .09 .04 .04 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
731          KM
732          KM          L=   1.095 miles, S=  137 feet/mile, Kb= .09
733          KM
734          BA   0.465
735          LG    0.26    0.31    4.55    0.36   29.00
736          UC   0.458   0.259
737          UA       0       3       5       8      12      20      43      75      90      96
738          UA     100
             *

739          KK   S3020
740          KM   VOLUME RETAINED WITHIN SUB-BASIN S302
741          DT  DIV302     8.3
742          DI       0    3000
743          DQ       0    3000
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

744          KK    C301
745          KM        Combine routed hydrograph 300301 w/runoff from S302
746          HC       2
             *

747          KK  301302
748          KM        Normal depth route from C301 to C302
749          KM        Source: Field Reconnaissance
750          RS      11    FLOW      -1
751          RC    .051    .039    .051    8124  0.0086
752          RX    1000    1004  1200.3  1213.6  1240.6  1249.9  1344.4  1369.6
753          RY   110.6   108.6   103.5   100.2     100   104.2   107.4   110.4
             *

754          KK    S303
755          KM   Sub-Basin   S303
756          KM
757          KM      The Clark Unit Hydrograph is used for this basin.
758          KM          The Natural time-area relation is used for this basin.
759          KM
760          KM      Time of Concentration for this sub-basin is based on the following:
761          KM          6-Hour Rainfall, Pattern No.  1.20
762          KM          An rainfall areal reduction factor of 0.991
763          KM
764          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
765          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
766          KM   .39 .39 .38 .13 .09 .08 .04 .04 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
767          KM
768          KM          L=   1.539 miles, S=  188 feet/mile, Kb= .10
769          KM
770          BA   0.708
771          LG    0.24    0.32    4.60    0.35   11.00
772          UC   0.588   0.352
773          UA       0       3       5       8      12      20      43      75      90      96
774          UA     100
             *

775          KK    C302
776          KM        Combine routed hydrograph 301302 w/runoff from S303
777          HC       2
             *

778          KK  302303
779          KM        Normal depth route from C302 to C303
780          KM        Source: Field Reconniassance
781          RS       4    FLOW      -1
```

```
 782          RC    .055    .048    .055    7304  0.0192
 783          RX  995.97  1009.4  1017.8  1026.5  1067.3  1068.7  1071.5 1077.82
 784          RY   107.0     104     102     100     101     102     104   107.0
              *
1                                          HEC-1 INPUT                                                    PAGE 19

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 785          KK    S304
 786          KM   Sub-Basin   S304
 787          KM
 788          KM      The Clark Unit Hydrograph is used for this basin.
 789          KM          The Urban time-area relation is used for this basin.
 790          KM
 791          KM      Time of Concentration for this sub-basin is based on the following:
 792          KM          6-Hour Rainfall, Pattern No.  1.29
 793          KM          An rainfall areal reduction factor of 0.989
 794          KM
 795          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 796          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 797          KM   .38 .38 .37 .14 .11 .10 .06 .05 .05 .01 .01 .01 .00 .00 .00 .00 .00 .00
 798          KM
 799          KM          L=   2.314 miles, S=  186 feet/mile, Kb= .06
 800          KM
 801          BA   0.823
 802          LG    0.25    0.29    5.10    0.27    7.00
 803          UC   0.533   0.403
 804          UA       0       5      16      30      65      77      84      90      94      97
 805          UA     100
              *

 806          KK   S304O
 807          KM   VOLUME RETAINED WITHIN SUB-BASIN S304
 808          DT  DIV304    33.2
 809          DI       0    3000
 810          DQ       0    3000
              *

 811          KK    C303
 812          KM        Combine routed hydrograph 302303 w/runoff from S304
 813          HC       2
              *

 814          KK  WEST-1
 815          KM        Dummy combine of major basins 100, 200 and 300
 816          HC       2
              *
              *  ***************************************************************************
              *                  Begin Major Basin 400 (Caterpillar Tanks Wash)
              *  ***************************************************************************
              *

 817          KK    S400
 818          KM   Sub-Basin   S400
 819          KM
 820          KM      The Clark Unit Hydrograph is used for this basin.
 821          KM          The Natural time-area relation is used for this basin.
 822          KM
 823          KM      Time of Concentration for this sub-basin is based on the following:
 824          KM          6-Hour Rainfall, Pattern No.  1.43
 825          KM          An rainfall areal reduction factor of 0.987
 826          KM
1                                          HEC-1 INPUT                                                    PAGE 20

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 827          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 828          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 829          KM   .37 .37 .36 .17 .15 .14 .09 .08 .08 .04 .03 .03 .02 .02 .01 .01 .01 .01
 830          KM
 831          KM          L=   1.864 miles, S=  110 feet/mile, Kb= .04
 832          KM
 833          BA   1.048
 834          LG    0.24    0.30    5.40    0.22   36.00
 835          UC   0.429   0.232
 836          UA       0       3       5       8      12      20      43      75      90      96
 837          UA     100
              *

 838          KK   S4000
```

```
839          KM   VOLUME RETAINED WITHIN SUB-BASIN S400
840          DT  DIV400    55.3
841          DI       0    3000
842          DQ       0    3000
             *

843          KK   C4000
844          KM        Storage routing at crossing structure no. 78 (see Plate 5)
845          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
846          RS       1    STOR       0
847          SQ       0      62     200     400     540     625     750
848          SE    1508    1511    1514    1520    1526    1532    1540
849          SV       0     5.2    18.6    40.7    71.7   115.5   178.1   266.3
850          SE    1508    1516    1520    1524    1528    1532    1536    1540
             *

851          KK  400401
852          KM        Normal depth route from S400 to C401
853          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
854          RS       9    FLOW      -1
855          RC    .045    .040    .045    7424  0.0101
856          RX  9729.2  9772.7  9849.9   10000 10007.8 10090.6 10147.3 10185.4
857          RY  1509.6  1508.8  1500.2  1475.5  1475.3  1495.3    1496  1497.5
             *

858          KK    S401
859          KM   Sub-Basin   S401
860          KM
861          KM      The Clark Unit Hydrograph is used for this basin.
862          KM          The Urban time-area relation is used for this basin.
863          KM
864          KM      Time of Concentration for this sub-basin is based on the following:
865          KM          6-Hour Rainfall, Pattern No.  1.15
866          KM          An rainfall areal reduction factor of 0.992
867          KM
868          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
869          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
870          KM   .42 .42 .41 .14 .11 .10 .05 .05 .05 .01 .01 .01 .00 .00 .00 .00 .00 .00
871          KM
872          KM          L=   1.349 miles, S=   74 feet/mile, Kb= .04
873          KM
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

874          BA   0.646
875          LG    0.29    0.27    5.10    0.26   13.00
876          UC   0.396   0.216
877          UA       0       5      16      30      65      77      84      90      94      97
878          UA     100
             *

879          KK   S4010
880          KM   VOLUME RETAINED WITHIN SUB-BASIN S401
881          DT  DIV401    36.2
882          DI       0    3000
883          DQ       0    3000
             *

884          KK    C401
885          KM        Combine routed hydrograph 400401 w/runoff from S401
886          HC       2
             *

887          KK  401402
888          KM        Normal depth route from C401 to C402
889          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
890          RS      13    FLOW      -1
891          RC    .045    .043    .045    8029  0.0112
892          RX  9581.3  9756.6  9997.5   10000 10022.2 10086.4 10119.5 10362.5
893          RY  1455.4  1419.3  1413.3  1410.9  1409.8  1414.4    1419  1428.6
             *

894          KK    S402
895          KM   Sub-Basin   S402
896          KM
897          KM      The Clark Unit Hydrograph is used for this basin.
898          KM          The Urban time-area relation is used for this basin.
899          KM
900          KM      Time of Concentration for this sub-basin is based on the following:
901          KM          6-Hour Rainfall, Pattern No.  1.23
```

```
902          KM          An rainfall areal reduction factor of 0.990
903          KM
904          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
905          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
906          KM   .42 .41 .41 .16 .14 .13 .07 .07 .07 .03 .03 .03 .01 .01 .01 .01 .01 .01
907          KM
908          KM          L=   1.468 miles, S=   75 feet/mile, Kb= .03
909          KM
910          BA   0.740
911          LG    0.25    0.28    5.60    0.22   33.00
912          UC   0.342   0.181
913          UA       0       5      16      30      65      77      84      90      94      97
914          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

915          KK   S4020
916          KM   VOLUME RETAINED WITHIN SUB-BASIN S402
917          DT  DIV402    51.8
918          DI       0    3000
919          DQ       0    3000
             *

920          KK    C402
921          KM        Combine routed hydrograph 401402 w/runoff from S402
922          HC       2
             *

923          KK  402403
924          KM        Normal depth route from C402 to C403
925          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
926          RS      11     FLOW      -1
927          RC    .045     .043    .045    6138  0.0049
928          RX   9267.  9571.2  9916.2  9988.7  9997.4 10095.3 10157.8   10641
929          RY  1395.9  1388.7  1383.7    1355    1355  1361.4  1359.6    1378
930          RL                     0.03  1355.0
             *

931          KK    S403
932          KM   Sub-Basin   S403
933          KM
934          KM      The Clark Unit Hydrograph is used for this basin.
935          KM          The Urban time-area relation is used for this basin.
936          KM
937          KM      Time of Concentration for this sub-basin is based on the following:
938          KM          6-Hour Rainfall, Pattern No.  1.06
939          KM          An rainfall areal reduction factor of 0.993
940          KM
941          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
942          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
943          KM   .48 .47 .47 .18 .15 .15 .08 .08 .07 .06 .06 .06 .01 .01 .01 .01 .01 .01
944          KM
945          KM          L=   1.638 miles, S=   52 feet/mile, Kb= .02
946          KM
947          BA   0.559
948          LG    0.23    0.16    8.00    0.09   37.00
949          UC   0.300   0.201
950          UA       0       5      16      30      65      77      84      90      94      97
951          UA     100
             *

952          KK   S4030
953          KM   VOLUME RETAINED WITHIN SUB-BASIN S403
954          DT  DIV403    49.4
955          DI       0    3000
956          DQ       0    3000
             *
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

957          KK    C403
958          KM        Combine routed hydrograph 402403 w/runoff from S403
959          HC       2
             *

960          KK  403404
```

```
 961          KM        Normal depth route from C403 to C404
 962          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
 963          RS       3    FLOW      -1
 964          RC    .045     .045     .045    4256   .0164
 965          RX  9506.5  9551.7  9955.5    9995 10007.4 10060.9 10227.2 10315.3
 966          RY  1300.9  1282.3  1282.7  1276.7  1276.5  1283.5  1283.3  1302.1
 967          RL                    0.03  1276.5
              *

 968          KK    S404
 969          KM   Sub-Basin   S404
 970          KM
 971          KM      The Clark Unit Hydrograph is used for this basin.
 972          KM          The Natural time-area relation is used for this basin.
 973          KM
 974          KM      Time of Concentration for this sub-basin is based on the following:
 975          KM          6-Hour Rainfall, Pattern No.  1.00
 976          KM          An rainfall areal reduction factor of 0.997
 977          KM
 978          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 979          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 980          KM   .47 .46 .46 .15 .12 .11 .05 .05 .04 .02 .01 .01 .00 .00 .00 .00 .00 .00
 981          KM
 982          KM          L=   0.773 miles, S=  181 feet/mile, Kb= .09
 983          KM
 984          BA   0.263
 985          LG    0.26     0.33     6.60     0.14     8.00
 986          UC   0.313    0.177
 987          UA       0        3        5        8       12       20       43       75       90       96
 988          UA     100
              *

 989          KK   S4040
 990          KM   VOLUME RETAINED WITHIN SUB-BASIN 404
 991          DT  DIV404     2.9
 992          DI       0    3000
 993          DQ       0    3000
              *

 994          KK    C404
 995          KM        Combine routed hydrograph C403 w/runoff S404
 996          HC       2
              *
```

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```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 997          KK  WEST-2
 998          KM        Dummy combine of major basins 100, 200, 300 and 400
 999          HC       2
              *
              *  ****************************************************************************
              *                Begin Major Basin 500 (Twin Buttes Wash)
              *  ****************************************************************************
              *

1000          KK    S500
1001          KM   Sub-Basin   S500
1002          KM
1003          KM      The Clark Unit Hydrograph is used for this basin.
1004          KM          The Urban time-area relation is used for this basin.
1005          KM
1006          KM      Time of Concentration for this sub-basin is based on the following:
1007          KM          6-Hour Rainfall, Pattern No.  1.43
1008          KM          An rainfall areal reduction factor of 0.987
1009          KM
1010          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1011          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1012          KM   .35 .35 .35 .15 .13 .12 .07 .07 .07 .04 .04 .04 .02 .02 .02 .01 .01 .01
1013          KM
1014          KM          L=   2.399 miles, S=  117 feet/mile, Kb= .06
1015          KM
1016          BA   1.054
1017          LG    0.28     0.29     4.25     0.43    39.00
1018          UC   0.675    0.467
1019          UA       0        5       16       30       65       77       84       90       94       97
1020          UA     100
              *

1021          KK   S5000
```

```
1022          KM   VOLUME RETAINED WITHIN SUB-BASIN S500
1023          DT  DIV500    46.6
1024          DI       0    3000
1025          DQ       0    3000
              *

1026          KK  500501
1027          KM        Normal depth route from S500 to C501
1028          KM        Source: Field Reconnaissance
1029          RS       6    FLOW      -1
1030          RC    0.05   0.035    0.05    5972  0.0134
1031          RX    1000    1004    1032    1047    1069 1072.75  1075.9  1081.9
1032          RY   105.7   101.7    99.6    96.8    97.1    99.6   101.7   105.7
              *

1033          KK    S501
1034          KM   Sub-Basin   S501
1035          KM
1036          KM      The Clark Unit Hydrograph is used for this basin.
1037          KM          The Urban time-area relation is used for this basin.
1038          KM
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1039          KM      Time of Concentration for this sub-basin is based on the following:
1040          KM          6-Hour Rainfall, Pattern No.  1.12
1041          KM          An rainfall areal reduction factor of 0.992
1042          KM
1043          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1044          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1045          KM   .43 .42 .42 .14 .10 .09 .05 .04 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
1046          KM
1047          KM          L=   1.486 miles, S=  135 feet/mile, Kb= .06
1048          KM
1049          BA   0.614
1050          LG    0.27    0.29    4.45    0.38   27.00
1051          UC   0.438   0.268
1052          UA       0       5      16      30      65      77      84      90      94      97
1053          UA     100
              *

1054          KK   S501O
1055          KM   VOLUME RETAINED WITHIN SUB-BASIN S501
1056          DT  DIV501    25.1
1057          DI       0    3000
1058          DQ       0    3000
              *

1059          KK    C501
1060          KM        Combine routed hydrograph 500501 w/runoff from S501
1061          HC       2
              *

1062          KK  501502
1063          KM        Normal depth route from C501 to C502L
1064          KM        Source: Field Reconniassance
1065          RS       3    FLOW      -1
1066          RC    0.05   0.035    0.05    5021  0.0159
1067          RX    1000    1001    1002    1006    1035    1039    1040    1041
1068          RY     106     105     104     100     100     104     105     106
1069          RL                    0.94   100.0
              *

1070          KK    S502
1071          KM   Sub-Basin   S502
1072          KM
1073          KM      The Clark Unit Hydrograph is used for this basin.
1074          KM          The Natural time-area relation is used for this basin.
1075          KM
1076          KM      Time of Concentration for this sub-basin is based on the following:
1077          KM          6-Hour Rainfall, Pattern No.  1.00
1078          KM          An rainfall areal reduction factor of 0.995
1079          KM
1080          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1081          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1082          KM   .45 .45 .44 .13 .09 .08 .04 .03 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
1083          KM
1084          KM          L=   1.053 miles, S=  209 feet/mile, Kb= .11
1085          KM
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1086          BA   0.403
1087          LG    0.27    0.30    4.50    0.36   22.00
1088          UC   0.424   0.250
1089          UA       0       3       5       8      12      20      43      75      90      96
1090          UA     100
              *

1091          KK   S502O
1092          KM   VOLUME RETAINED WITHIN SUB-BASIN S502
1093          DT  DIV502    13.3
1094          DI       0    3000
1095          DQ       0    3000
              *

1096          KK   C502L
1097          KM        Combine routed hydrograph 501502 w/runoff from S502
1098          HC       2
              *

1099          KK    S503
1100          KM   Sub-Basin   S503
1101          KM
1102          KM      The Clark Unit Hydrograph is used for this basin.
1103          KM         The Urban time-area relation is used for this basin.
1104          KM
1105          KM      Time of Concentration for this sub-basin is based on the following:
1106          KM          6-Hour Rainfall, Pattern No.  1.40
1107          KM          An rainfall areal reduction factor of 0.987
1108          KM
1109          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1110          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1111          KM   .37 .36 .36 .15 .13 .12 .07 .07 .07 .03 .03 .03 .01 .01 .01 .01 .01 .01
1112          KM
1113          KM          L=   1.891 miles, S=  116 feet/mile, Kb= .06
1114          KM
1115          BA   0.994
1116          LG    0.27    0.28    4.65    0.33   31.00
1117          UC   0.567   0.329
1118          UA       0       5      16      30      65      77      84      90      94      97
1119          UA     100
              *

1120          KK   S503O
1121          KM   VOLUME RETAINED WITHIN SUB-BASIN S503
1122          DT  DIV503    25.5
1123          DI       0    3000
1124          DQ       0    3000
              *

1125          KK   C502I
1126          KM        Combine hydrograph from C502L w/runoff from S503
1127          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1128          KK   C502O
1129          KM        Storage routing at crossing structure no. 81
1130          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1131          RS       1    STOR       0
1132          SQ       0     248     800    1600    2160    2500    2900    3200
1133          SE    1500    1503    1506    1512    1518    1524    1530    1536
1134          SV       0    2.37    9.23   20.95   37.67  122.58   212.7  516.24
1135          SE    1500    1508    1512    1516    1520    1528    1532    1540
              *

1136          KK  502505
1137          KM        Normal depth route from C502 to C505L
1138          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1139          RS       7    FLOW      -1
1140          RC    .046     .04    .046    8775  0.0091
1141          RX  9875.7  9921.8  9941.2  9962.7 10048.7 10088.3 10258.2 10339.9
1142          RY  1488.4  1476.5  1472.2    1469  1470.4  1480.9  1485.4  1497.1
1143          RL                    0.94    1469
              *
```

```
1144          KK    S504
1145          KM   Sub-Basin   S504
1146          KM
1147          KM      The Clark Unit Hydrograph is used for this basin.
1148          KM          The Urban time-area relation is used for this basin.
1149          KM
1150          KM      Time of Concentration for this sub-basin is based on the following:
1151          KM          6-Hour Rainfall, Pattern No.  1.00
1152          KM          An rainfall areal reduction factor of 0.996
1153          KM
1154          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1155          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1156          KM   .46 .46 .45 .14 .11 .10 .04 .04 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
1157          KM
1158          KM          L=   1.571 miles, S=   64 feet/mile, Kb= .04
1159          KM
1160          BA   0.326
1161          LG    0.24    0.25    4.40    0.39   33.00
1162          UC   0.450   0.415
1163          UA       0       5      16      30      65      77      84      90      94      97
1164          UA     100
              *

1165          KK   S504O
1166          KM   VOLUME RETAINED WITHIN SUB-BASIN S504
1167          DT  DIV504    26.1
1168          DI       0    3000
1169          DQ       0    3000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1170          KK   C505L
1171          KM       Combine routed hydrograph 502505 w/runoff from S504
1172          HC       2
              *

1173          KK    S505
1174          KM   Sub-Basin   S505
1175          KM
1176          KM      The Clark Unit Hydrograph is used for this basin.
1177          KM          The Natural time-area relation is used for this basin.
1178          KM
1179          KM      Time of Concentration for this sub-basin is based on the following:
1180          KM          6-Hour Rainfall, Pattern No.  1.00
1181          KM          An rainfall areal reduction factor of 0.998
1182          KM
1183          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1184          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1185          KM   .45 .44 .44 .13 .09 .08 .03 .03 .03 .02 .02 .02 .00 .00 .00 .00 .00 .00
1186          KM
1187          KM          L=   0.472 miles, S=  365 feet/mile, Kb= .14
1188          KM
1189          BA   0.143
1190          LG    0.24    0.33    4.40    0.37   20.00
1191          UC   0.238   0.125
1192          UA       0       3       5       8      12      20      43      75      90      96
1193          UA     100
              *

1194          KK   S505O
1195          KM   VOLUME RETAINED WITHIN SUB-BASIN S505
1196          DT  DIV505     1.8
1197          DI       0    3000
1198          DQ       0    3000
              *

1199          KK   C503O
1200          KM       Storage routing at crossing structure no. 94
1201          KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1202          RS       1    STOR       0
1203          SQ       0     7.5      22      45      71      93     110
1204          SE    1519  1520.25 1521.5    1524    1529    1534    1540
1205          SV       0    0.61    2.78    8.03   18.24
1206          SE    1519    1528    1532    1536    1540
              *

1207          KK  503505
1208          KM       Normal depth route from S505 to C505
```

```
1209          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1210          RS      15    FLOW      -1
1211          RC    .045    .047    .043    9136   .0115
1212          RX    9715  9892.4    9965  9996.6   10000 10044.9 10077.4 10088.5
1213          RY  1504.8  1497.4  1487.9  1471.1  1471.6  1487.4  1484.4  1483.1
1214          RL                    0.63  1471.1
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1215          KK    S506
1216          KM   Sub-Basin   S506
1217          KM
1218          KM      The Clark Unit Hydrograph is used for this basin.
1219          KM          The Natural time-area relation is used for this basin.
1220          KM
1221          KM      Time of Concentration for this sub-basin is based on the following:
1222          KM          6-Hour Rainfall, Pattern No.  1.00
1223          KM          An rainfall areal reduction factor of 0.998
1224          KM
1225          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1226          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1227          KM   .47 .47 .47 .16 .12 .11 .05 .05 .05 .03 .02 .02 .01 .01 .01 .01 .01 .01
1228          KM
1229          KM          L=   0.726 miles, S=  307 feet/mile, Kb= .10
1230          KM
1231          BA   0.151
1232          LG    0.23    0.32    5.70    0.19   27.00
1233          UC   0.258   0.187
1234          UA       0       3       5       8      12      20      43      75      90      96
1235          UA     100
              *

1236          KK   S506O
1237          KM   VOLUME RETAINED WITHIN SUB-BASIN S506
1238          DT  DIV506     6.0
1239          DI       0    3000
1240          DQ       0    3000
              *

1241          KK   C504O
1242          KM        Storage routing at crossing structure no. 93
1243          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1244          RS       1    STOR       0
1245          SQ       0     7.5      22      52      72      90     103     115
1246          SE  1513.9  1515.2  1516.4  1520.2  1524.2  1528.2  1532.2    1540
1247          SV       0     0.1    0.18    1.89    5.34   11.99   24.05    43.4
1248          SE  1513.9  1517.8    1520    1524    1528    1532    1536    1540
              *

1249          KK  504505
1250          KM        Normal depth route from S506 to C505
1251          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1252          RS      13    FLOW      -1
1253          RC    .045    .043    .044    7754  0.0129
1254          RX  9785.2  9855.2  9914.4  9959.2 10013.6 10041.2 10119.8 10183.2
1255          RY    1501  1493.8  1487.5    1473  1468.9  1480.7  1487.9  1494.5
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1256          KK    S507
1257          KM   Sub-Basin   S507
1258          KM
1259          KM      The Clark Unit Hydrograph is used for this basin.
1260          KM          The Urban time-area relation is used for this basin.
1261          KM
1262          KM      Time of Concentration for this sub-basin is based on the following:
1263          KM          6-Hour Rainfall, Pattern No.  1.17
1264          KM          An rainfall areal reduction factor of 0.991
1265          KM
1266          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1267          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1268          KM   .42 .42 .42 .15 .12 .11 .06 .06 .05 .02 .01 .01 .00 .00 .00 .00 .00 .00
1269          KM
1270          KM          L=   1.467 miles, S=   68 feet/mile, Kb= .03
1271          KM
```

```
1272          BA   0.666
1273          LG    0.28    0.25    5.70    0.21   12.00
1274          UC   0.350   0.198
1275          UA       0       5      16      30      65      77      84      90      94      97
1276          UA     100
              *

1277          KK   S507O
1278          KM   VOLUME RETAINED WITHIN SUB-BASIN S507
1279          DT  DIV507    45.5
1280          DI       0    3000
1281          DQ       0    3000
              *

1282          KK   C505R
1283          KM        Combine routed hydrographs 503505 and 504505 w/runoff from S507
1284          HC       3
              *

1285          KK    C505
1286          KM        Combine hydrographs from C505L and C505R
1287          HC       2
              *

1288          KK  505509
1289          KM        Normal depth route from C505 to C509L
1290          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1291          RS      10    FLOW      -1
1292          RC    .046    .047    .036    6213  0.0064
1293          RX  9136.7  9456.9  9928.8   10000 10150.9 10209.7   10414 10505.9
1294          RY  1419.5  1401.9    1395    1390  1390.3  1398.3  1395.1  1398.3
1295          RL                    0.94  1390.0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1296          KK    S508
1297          KM   Sub-Basin   S508
1298          KM
1299          KM      The Clark Unit Hydrograph is used for this basin.
1300          KM          The Urban time-area relation is used for this basin.
1301          KM
1302          KM      Time of Concentration for this sub-basin is based on the following:
1303          KM          6-Hour Rainfall, Pattern No.  1.00
1304          KM          An rainfall areal reduction factor of 0.996
1305          KM
1306          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1307          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1308          KM   .47 .46 .46 .15 .11 .10 .05 .05 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
1309          KM
1310          KM          L=   1.082 miles, S=   92 feet/mile, Kb= .03
1311          KM
1312          BA   0.295
1313          LG    0.28    0.26    5.30    0.25   22.00
1314          UC   0.246   0.166
1315          UA       0       5      16      30      65      77      84      90      94      97
1316          UA     100
              *

1317          KK   S508O
1318          KM   VOLUME RETAINED WITHIN SUB-BASIN S508
1319          DT  DIV508    20.7
1320          DI       0    3000
1321          DQ       0    3000
              *

1322          KK   C509L
1323          KM        Combine routed hydrograph 505509 w/runoff from S508
1324          HC       2
              *

1325          KK    S509
1326          KM   Sub-Basin   S509
1327          KM
1328          KM      The Clark Unit Hydrograph is used for this basin.
1329          KM          The Urban time-area relation is used for this basin.
1330          KM
1331          KM      Time of Concentration for this sub-basin is based on the following:
1332          KM          6-Hour Rainfall, Pattern No.  1.00
```

```
1333          KM          An rainfall areal reduction factor of 0.998
1334          KM
1335          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1336          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1337          KM   .47 .46 .46 .15 .11 .10 .05 .05 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
1338          KM
1339          KM          L=   0.721 miles, S=  304 feet/mile, Kb= .05
1340          KM
1341          BA   0.170
1342          LG    0.28    0.26    4.65    0.33   33.00
1343          UC   0.179   0.116
1                                          HEC-1 INPUT                                          PAGE 32

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1344          UA       0       5      16      30      65      77      84      90      94      97
1345          UA     100
              *

1346          KK   S509O
1347          KM   VOLUME RETAINED WITHIN SUB-BASIN S509
1348          DT  DIV509     5.2
1349          DI       0    3000
1350          DQ       0    3000
              *

1351          KK   C506O
1352          KM        Storage routing at crossing structure no. 84
1353          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1354          RS       1    STOR       0
1355          SQ       0     7.5      22      45      71      93     110
1356          SE    1519 1520.25  1521.5    1524    1529    1534    1540
1357          SV       0     .77    4.36   15.19   35.89
1358          SE    1519    1528    1532    1536    1540
              *

1359          KK  506508
1360          KM        Normal depth route from S506 to C508
1361          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1362          RS       6    FLOW      -1
1363          RC    .045    .045    .035    4023   .0149
1364          RX  9717.6  9800.2  9981.4   10000 10010.3 10036.3 10068.8 10227.2
1365          RY  1512.9  1510.9  1508.9    1502    1499  1505.7  1511.5  1512.3
              *

1366          KK    S510
1367          KM   Sub-Basin   S510
1368          KM
1369          KM      The Clark Unit Hydrograph is used for this basin.
1370          KM          The Urban time-area relation is used for this basin.
1371          KM
1372          KM      Time of Concentration for this sub-basin is based on the following:
1373          KM          6-Hour Rainfall, Pattern No.  1.00
1374          KM          An rainfall areal reduction factor of 0.998
1375          KM
1376          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1377          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1378          KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .06 .06 .06 .01 .01 .01 .01 .01 .01
1379          KM
1380          KM          L=   0.803 miles, S=   75 feet/mile, Kb= .04
1381          KM
1382          BA   0.127
1383          LG    0.24    0.15    7.30    0.11   44.00
1384          UC   0.258   0.224
1385          UA       0       5      16      30      65      77      84      90      94      97
1386          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 33

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1387          KK   S510O
1388          KM   VOLUME RETAINED WITHIN SUB-BASIN S510
1389          DT  DIV510    11.0
1390          DI       0    3000
1391          DQ       0    3000
              *

1392          KK   C508R
1393          KM        Combine routed hydrograph 506508 w/runoff from S510
```

```
1394          HC       2
              *

1395          KK    S511
1396          KM   Sub-Basin   S511
1397          KM
1398          KM      The Clark Unit Hydrograph is used for this basin.
1399          KM          The Urban time-area relation is used for this basin.
1400          KM
1401          KM      Time of Concentration for this sub-basin is based on the following:
1402          KM          6-Hour Rainfall, Pattern No.  1.00
1403          KM          An rainfall areal reduction factor of 0.995
1404          KM
1405          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1406          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1407          KM   .47 .47 .46 .15 .12 .11 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1408          KM
1409          KM          L=   1.319 miles, S=  270 feet/mile, Kb= .05
1410          KM
1411          BA   0.385
1412          LG    0.29     0.28     5.70     0.22    29.00
1413          UC   0.254    0.174
1414          UA       0        5       16       30       65       77       84       90       94       97
1415          UA     100
              *

1416          KK   S511O
1417          KM   VOLUME RETAINED WITHIN SUB-BASIN S511
1418          DT  DIV511     17.6
1419          DI       0     3000
1420          DQ       0     3000
              *

1421          KK   C507O
1422          KM        Storage routing at crossing structure no. 82
1423          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1424          RS       1     STOR        0
1425          SQ       0      7.5       22       45       71       93      108      115
1426          SE    1516 1517.25   1518.5     1521     1526     1531     1536     1540
1427          SV       0      .75     4.47    19.99    60.85   133.63
1428          SE    1520     1524     1528     1532     1536     1540
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1429          KK  507508
1430          KM        Normal depth route from S511 to C508
1431          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1432          RS       9     FLOW       -1
1433          RC    .045     .045     .035     5400    .0111
1434          RX  9723.2   9781.7    9912.   9989.1    10000 10022.9 10089.7 10209.7
1435          RY  1491.1   1490.1   1489.9   1476.5   1477.1  1483.3  1486.2  1492.1
1436          RL                     0.39   1476.5
              *

1437          KK    S512
1438          KM   Sub-Basin   S512
1439          KM
1440          KM      The Clark Unit Hydrograph is used for this basin.
1441          KM          The Urban time-area relation is used for this basin.
1442          KM
1443          KM      Time of Concentration for this sub-basin is based on the following:
1444          KM          6-Hour Rainfall, Pattern No.  1.00
1445          KM          An rainfall areal reduction factor of 0.997
1446          KM
1447          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1448          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1449          KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
1450          KM
1451          KM          L=   0.974 miles, S=   62 feet/mile, Kb= .04
1452          KM
1453          BA   0.214
1454          LG    0.19     0.15     8.00     0.08    48.00
1455          UC   0.313    0.240
1456          UA       0        5       16       30       65       77       84       90       94       97
1457          UA     100
              *

1458          KK   S512O
```

```
1459          KM   VOLUME RETAINED WITHIN SUB-BASIN S512
1460          DT  DIV512    19.6
1461          DI       0    3000
1462          DQ       0    3000
              *

1463          KK   C508L
1464          KM        Combine routed hydrograph 507508 w/runoff from S512
1465          HC       2
              *

1466          KK    C508
1467          KM        Combine hydrographs from C508L and C508R
1468          HC       2
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1469          KK  508509
1470          KM        Normal depth route from C508 to C509
1471          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1472          RS      19    FLOW      -1
1473          RC    .045    .041    .045   10349  0.0077
1474          RX  9573.3  9869.3    9973  9985.2   10000   10053 10231.6 10511.6
1475          RY  1439.9  1425.1  1424.7  1422.1  1419.1  1425.1  1437.1  1444.5
1476          RL                    0.94  1419.1
              *

1477          KK    S513
1478          KM   Sub-Basin   S513
1479          KM
1480          KM      The Clark Unit Hydrograph is used for this basin.
1481          KM          The Urban time-area relation is used for this basin.
1482          KM
1483          KM      Time of Concentration for this sub-basin is based on the following:
1484          KM          6-Hour Rainfall, Pattern No.  1.26
1485          KM          An rainfall areal reduction factor of 0.990
1486          KM
1487          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1488          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1489          KM   .40 .40 .39 .15 .12 .12 .06 .06 .06 .02 .02 .02 .01 .01 .01 .01 .01 .01
1490          KM
1491          KM          L=   2.301 miles, S=   52 feet/mile, Kb= .02
1492          KM
1493          BA   0.778
1494          LG    0.28    0.25    5.40    0.25   19.00
1495          UC   0.408   0.308
1496          UA       0       5      16      30      65      77      84      90      94      97
1497          UA     100
              *

1498          KK   S513O
1499          KM   VOLUME RETAINED WITHIN SUB-BASIN S513
1500          DT  DIV513    57.1
1501          DI       0    3000
1502          DQ       0    3000
              *

1503          KK   C509R
1504          KM        Combine routed hydrograph 508509 w/runoff from S513
1505          HC       2
              *

1506          KK    C509
1507          KM        Combine hydrographs from C509L and C509R
1508          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1509          KK  509510
1510          KM        Normal depth route from C509 to C510
1511          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1512          RS       3    FLOW      -1
1513          RC    .046    .043    .045    1958   .0102
1514          RX  9605.5  9805.1  9911.8   10000 10026.3 10119.6 10293.4 10613.5
1515          RY  1374.6  1369.2  1370.3  1365.5  1365.6  1379.6  1383.9  1390.1
```

```
1516          RL                    0.38  1365.5
              *

1517          KK    S514
1518          KM   Sub-Basin   S514
1519          KM
1520          KM      The Clark Unit Hydrograph is used for this basin.
1521          KM          The Urban time-area relation is used for this basin.
1522          KM
1523          KM      Time of Concentration for this sub-basin is based on the following:
1524          KM          6-Hour Rainfall, Pattern No.  1.15
1525          KM          An rainfall areal reduction factor of 0.992
1526          KM
1527          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1528          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1529          KM   .45 .45 .45 .18 .15 .15 .08 .08 .08 .06 .06 .05 .01 .01 .01 .01 .01 .01
1530          KM
1531          KM          L=   2.147 miles, S=   65 feet/mile, Kb= .02
1532          KM
1533          BA   0.650
1534          LG    0.24    0.16    7.60    0.10   31.00
1535          UC   0.338   0.261
1536          UA      0       5      16      30      65      77      84      90      94      97
1537          UA    100
              *

1538          KK   S5140
1539          KM   VOLUME RETAINED WITHIN SUB-BASIN S514
1540          DT  DIV514    51.8
1541          DI       0    3000
1542          DQ       0    3000
              *

1543          KK    C510
1544          KM        Combine routed hydrograph 509510 w/runoff from S514
1545          HC       2
              *

1546          KK  510511
1547          KM        Normal depth route from C510 to C511
1548          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1549          RS      12    FLOW      -1
1550          RC    .046    .044    .046    6722  0.0067
1551          RX  9361.9  9781.7  9944.4  9985.6   10000 10040.8   10420 11470.9
1552          RY  1382.6  1375.5  1364.2  1355.1  1355.4  1360.8  1363.1  1381.1
1553          RL                    0.38  1355.1
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1554          KK    S515
1555          KM   Sub-Basin   S515
1556          KM
1557          KM      The Clark Unit Hydrograph is used for this basin.
1558          KM          The Urban time-area relation is used for this basin.
1559          KM
1560          KM      Time of Concentration for this sub-basin is based on the following:
1561          KM          6-Hour Rainfall, Pattern No.  1.46
1562          KM          An rainfall areal reduction factor of 0.986
1563          KM
1564          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1565          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1566          KM   .38 .38 .38 .19 .17 .17 .11 .10 .10 .07 .07 .07 .03 .03 .03 .02 .02 .02
1567          KM
1568          KM          L=   1.948 miles, S=   54 feet/mile, Kb= .02
1569          KM
1570          BA   1.102
1571          LG    0.25    0.16    8.80    0.06   29.00
1572          UC   0.363   0.193
1573          UA      0       5      16      30      65      77      84      90      94      97
1574          UA    100
              *

1575          KK   S5150
1576          KM   VOLUME RETAINED WITHIN SUB-BASIN S515
1577          DT  DIV515    84.7
1578          DI       0    3000
1579          DQ       0    3000
              *
```

```
1580          KK    C511
1581          KM        Combine routed hydrograph 510511 w/runoff from S515
1582          HC       2
              *

1583          KK  511512
1584          KM        Normal depth route from C511 to C512
1585          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1586          RS      10    FLOW      -1
1587          RC    .046    .044    .046    9226  0.0081
1588          RX  9565.4  9665.5  9852.4   10000 10019.5 10074.2 10242.6   10760
1589          RY  1305.6  1305.6  1303.1  1297.8  1296.9  1336.3  1339.9  1336.5
1590          RL                    0.40  1296.9
              *

1591          KK    S516
1592          KM   Sub-Basin   S516
1593          KM
1594          KM      The Clark Unit Hydrograph is used for this basin.
1595          KM          The Urban time-area relation is used for this basin.
1596          KM
1597          KM      Time of Concentration for this sub-basin is based on the following:
1598          KM          6-Hour Rainfall, Pattern No.  1.04
1599          KM          An rainfall areal reduction factor of 0.993
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1600          KM
1601          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1602          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1603          KM   .47 .46 .46 .16 .13 .12 .06 .06 .06 .04 .04 .04 .01 .01 .01 .01 .01 .01
1604          KM
1605          KM          L=   1.747 miles, S=   66 feet/mile, Kb= .03
1606          KM
1607          BA   0.540
1608          LG    0.22    0.27    4.80    0.29   47.00
1609          UC   0.383   0.283
1610          UA       0       5      16      30      65      77      84      90      94      97
1611          UA     100
              *

1612          KK   S516O
1613          KM   VOLUME RETAINED WITHIN SUB-BASIN S516
1614          DT  DIV516    39.4
1615          DI       0    3000
1616          DQ       0    3000
              *

1617          KK    C512
1618          KM        Combine routed hydrograph 511512 w/runoff from S516
1619          HC       2
              *

1620          KK  WEST-3
1621          KM        Dummy combine of major basins S100, S200, S300, S400 and S500
1622          HC       2
              *
              *  ******************************************************************************
              *                 Begin Major Basin 600 (Morgan City Wash)
              *  ******************************************************************************
              *

1623          KK    S600
1624          KM   Sub-Basin   S600
1625          KM
1626          KM      The Clark Unit Hydrograph is used for this basin.
1627          KM          The Natural time-area relation is used for this basin.
1628          KM
1629          KM      Time of Concentration for this sub-basin is based on the following:
1630          KM          6-Hour Rainfall, Pattern No.  1.81
1631          KM          An rainfall areal reduction factor of 0.980
1632          KM
1633          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1634          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1635          KM   .24 .24 .23 .13 .12 .10 .08 .08 .08 .02 .02 .02 .01 .01 .01 .01 .01 .01
1636          KM
1637          KM          L=   2.796 miles, S=  271 feet/mile, Kb= .09
1638          KM
1639          BA   2.018
```

```
1640          LG    0.25    0.35    4.00    0.49   22.00
1641          UC   0.796   0.438
1642          UA       0       3       5       8      12      20      43      75      90      96
1                                          HEC-1 INPUT                                          PAGE 3

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1643          UA     100
              *

1644          KK  600601
1645          KM        Normal depth route from S600 to C601
1646          KM        Source: Morgan City Wash FDS, FCD 89-15
1647          RS       2    FLOW      -1
1648          RC    0.05   0.035    0.05    3463   .0332
1649          RX     100     110     135     200     220     260     275     290
1650          RY    2516    2512    2504    2500    2510    2520    2530    2540
              *

1651          KK    S601
1652          KM   Sub-Basin   S601
1653          KM
1654          KM      The Clark Unit Hydrograph is used for this basin.
1655          KM          The Natural time-area relation is used for this basin.
1656          KM
1657          KM      Time of Concentration for this sub-basin is based on the following:
1658          KM          6-Hour Rainfall, Pattern No.  1.34
1659          KM          An rainfall areal reduction factor of 0.988
1660          KM
1661          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1662          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1663          KM   .39 .39 .38 .17 .14 .13 .08 .08 .08 .04 .04 .04 .02 .02 .02 .01 .01 .01
1664          KM
1665          KM          L=   1.840 miles, S=  232 feet/mile, Kb= .10
1666          KM
1667          BA   0.901
1668          LG    0.25    0.39    5.70    0.21   44.00
1669          UC   0.575   0.346
1670          UA       0       3       5       8      12      20      43      75      90      96
1671          UA     100
              *

1672          KK    C601
1673          KM        Combine routed hydrograph from S600 w/runoff from S601
1674          HC       2
              *

1675          KK  601602
1676          KM        Normal depth route from S601 to C602
1677          KM        Source: Morgan City Wash FDS, FCD 89-15
1678          RS       3    FLOW      -1
1679          RC    0.05   0.035    0.05    6017   .0266
1680          RX     100     130     140     155     245     255     270     340
1681          RY    2380    2360    2356    2352    2352    2356    2360    2380
              *

1682          KK    S603
1683          KM   Sub-Basin   S603
1684          KM
1685          KM      The Clark Unit Hydrograph is used for this basin.
1686          KM          The Natural time-area relation is used for this basin.
1687          KM
1                                          HEC-1 INPUT                                          PAGE 40

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1688          KM      Time of Concentration for this sub-basin is based on the following:
1689          KM          6-Hour Rainfall, Pattern No.  1.17
1690          KM          An rainfall areal reduction factor of 0.991
1691          KM
1692          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1693          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1694          KM   .43 .43 .43 .16 .13 .12 .07 .07 .06 .04 .04 .04 .01 .01 .01 .01 .01 .01
1695          KM
1696          KM          L=   1.377 miles, S=  326 feet/mile, Kb= .10
1697          KM
1698          BA   0.665
1699          LG    0.25    0.39    5.80    0.20   41.00
1700          UC   0.400   0.218
1701          UA       0       3       5       8      12      20      43      75      90      96
1702          UA     100
```

```
                 *
1703             KK   C602L
1704             KM        Combine routed hydrogaph 601602 w/runoff from S603
1705             HC       2
                 *

1706             KK    S602
1707             KM   Sub-Basin   S602
1708             KM
1709             KM      The Clark Unit Hydrograph is used for this basin.
1710             KM          The Natural time-area relation is used for this basin.
1711             KM
1712             KM      Time of Concentration for this sub-basin is based on the following:
1713             KM          6-Hour Rainfall, Pattern No.  1.77
1714             KM          An rainfall areal reduction factor of 0.981
1715             KM
1716             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1717             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1718             KM   .27 .26 .26 .15 .14 .13 .09 .09 .09 .03 .03 .03 .02 .02 .02 .02 .01 .01
1719             KM
1720             KM          L=   3.035 miles, S=  258 feet/mile, Kb= .09
1721             KM
1722             BA   1.883
1723             LG    0.25    0.35    4.35    0.41   35.00
1724             UC   0.800   0.489
1725             UA       0       3       5       8      12      20      43      75      90      96
1726             UA     100
                 *

1727             KK    C602
1728             KM        Combine hydrograph at C602L w/runoff from S602
1729             HC       2
                 *
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1730             KK  602603
1731             KM        Normal depth route from C602 to C603L
1732             KM        Source: Morgan City Wash FDS, FCD 89-15
1733             RS       7    FLOW      -1
1734             RC    0.05   0.035    0.05    7614   .0171
1735             RX    1000    1020    1045    1065    1322    1340    1372    1405
1736             RY    2228    2224    2220    2212    2212    2220    2240    2260
1737             RL                    0.96  2212.0
                 *

1738             KK    S606
1739             KM   Sub-Basin   S606
1740             KM
1741             KM      The Clark Unit Hydrograph is used for this basin.
1742             KM          The Natural time-area relation is used for this basin.
1743             KM
1744             KM      Time of Concentration for this sub-basin is based on the following:
1745             KM          6-Hour Rainfall, Pattern No.  1.16
1746             KM          An rainfall areal reduction factor of 0.991
1747             KM
1748             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1749             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1750             KM   .42 .41 .41 .14 .11 .09 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1751             KM
1752             KM          L=   2.111 miles, S=  300 feet/mile, Kb= .10
1753             KM
1754             BA   0.660
1755             LG    0.26    0.35    4.50    0.37   35.00
1756             UC   0.575   0.461
1757             UA       0       3       5       8      12      20      43      75      90      96
1758             UA     100
                 *

1759             KK   C603L
1760             KM        Combine routed hydrograph 602603 w/runoff from S606
1761             HC       2
                 *

1762             KK    S605
1763             KM   Sub-Basin   S605
1764             KM
1765             KM      The Clark Unit Hydrograph is used for this basin.
```

```
1766        KM          The Natural time-area relation is used for this basin.
1767        KM
1768        KM      Time of Concentration for this sub-basin is based on the following:
1769        KM          6-Hour Rainfall, Pattern No.  1.45
1770        KM          An rainfall areal reduction factor of 0.986
1771        KM
1772        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1773        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1774        KM   .34 .34 .34 .14 .12 .11 .07 .07 .07 .03 .03 .03 .02 .02 .01 .01 .01 .01
1775        KM
1776        KM          L=   2.322 miles, S=  229 feet/mile, Kb= .10
1777        KM
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1778        BA   1.085
1779        LG    0.25    0.35    4.35    0.41   35.00
1780        UC   0.725   0.485
1781        UA       0       3       5       8      12      20      43      75      90      96
1782        UA     100
            *

1783        KK    S604
1784        KM   Sub-Basin   S604
1785        KM
1786        KM      The Clark Unit Hydrograph is used for this basin.
1787        KM          The Natural time-area relation is used for this basin.
1788        KM
1789        KM      Time of Concentration for this sub-basin is based on the following:
1790        KM          6-Hour Rainfall, Pattern No.  1.97
1791        KM          An rainfall areal reduction factor of 0.976
1792        KM
1793        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1794        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1795        KM   .22 .22 .21 .16 .15 .14 .11 .10 .10 .03 .03 .03 .02 .02 .02 .02 .02 .02
1796        KM
1797        KM          L=   4.105 miles, S=  207 feet/mile, Kb= .09
1798        KM
1799        BA   2.656
1800        LG    0.25    0.35    4.35    0.41   35.00
1801        UC   1.121   0.745
1802        UA       0       3       5       8      12      20      43      75      90      96
1803        UA     100
            *

1804        KK    C603
1805        KM        Combine hydrograph from C603L w/runoff from  S605, and S604
1806        HC       3
            *

1807        KK  603604
1808        KM        Normal depth route from C603 to C604R
1809        KM        Source: Morgan City Wash FDS, FCD 89-15
1810        RS       4    FLOW      -1
1811        RC    0.05   0.035    0.05    7830   .0192
1812        RX    1000    1022    1038    1053    1328    1375    1410    1430
1813        RY    2108    2104    2100    2088    2088    2100    2108    2112
1814        RL                    0.96  2088.0
            *

1815        KK    S609
1816        KM   Sub-Basin   S609
1817        KM
1818        KM      The Clark Unit Hydrograph is used for this basin.
1819        KM          The Natural time-area relation is used for this basin.
1820        KM
1821        KM      Time of Concentration for this sub-basin is based on the following:
1822        KM          6-Hour Rainfall, Pattern No.  1.07
1823        KM          An rainfall areal reduction factor of 0.993
1824        KM
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1825        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1826        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1827        KM   .43 .42 .42 .12 .09 .07 .03 .03 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
1828        KM
1829        KM          L=   2.239 miles, S=  214 feet/mile, Kb= .09
1830        KM
```

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1831          BA   0.560
1832          LG    0.28    0.32    4.10    0.47   28.00
1833          UC   0.654   0.613
1834          UA       0       3       5       8      12      20      43      75      90      96
1835          UA     100
              *

1836          KK   S6090
1837          KM   VOLUME RETAINED WITHIN SUB-BASIN S609
1838          DT  DIV609    10.2
1839          DI       0    3000
1840          DQ       0    3000
              *

1841          KK   C604R
1842          KM        Combine routed hydrograph 603604 w/runoff from S609
1843          HC       2
              *

1844          KK    S607
1845          KM   Sub-Basin   S607
1846          KM
1847          KM      The Clark Unit Hydrograph is used for this basin.
1848          KM          The Natural time-area relation is used for this basin.
1849          KM
1850          KM      Time of Concentration for this sub-basin is based on the following:
1851          KM          6-Hour Rainfall, Pattern No.  1.29
1852          KM          An rainfall areal reduction factor of 0.989
1853          KM
1854          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1855          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1856          KM   .40 .39 .39 .15 .13 .12 .07 .07 .06 .03 .03 .03 .01 .01 .01 .01 .01 .01
1857          KM
1858          KM          L=   2.567 miles, S=  257 feet/mile, Kb= .10
1859          KM
1860          BA   0.822
1861          LG    0.26    0.35    5.10    0.27   35.00
1862          UC   0.700   0.592
1863          UA       0       3       5       8      12      20      43      75      90      96
1864          UA     100
              *

1865          KK   S6070
1866          KM   VOLUME RETAINED WITHIN SUB-BASIN S607
1867          DT  DIV607     5.4
1868          DI       0    3000
1869          DQ       0    3000
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1870          KK    C604
1871          KM        Combine hydrograph from C604R w/runoff from S607
1872          HC       2
              *

1873          KK  604605
1874          KM        Normal depth route from C604 to C605
1875          KM        Source: Morgan City Wash FDS, FCD 89-15
1876          RS       1    FLOW      -1
1877          RC    0.05   0.035    0.05    1543   .0065
1878          RX    1000    1080    1110    1125    1210    1292    1340    1375
1879          RY    2016    2112    2000    1984    1984    1992    2000    2008
              *

1880          KK    S608
1881          KM   Sub-Basin   S608
1882          KM
1883          KM      The Clark Unit Hydrograph is used for this basin.
1884          KM          The Natural time-area relation is used for this basin.
1885          KM
1886          KM      Time of Concentration for this sub-basin is based on the following:
1887          KM          6-Hour Rainfall, Pattern No.  1.01
1888          KM          An rainfall areal reduction factor of 0.993
1889          KM
1890          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1891          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1892          KM   .47 .46 .46 .16 .12 .11 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
1893          KM
```

```
1894          KM          L=   1.398 miles, S=  230 feet/mile, Kb= .09
1895          KM
1896          BA   0.508
1897          LG    0.27    0.36    5.80    0.20   37.00
1898          UC   0.421   0.272
1899          UA       0       3       5       8      12      20      43      75      90      96
1900          UA     100
              *

1901          KK   S6080
1902          KM   VOLUME RETAINED WITHIN SUB-BASIN S608
1903          DT  DIV608     9.0
1904          DI       0    3000
1905          DQ       0    3000
              *

1906          KK    C605
1907          KM        Combine routed hydrograph from 604605 w/runoff from S608
1908          HC       2
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1909          KK  605606
1910          KM        Normal depth route from C605 to C606L
1911          KM        Source: Morgan City Wash FDS, FCD 89-15
1912          RS       3    FLOW      -1
1913          RC    0.05   0.035    0.05    5520   .0199
1914          RX    1000    1052    1190    1248    1281    1340    1368    1395
1915          RY    1940    1928    1928    1924    1924    1928    1936    1940
1916          RL                    0.96  1924.0
              *

1917          KK    S610
1918          KM   Sub-Basin   S610
1919          KM
1920          KM      The Clark Unit Hydrograph is used for this basin.
1921          KM          The Urban time-area relation is used for this basin.
1922          KM
1923          KM      Time of Concentration for this sub-basin is based on the following:
1924          KM          6-Hour Rainfall, Pattern No.  1.11
1925          KM          An rainfall areal reduction factor of 0.992
1926          KM
1927          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1928          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1929          KM   .45 .44 .44 .16 .13 .12 .06 .06 .06 .04 .04 .03 .01 .01 .01 .01 .01 .01
1930          KM
1931          KM          L=   1.869 miles, S=  118 feet/mile, Kb= .06
1932          KM
1933          BA   0.603
1934          LG    0.28    0.30    5.10    0.27   40.00
1935          UC   0.521   0.395
1936          UA       0       5      16      30      65      77      84      90      94      97
1937          UA     100
              *

1938          KK   C606L
1939          KM        Combine routed hydrograph 605606 w/runoff from S610
1940          HC       2
              *

1941          KK    S612
1942          KM   Sub-Basin   S612
1943          KM
1944          KM      The Clark Unit Hydrograph is used for this basin.
1945          KM          The Urban time-area relation is used for this basin.
1946          KM
1947          KM      Time of Concentration for this sub-basin is based on the following:
1948          KM          6-Hour Rainfall, Pattern No.  1.28
1949          KM          An rainfall areal reduction factor of 0.989
1950          KM
1951          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1952          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1953          KM   .41 .41 .41 .17 .15 .14 .08 .08 .08 .04 .03 .03 .01 .01 .01 .01 .01 .01
1954          KM
1955          KM          L=   2.531 miles, S=  230 feet/mile, Kb= .08
1956          KM
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1957          BA   0.808
1958          LG    0.29    0.26    6.40    0.16   34.00
1959          UC   0.596   0.494
1960          UA       0       5      16      30      65      77      84      90      94      97
1961          UA     100
              *

1962          KK    C606
1963          KM        Combine hydrograph from C606L w/runoff from S612
1964          HC       2
              *

1965          KK  606608
1966          KM        Normal depth route from C606 to C608
1967          KM        Source: Morgan City Wash FDS, FCD 89-15
1968          RS       1    FLOW      -1
1969          RC    0.05   0.035    0.05    1141   .0175
1970          RX    1000    1034    1070    1150    1237    1280    1378    1420
1971          RY    1888    1880    1876    1868    1868    1876    1900    1920
1972          RL                    0.96  1868.0
              *

1973          KK    S611
1974          KM   Sub-Basin   S611
1975          KM
1976          KM      The Clark Unit Hydrograph is used for this basin.
1977          KM          The Natural time-area relation is used for this basin.
1978          KM
1979          KM      Time of Concentration for this sub-basin is based on the following:
1980          KM          6-Hour Rainfall, Pattern No.  1.07
1981          KM          An rainfall areal reduction factor of 0.993
1982          KM
1983          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1984          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1985          KM   .44 .43 .43 .13 .10 .08 .04 .04 .04 .03 .03 .03 .01 .01 .01 .01 .01 .01
1986          KM
1987          KM          L=   1.286 miles, S=  270 feet/mile, Kb= .12
1988          KM
1989          BA   0.569
1990          LG    0.25    0.35    4.35    0.41   35.00
1991          UC   0.479   0.276
1992          UA       0       3       5       8      12      20      43      75      90      96
1993          UA     100
              *

1994          KK  607608
1995          KM        Normal depth route from S611 to S613
1996          KM        Source: Field Reconnaissance
1997          RS       5    FLOW      -1
1998          RC    .075     .03    .075   11167  0.0242
1999          RX     100     106     114     120     168     172     232     292
2000          RY     110     107     103     100     100     104     107     110
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2001          KK    S613
2002          KM   Sub-Basin   S613
2003          KM
2004          KM      The Clark Unit Hydrograph is used for this basin.
2005          KM          The Natural time-area relation is used for this basin.
2006          KM
2007          KM      Time of Concentration for this sub-basin is based on the following:
2008          KM          6-Hour Rainfall, Pattern No.  1.74
2009          KM          An rainfall areal reduction factor of 0.982
2010          KM
2011          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2012          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2013          KM   .28 .28 .28 .16 .15 .14 .10 .10 .10 .03 .03 .03 .02 .02 .02 .02 .01 .01
2014          KM
2015          KM          L=   2.525 miles, S=  131 feet/mile, Kb= .09
2016          KM
2017          BA   1.797
2018          LG    0.28    0.29    4.55    0.35   36.00
2019          UC   0.913   0.502
2020          UA       0       3       5       8      12      20      43      75      90      96
2021          UA     100
```

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                 *
2022             KK    C608
2023             KM        Combine routed hydrograph 606608 and 607608 w/runoff from S613
2024             HC       3
                 *

2025             KK  608609
2026             KM        Normal depth route from C608 to C609
2027             KM        Source: Morgan City Wash FDS, FCD 89-15
2028             RS       4    FLOW      -1
2029             RC    0.05   0.035    0.05    6518   .0123
2030             RX    1000    1031    1052    1090    1132    1290    1320    1360
2031             RY    1860    1848    1844    1836    1836    1844    1848    1860
2032             RL                    0.94  1836.0
                 *

2033             KK    S614
2034             KM   Sub-Basin   S614
2035             KM
2036             KM      The Clark Unit Hydrograph is used for this basin.
2037             KM          The Natural time-area relation is used for this basin.
2038             KM
2039             KM      Time of Concentration for this sub-basin is based on the following:
2040             KM          6-Hour Rainfall, Pattern No.  1.45
2041             KM          An rainfall areal reduction factor of 0.986
2042             KM
2043             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2044             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2045             KM   .35 .34 .34 .15 .12 .11 .07 .07 .07 .03 .03 .03 .02 .02 .01 .01 .01 .01
2046             KM
2047             KM          L=   2.285 miles, S=  149 feet/mile, Kb= .10
2048             KM
```



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LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2049             BA   1.079
2050             LG    0.26    0.32    4.40    0.39   35.00
2051             UC   0.854   0.576
2052             UA       0       3       5       8      12      20      43      75      90      96
2053             UA     100
                 *

2054             KK    C609
2055             KM        Combine routed hydrograph 608609 w/runoff from S614
2056             HC       2
                 *

2057             KK  609611
2058             KM        Normal depth route from C609 to C611R
2059             KM        Source: Morgan City Wash FDS, FCD 89-15
2060             RS       6    FLOW      -1
2061             RC    0.05   0.035    0.05    6519   .0031
2062             RX    1000    1070    1145    1230    1410    1430    1550    1642
2063             RY    1732    1720    1716    1708    1708    1716    1720    1740
2064             RL                    0.94  1708.0
                 *

2065             KK    S617
2066             KM   Sub-Basin   S617
2067             KM
2068             KM      The Clark Unit Hydrograph is used for this basin.
2069             KM          The Urban time-area relation is used for this basin.
2070             KM
2071             KM      Time of Concentration for this sub-basin is based on the following:
2072             KM          6-Hour Rainfall, Pattern No.  1.17
2073             KM          An rainfall areal reduction factor of 0.991
2074             KM
2075             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2076             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2077             KM   .42 .41 .41 .14 .11 .10 .05 .05 .05 .02 .02 .02 .01 .01 .01 .01 .01 .01
2078             KM
2079             KM          L=   1.368 miles, S=  154 feet/mile, Kb= .08
2080             KM
2081             BA   0.675
2082             LG    0.26    0.31    4.80    0.31   24.00
2083             UC   0.479   0.263
2084             UA       0       5      16      30      65      77      84      90      94      97
2085             UA     100
                 *
```

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2086          KK   C611R
2087          KM        Combine routed hydrograph 609611 w/runoff from S617
2088          HC       2
              *
1                                        HEC-1 INPUT                                                    PAGE 49

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2089          KK    S615
2090          KM   Sub-Basin   S615
2091          KM
2092          KM      The Clark Unit Hydrograph is used for this basin.
2093          KM          The Natural time-area relation is used for this basin.
2094          KM
2095          KM      Time of Concentration for this sub-basin is based on the following:
2096          KM          6-Hour Rainfall, Pattern No.  1.43
2097          KM          An rainfall areal reduction factor of 0.987
2098          KM
2099          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2100          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2101          KM   .38 .38 .37 .18 .16 .15 .10 .09 .09 .05 .05 .05 .02 .02 .02 .02 .02 .02
2102          KM
2103          KM          L=   2.059 miles, S=  136 feet/mile, Kb= .12
2104          KM
2105          BA   1.055
2106          LG    0.25     0.39     6.20     0.17    55.00
2107          UC   0.867    0.546
2108          UA       0        3        5        8       12       20       43       75       90       96
2109          UA     100
              *

2110          KK  610611
2111          KM        Normal depth route from S615 to C611
2112          KM        Source: Morgan City Wash FDS, FCD 89-15
2113          RS       5    FLOW      -1
2114          RC    0.05    0.035     0.05     7981    .0100
2115          RX    1000     1028     1041     1078     1087     1092     1100     1108
2116          RY    1860     1840     1820     1800     1800     1820     1840     1860
              *

2117          KK    S616
2118          KM   Sub-Basin   S616
2119          KM
2120          KM      The Clark Unit Hydrograph is used for this basin.
2121          KM          The Natural time-area relation is used for this basin.
2122          KM
2123          KM      Time of Concentration for this sub-basin is based on the following:
2124          KM          6-Hour Rainfall, Pattern No.  1.01
2125          KM          An rainfall areal reduction factor of 0.993
2126          KM
2127          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2128          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2129          KM   .46 .45 .45 .14 .10 .09 .04 .04 .04 .02 .02 .02 .00 .00 .00 .00 .00 .00
2130          KM
2131          KM          L=   1.738 miles, S=  213 feet/mile, Kb= .09
2132          KM
2133          BA   0.505
2134          LG    0.25     0.32     5.20     0.26    21.00
2135          UC   0.517    0.408
2136          UA       0        3        5        8       12       20       43       75       90       96
2137          UA     100
              *
1                                        HEC-1 INPUT                                                    PAGE 50

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2138          KK   S616O
2139          KM   VOLUME RETAINED WITHIN SUB-BASIN S616
2140          DT  DIV616     12.6
2141          DI       0     3000
2142          DQ       0     3000
              *

2143          KK   C611L
2144          KM        Combine routed hydrograph 6110611 w/runoff frm S616
2145          HC       2
              *
```

```
2146          KK    C611
2147          KM        Combine hydrographs C611L and C611R
2148          HC       2
              *

2149          KK  611613
2150          KM        Normal depth route from C611 to C613
2151          KM        Source: Morgan City Wash FDS, FCD 89-15
2152          RS       2    FLOW      -1
2153          RC    0.05   0.035    0.05    4445   .0382
2154          RX    1000    1050    1080    1122    1210    1250    1305    1338
2155          RY    1644    1644    1628    1620    1620    1628    1660    1680
2156          RL                    0.94  1620.0
              *

2157          KK    S618
2158          KM   Sub-Basin   S618
2159          KM
2160          KM      The Clark Unit Hydrograph is used for this basin.
2161          KM          The Natural time-area relation is used for this basin.
2162          KM
2163          KM      Time of Concentration for this sub-basin is based on the following:
2164          KM          6-Hour Rainfall, Pattern No.  1.38
2165          KM          An rainfall areal reduction factor of 0.988
2166          KM
2167          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2168          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2169          KM   .37 .36 .36 .15 .12 .11 .07 .07 .06 .02 .02 .02 .01 .01 .01 .01 .01 .01
2170          KM
2171          KM          L=   2.364 miles, S=  199 feet/mile, Kb= .10
2172          KM
2173          BA   0.958
2174          LG    0.21    0.36    5.20    0.26   22.00
2175          UC   0.758   0.585
2176          UA       0       3       5       8      12      20      43      75      90      96
2177          UA     100
              *
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2178          KK   C613R
2179          KM        Combine routed hydrograph 611613 w/runoff from S618
2180          HC       2
              *

2181          KK    S619
2182          KM   Sub-Basin   S619
2183          KM
2184          KM      The Clark Unit Hydrograph is used for this basin.
2185          KM          The Natural time-area relation is used for this basin.
2186          KM
2187          KM      Time of Concentration for this sub-basin is based on the following:
2188          KM          6-Hour Rainfall, Pattern No.  1.29
2189          KM          An rainfall areal reduction factor of 0.989
2190          KM
2191          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2192          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2193          KM   .41 .40 .40 .17 .15 .14 .08 .08 .08 .04 .04 .04 .01 .01 .01 .01 .01 .01
2194          KM
2195          KM          L=   1.212 miles, S=   99 feet/mile, Kb= .12
2196          KM
2197          BA   0.827
2198          LG    0.27    0.36    6.80    0.14   39.00
2199          UC   0.688   0.317
2200          UA       0       3       5       8      12      20      43      75      90      96
2201          UA     100
              *

2202          KK  612613
2203          KM        Normal depth route from S619 to S620
2204          KM        Source: Morgan City Wash FDS, FCD 89-15
2205          RS       4    FLOW      -1
2206          RC    0.05   0.035    0.05    8752   .0331
2207          RX     100     103     106     110     180     184     187     190
2208          RY     110     107     104     100     100     104     107     110
              *

2209          KK    S620
2210          KM   Sub-Basin   S620
```

```
2211        KM
2212        KM      The Clark Unit Hydrograph is used for this basin.
2213        KM          The Natural time-area relation is used for this basin.
2214        KM
2215        KM      Time of Concentration for this sub-basin is based on the following:
2216        KM          6-Hour Rainfall, Pattern No.  1.00
2217        KM          An rainfall areal reduction factor of 0.994
2218        KM
2219        KM        EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2220        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2221        KM   .48 .47 .47 .16 .13 .12 .06 .06 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
2222        KM
2223        KM          L=   1.763 miles, S=  228 feet/mile, Kb= .13
2224        KM
2225        BA   0.444
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2226        LG    0.23    0.38    6.40    0.16   37.00
2227        UC   0.642   0.565
2228        UA       0       3       5       8      12      20      43      75      90      96
2229        UA     100
            *

2230        KK   C613L
2231        KM        Combine routed hydrograph 612613 w/runoff from S620
2232        HC       2
            *

2233        KK    C613
2234        KM        Combine hydrographs C613R and C613L
2235        HC       2
            *

2236        KK  613614
2237        KM        Normal depth route from C613 to C614
2238        KM        Source: Morgan City Wash FDS, FCD 89-15
2239        RS       2    FLOW      -1
2240        RC    0.05   0.035    0.05    5557   .0108
2241        RX    1000    1022    1050    1100    1180    1225    1260    1360
2242        RY    1640    1620    1580    1552    1552    1564    1576    1580
2243        RL                    0.94  1552.0
            *

2244        KK    S621
2245        KM   Sub-Basin   S621
2246        KM
2247        KM      The Clark Unit Hydrograph is used for this basin.
2248        KM          The Natural time-area relation is used for this basin.
2249        KM
2250        KM      Time of Concentration for this sub-basin is based on the following:
2251        KM          6-Hour Rainfall, Pattern No.  1.36
2252        KM          An rainfall areal reduction factor of 0.988
2253        KM
2254        KM        EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2255        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2256        KM   .36 .35 .35 .13 .11 .10 .05 .05 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
2257        KM
2258        KM          L=   1.470 miles, S=  170 feet/mile, Kb= .08
2259        KM
2260        BA   0.923
2261        LG    0.22    0.31    4.80    0.31    4.00
2262        UC   0.517   0.253
2263        UA       0       3       5       8      12      20      43      75      90      96
2264        UA     100
            *

2265        KK    C614
2266        KM        Combine routed hydrograph 613614 w/runoff from S621
2267        HC       2
            *
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2268        KK  614615
2269        KM        Normal depth route from C614 to C615
2270        KM        Source: Morgan City Wash FDS, FCD 89-15
2271        RS       3    FLOW      -1
```

```
2272        RC    0.05    0.035    0.05    7995    .0144
2273        RX    1000     1050    1088    1150     1195    1290    1340    1405
2274        RY    1496     1484    1476    1460     1460    1476    1484    1516
2275        RL                     0.94  1460.0
            *

2276        KK    S622
2277        KM   Sub-Basin   S622
2278        KM
2279        KM      The Clark Unit Hydrograph is used for this basin.
2280        KM          The Natural time-area relation is used for this basin.
2281        KM
2282        KM      Time of Concentration for this sub-basin is based on the following:
2283        KM          6-Hour Rainfall, Pattern No.  1.34
2284        KM          An rainfall areal reduction factor of 0.988
2285        KM
2286        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2287        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2288        KM   .36 .36 .35 .13 .10 .09 .05 .05 .05 .00 .00 .00 .00 .00 .00 .00 .00 .00
2289        KM
2290        KM          L=   2.004 miles, S=  152 feet/mile, Kb= .12
2291        KM
2292        BA   0.897
2293        LG    0.19    0.35    4.90    0.30    4.00
2294        UC   0.929   0.633
2295        UA       0       3       5       8      12      20      43      75      90      96
2296        UA     100
            *

2297        KK    C615
2298        KM        Combine routed hydrograph from 614615 w/runoff from S622
2299        HC       2
            *

2300        KK  WEST-4
2301        KM        Dummy combine for all major basins, west of the Agua Fria River
2302        HC       2
            *

2303        KK    S700
2304        KM   Sub-Basin   S700
2305        KM
2306        KM      The Clark Unit Hydrograph is used for this basin.
2307        KM          The Urban time-area relation is used for this basin.
2308        KM
2309        KM      Time of Concentration for this sub-basin is based on the following:
2310        KM          6-Hour Rainfall, Pattern No.  1.11
2311        KM          An rainfall areal reduction factor of 0.992
2312        KM
2313        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2314        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2315        KM   .43 .42 .42 .14 .11 .10 .05 .05 .04 .01 .01 .01 .00 .00 .00 .00 .00 .00
2316        KM
2317        KM          L=   1.923 miles, S=  185 feet/mile, Kb= .04
2318        KM
2319        BA   0.610
2320        LG    0.28    0.26    5.10    0.27    9.00
2321        UC   0.342   0.251
2322        UA       0       5      16      30      65      77      84      90      94      97
2323        UA     100
            *

2324        KK    S701
2325        KM   Sub-Basin   S701
2326        KM
2327        KM      The Clark Unit Hydrograph is used for this basin.
2328        KM          The Urban time-area relation is used for this basin.
2329        KM
2330        KM      Time of Concentration for this sub-basin is based on the following:
2331        KM          6-Hour Rainfall, Pattern No.  1.21
2332        KM          An rainfall areal reduction factor of 0.991
2333        KM
2334        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2335        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2336        KM   .41 .41 .40 .15 .12 .11 .06 .06 .06 .02 .02 .02 .01 .01 .01 .01 .01 .01
2337        KM
2338        KM          L=   2.821 miles, S=  136 feet/mile, Kb= .06
```

```
2339          KM
2340          BA   0.720
2341          LG    0.28    0.29    5.60    0.22   18.00
2342          UC   0.675   0.661
2343          UA       0       5      16      30      65      77      84      90      94      97
2344          UA     100
              *

2345          KK   S703O
2346          KM   VOLUME RETAINED WITHIN SUB-BASIN S703
2347          DT  DIV703     0.4
2348          DI       0    3000
2349          DQ       0    3000
              *

2350          KK    S702
2351          KM   Sub-Basin   S702
2352          KM
2353          KM      The Clark Unit Hydrograph is used for this basin.
2354          KM          The Urban time-area relation is used for this basin.
2355          KM
2356          KM      Time of Concentration for this sub-basin is based on the following:
2357          KM          6-Hour Rainfall, Pattern No.  1.00
2358          KM          An rainfall areal reduction factor of 0.997
2359          KM
2360          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2361          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2362          KM   .47 .46 .46 .15 .12 .11 .05 .05 .04 .02 .02 .02 .01 .01 .01 .01 .01 .01
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2363          KM
2364          KM          L=   1.395 miles, S=  215 feet/mile, Kb= .05
2365          KM
2366          BA   0.257
2367          LG    0.23    0.27    5.10    0.26   24.00
2368          UC   0.288   0.263
2369          UA       0       5      16      30      65      77      84      90      94      97
2370          UA     100
              *

2371          KK   S702O
2372          KM   VOLUME RETAINED WITHIN SUB-BASIN S702
2373          DT  DIV702    16.5
2374          DI       0    3000
2375          DQ       0    3000
              *

2376          KK    S703
2377          KM   Sub-Basin   S703
2378          KM
2379          KM      The Clark Unit Hydrograph is used for this basin.
2380          KM          The Natural time-area relation is used for this basin.
2381          KM
2382          KM      Time of Concentration for this sub-basin is based on the following:
2383          KM          6-Hour Rainfall, Pattern No.  1.00
2384          KM          An rainfall areal reduction factor of 0.997
2385          KM
2386          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2387          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2388          KM   .45 .44 .44 .12 .09 .07 .03 .03 .02 .00 .00 .00 .00 .00 .00 .00 .00 .00
2389          KM
2390          KM          L=   1.126 miles, S=  204 feet/mile, Kb= .09
2391          KM
2392          BA   0.257
2393          LG    0.19    0.32    4.90    0.30    1.00
2394          UC   0.400   0.319
2395          UA       0       3       5       8      12      20      43      75      90      96
2396          UA     100
              *

2397          KK   S703O
2398          KM   VOLUME RETAINED WITHIN SUB-BASIN S703
2399          DT  DIV703     5.1
2400          DI       0    3000
2401          DQ       0    3000
              *

2402          KK    S704
2403          KM   Sub-Basin   S704
```

```
2404          KM
2405          KM      The Clark Unit Hydrograph is used for this basin.
2406          KM          The Urban time-area relation is used for this basin.
2407          KM
2408          KM      Time of Concentration for this sub-basin is based on the following:
2409          KM          6-Hour Rainfall, Pattern No.  1.00
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2410          KM          An rainfall areal reduction factor of 0.995
2411          KM
2412          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2413          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2414          KM   .45 .45 .44 .13 .10 .08 .04 .04 .03 .01 .01 .01 .00 .00 .00 .00 .00 .00
2415          KM
2416          KM          L=   1.266 miles, S=  300 feet/mile, Kb= .07
2417          KM
2418          BA   0.408
2419          LG    0.28    0.29    4.90    0.29   14.00
2420          UC   0.304   0.199
2421          UA       0       5      16      30      65      77      84      90      94      97
2422          UA     100
              *

2423          KK  704705
2424          KM       Normal depth route from S704 to C705
2425          KM       Source: Field reconnaissance
2426          RS       7    FLOW      -1
2427          RC    .035    .045    .025    7534   .0186
2428          RX     100     123   159.5   162.8   186.8   205.3   206.3   207.3
2429          RY   108.5   102.7   101.3   100.2     100   108.3   109.3   110.3
              *

2430          KK    S705
2431          KM   Sub-Basin   S705
2432          KM
2433          KM      The Clark Unit Hydrograph is used for this basin.
2434          KM          The Urban time-area relation is used for this basin.
2435          KM
2436          KM      Time of Concentration for this sub-basin is based on the following:
2437          KM          6-Hour Rainfall, Pattern No.  1.24
2438          KM          An rainfall areal reduction factor of 0.990
2439          KM
2440          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2441          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2442          KM   .42 .42 .42 .17 .15 .14 .08 .08 .08 .05 .04 .03 .01 .01 .01 .01 .01 .01
2443          KM
2444          KM          L=   2.145 miles, S=  253 feet/mile, Kb= .04
2445          KM
2446          BA   0.754
2447          LG    0.25    0.21    6.40    0.16   33.00
2448          UC   0.321   0.227
2449          UA       0       5      16      30      65      77      84      90      94      97
2450          UA     100
              *

2451          KK    C705
2452          KM       Combine routed hydrograph 704705 w/runoff from S705
2453          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2454          KK   C7050
2455          KM       Storage routing at crossing structure no. 63
2456          KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2457          KM       Cooper Aerial Photography extended from Agua Fria FDS
2458          RS       1    STOR       0
2459          SQ       0     200     400     600     800    1000    1200    1400    1420    1800
2460          SQ    2000
2461          SE  1338.2 1342.26 1344.68 1347.93 1352.52 1359.03 1367.08 1376.59 1377.62    1400
2462          SE  1413.9
2463          SV       0    0.08    0.46    1.29    2.71    4.72    7.32   10.63   14.77   19.75
2464          SV   25.57   32.07   39.09   46.63   54.70   63.28   72.40   82.03   92.19  102.87
2465          SE  1338.2    1339    1340    1341    1342    1343    1344    1345    1346    1347
2466          SE    1348    1349    1350    1351    1352    1353    1354    1355    1356    1357
              *
```

```
2467          KK  705OAF
2468          KM        Normal depth route from C705O to C705AF
2469          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2470          RS       5    FLOW      -1
2471          RC    .045    .045    .045 2253.82   .0082
2472          RX     100  147.63  203.16  349.46  505.89  666.35  920.07 1239.80
2473          RY    1324 1324.30    1324 1321.84 1321.64 1322.54    1324    1326
              *

2474          KK  S705AF
2475          KM   Sub-Basin S705AF
2476          KM
2477          KM      The Clark Unit Hydrograph is used for this basin.
2478          KM          The Natural time-area relation is used for this basin.
2479          KM
2480          KM      Time of Concentration for this sub-basin is based on the following:
2481          KM          6-Hour Rainfall, Pattern No.  1.00
2482          KM          An rainfall areal reduction factor of 0.998
2483          KM
2484          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2485          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2486          KM   .49 .49 .49 .18 .15 .14 .07 .07 .07 .06 .06 .05 .01 .01 .01 .01 .01 .00
2487          KM
2488          KM          L=   0.933 miles, S=   34 feet/mile, Kb= .05
2489          KM
2490          BA   0.183
2491          LG    0.31    0.22   10.10    0.03    0.00
2492          UC   0.454   0.384
2493          UA       0       3       5       8      12      20      43      75      90      96
2494          UA     100
              *

2495          KK  705AFO
2496          KM   VOLUME RETAINED WITHIN SUB-BASIN S705AF
2497          DT  DIV703     5.4
2498          DI       0    3000
2499          DQ       0    3000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2500          KK  C705AF
2501          KM        Combine routed hydrograph 705OAF w/runoff from S705
2502          HC       2
              *

2503          KK  WEST-5
2504          KM        Dummy combine for minor basins, west of the Agua Fria River
2505          HC       5
              *

2506          KK    S706
2507          KM   Sub-Basin   S706
2508          KM
2509          KM      The Clark Unit Hydrograph is used for this basin.
2510          KM          The Urban time-area relation is used for this basin.
2511          KM
2512          KM      Time of Concentration for this sub-basin is based on the following:
2513          KM          6-Hour Rainfall, Pattern No.  1.21
2514          KM          An rainfall areal reduction factor of 0.991
2515          KM
2516          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2517          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2518          KM   .43 .42 .42 .17 .14 .13 .07 .07 .07 .04 .03 .03 .01 .01 .01 .01 .01 .01
2519          KM
2520          KM          L=   2.022 miles, S=  185 feet/mile, Kb= .03
2521          KM
2522          BA   0.713
2523          LG    0.26    0.25    5.70    0.21   37.00
2524          UC   0.288   0.198
2525          UA       0       5      16      30      65      77      84      90      94      97
2526          UA     100
              *

2527          KK   S706O
2528          KM   VOLUME RETAINED WITHIN SUB-BASIN S706
2529          DT  DIV706    50.4
2530          DI       0    3000
2531          DQ       0    3000
```

```
                 *
2532             KK    S707
2533             KM   Sub-Basin   S707
2534             KM
2535             KM      The Clark Unit Hydrograph is used for this basin.
2536             KM          The Urban time-area relation is used for this basin.
2537             KM
2538             KM      Time of Concentration for this sub-basin is based on the following:
2539             KM          6-Hour Rainfall, Pattern No.  1.14
2540             KM          An rainfall areal reduction factor of 0.992
2541             KM
2542             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2543             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2544             KM   .45 .45 .45 .18 .15 .15 .08 .08 .07 .06 .05 .05 .02 .02 .01 .01 .01 .01
2545             KM
1                                                HEC-1 INPUT                                                PAGE 59

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2546             KM          L=   2.256 miles, S=  217 feet/mile, Kb= .03
2547             KM
2548             BA   0.638
2549             LG    0.21    0.23    6.20    0.17   51.00
2550             UC   0.279   0.222
2551             UA       0       5      16      30      65      77      84      90      94      97
2552             UA     100
                 *

2553             KK   S707O
2554             KM   VOLUME RETAINED WITHIN SUB-BASIN S707
2555             DT  DIV707    52.4
2556             DI       0    3000
2557             DQ       0    3000
                 *

2558             KK    S728
2559             KM   Sub-Basin   S728
2560             KM
2561             KM      The Clark Unit Hydrograph is used for this basin.
2562             KM          The Urban time-area relation is used for this basin.
2563             KM
2564             KM      Time of Concentration for this sub-basin is based on the following:
2565             KM          6-Hour Rainfall, Pattern No.  1.00
2566             KM          An rainfall areal reduction factor of 0.996
2567             KM
2568             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2569             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2570             KM   .48 .48 .48 .17 .13 .13 .06 .06 .06 .04 .04 .04 .01 .01 .01 .01 .01 .01
2571             KM
2572             KM          L=   1.550 miles, S=   77 feet/mile, Kb= .04
2573             KM
2574             BA   0.276
2575             LG    0.21    0.30    5.20    0.22   46.00
2576             UC   0.396   0.391
2577             UA       0       5      16      30      65      77      84      90      94      97
2578             UA     100
                 *

2579             KK   S728O
2580             KM   VOLUME RETAINED WITHIN SUB-BASIN S728
2581             DT  DIV728    17.4
2582             DI       0    3000
2583             DQ       0    3000
                 *

2584             KK    WEST
2585             KM        Dummy combine for all operations in the stack, west of the Agua Fria R.
2586             HC       5
                 *
1                                                HEC-1 INPUT                                                PAGE 60

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2587             KK    S708
2588             KM   Sub-Basin   S708
2589             KM
2590             KM      The Clark Unit Hydrograph is used for this basin.
2591             KM          The Urban time-area relation is used for this basin.
2592             KM
```

```
2593          KM      Time of Concentration for this sub-basin is based on the following:
2594          KM          6-Hour Rainfall, Pattern No.  1.20
2595          KM          An rainfall areal reduction factor of 0.991
2596          KM
2597          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2598          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2599          KM   .44 .44 .44 .18 .16 .15 .08 .08 .08 .06 .06 .05 .02 .02 .01 .01 .01 .01
2600          KM
2601          KM          L=   1.694 miles, S=  194 feet/mile, Kb= .04
2602          KM
2603          BA   0.706
2604          LG    0.29    0.16    9.70    0.05    7.00
2605          UC   0.288   0.164
2606          UA       0       5      16      30      65      77      84      90      94      97
2607          UA     100
              *

2608          KK   S708O
2609          KM   VOLUME RETAINED WITHIN SUB-BASIN S708
2610          DT  DIV708    42.4
2611          DI       0    3000
2612          DQ       0    3000
              *

2613          KK    S709
2614          KM   Sub-Basin   S709
2615          KM
2616          KM      The Clark Unit Hydrograph is used for this basin.
2617          KM          The Urban time-area relation is used for this basin.
2618          KM
2619          KM      Time of Concentration for this sub-basin is based on the following:
2620          KM          6-Hour Rainfall, Pattern No.  1.00
2621          KM          An rainfall areal reduction factor of 0.994
2622          KM
2623          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2624          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2625          KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .02 .02 .01 .01 .01 .01
2626          KM
2627          KM          L=   1.417 miles, S=  155 feet/mile, Kb= .05
2628          KM
2629          BA   0.441
2630          LG    0.29    0.13   11.20    0.02    9.00
2631          UC   0.321   0.221
2632          UA       0       5      16      30      65      77      84      90      94      97
2633          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2634          KK   S709O
2635          KM   VOLUME RETAINED WITHIN SUB-BASIN S709
2636          DT  DIV709    21.6
2637          DI       0    3000
2638          DQ       0    3000
              *

2639          KK   C709O
2640          KM        Storage routing at crossing structure no. (South of 95)
2641          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2642          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2643          KM        Detour, Jan 4, 1985
2644          RS       1    STOR       0
2645          SQ       0     120     240     360     480     600     720     840     903    1080
2646          SQ    1200
2647          SE    1496 1500.80 1505.20 1512.68 1523.15 1525.11 1525.18 1525.23 1525.26 1525.33
2648          SE  1525.4
2649          SV     0.0    1.59    4.55    8.36   13.04   20.12   29.31   42.75   51.34   63.40
2650          SV   78.92   97.91
2651          SE    1496    1500    1504    1508    1512    1516    1520    1524    1528    1532
2652          SE    1536    1540
              *

2653          KK  709710
2654          KM        Normal depth route from S709 to C710
2655          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2656          RS       3    FLOW      -1
2657          RC     .05    .035     .05    2683   .0261
2658          RX     100     160     200     220     255     265     280     305
2659          RY    1448    1444    1440    1436    1436    1440    1444    1448
```

```
                 *
2660             KK    S710
2661             KM   Sub-Basin   S710
2662             KM
2663             KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2664             KM
2665             KM      The Clark Unit Hydrograph is used for this basin.
2666             KM          The Urban time-area relation is used for this basin.
2667             KM
2668             KM      Time of Concentration for this sub-basin is based on the following:
2669             KM          6-Hour Rainfall, Pattern No.  1.00
2670             KM          An rainfall areal reduction factor of 0.999
2671             KM
2672             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2673             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2674             KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .06 .01 .01 .01 .01 .01 .01
2675             KM
2676             KM          L=   0.633 miles, S=  198 feet/mile, Kb= .03
2677             KM
2678             BA   0.112
2679             LG    0.23    0.16   10.10    0.04   13.00
2680             UC   0.167   0.122
2681             UA       0       5      16      30      65      77      84      90      94      97
1                                                HEC-1 INPUT                                          PAGE 62

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2682             UA     100
                 *

2683             KK   S710O
2684             KM   VOLUME RETAINED WITHIN SUB-BASIN S710
2685             DT  DIV710     4.7
2686             DI       0    3000
2687             DQ       0    3000
                 *

2688             KK   C710I
2689             KM        Combine routed hydrograph 709710 w/runoff from S710
2690             HC       2
                 *

2691             KK   C710O
2692             KM        Storage routing at crossing structure no. 58
2693             KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2694             KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2695             KM        Detour, Jan 4, 1985
2696             RS       1    STOR       0
2697             SQ       0     120     240     360     480     600     720     840     960    1058
2698             SQ    1200
2699             SE  1424.2 1428.52 1431.70 1436.37 1442.23 1442.33 1442.39 1442.45 1442.50 1442.54
2700             SE  1442.6
2701             SV     0.0    1.08    3.46    7.13   13.17   22.51
2702             SE    1424    1428    1432    1436    1440    1444
                 *

2703             KK    S711
2704             KM   Sub-Basin   S711
2705             KM
2706             KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2707             KM
2708             KM      The Clark Unit Hydrograph is used for this basin.
2709             KM          The Urban time-area relation is used for this basin.
2710             KM
2711             KM      Time of Concentration for this sub-basin is based on the following:
2712             KM          6-Hour Rainfall, Pattern No.  1.00
2713             KM          An rainfall areal reduction factor of 0.998
2714             KM
2715             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2716             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2717             KM   .50 .50 .50 .19 .16 .16 .08 .08 .07 .07 .07 .07 .02 .02 .02 .01 .01 .01
2718             KM
2719             KM          L=   0.520 miles, S=  154 feet/mile, Kb= .03
2720             KM
2721             BA   0.159
2722             LG    0.28    0.10   11.20    0.03   22.00
2723             UC   0.167   0.086
2724             UA       0       5      16      30      65      77      84      90      94      97
2725             UA     100
                 *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2726          KK   S711O
2727          KM   VOLUME RETAINED WITHIN SUB-BASIN S711
2728          DT  DIV711     10.5
2729          DI       0     3000
2730          DQ       0     3000
              *

2731          KK   C711O
2732          KM        Storage routing at crossing structure no. 71
2733          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2734          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2735          KM        Detour, Jan 4, 1985
2736          RS       1    STOR       0
2737          SQ       0      60     120     180     240     300     360     420     480     483
2738          SQ     600
2739          SE  1496.1 1499.98 1504.58 1512.31 1524.39 1525.07 1525.12 1525.15 1525.19 1525.19
2740          SE  1525.2
2741          SV     0.0    0.20    0.59    3.79    7.98   16.27   27.64   42.75   63.25
2742          SE  1496.1    1500    1504    1508    1512    1516    1520    1524    1528
              *

2743          KK  711712
2744          KM        Normal depth route from S711 to C712
2745          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2746          RS       2    FLOW      -1
2747          RC     .05    .035     .05    1586   .0441
2748          RX     100     135     190     215     250     285     335     395
2749          RY    1488    1484    1480    1476    1476    1480    1484    1488
              *

2750          KK    S712
2751          KM   Sub-Basin   S712
2752          KM
2753          KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2754          KM
2755          KM      The Clark Unit Hydrograph is used for this basin.
2756          KM          The Urban time-area relation is used for this basin.
2757          KM
2758          KM      Time of Concentration for this sub-basin is based on the following:
2759          KM          6-Hour Rainfall, Pattern No.  1.00
2760          KM          An rainfall areal reduction factor of 0.999
2761          KM
2762          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2763          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2764          KM   .50 .50 .49 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2765          KM
2766          KM          L=   0.312 miles, S=  271 feet/mile, Kb= .03
2767          KM
2768          BA   0.068
2769          LG    0.27    0.13   10.10    0.04   19.00
2770          UC   0.167   0.092
2771          UA       0       5      16      30      65      77      84      90      94      97
2772          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2773          KK   S712O
2774          KM   VOLUME RETAINED WITHIN SUB-BASIN S712
2775          DT  DIV712      4.2
2776          DI       0     3000
2777          DQ       0     3000
              *

2778          KK   C712I
2779          KM        Combine routed hydrograph 711712 w/runoff from S712
2780          HC       2
              *

2781          KK   C712O
2782          KM        Storage routing at crossing structure no. 60
2783          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2784          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2785          KM        Detour, Jan 4, 1985
```

```
2786        RS      1    STOR      0
2787        SQ      0      90     180     270     360     450     540     630     658     810
2788        SQ    900
2789        SE   1432 1435.56 1437.81 1440.49 1444.18 1449.19 1450.09 1450.14 1450.16 1450.24
2790        SE  1450.2
2791        SV    0.0    0.14    0.36    0.65    1.02    1.56    2.43    3.61    5.10
2792        SE   1432    1433    1434    1435    1436    1437    1438    1439    1440
            *

2793        KK  712714
2794        KM        Normal depth route from C712 to C714
2795        KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2796        RS      2    FLOW     -1
2797        RC    .05    .035     .05    2032   .0172
2798        RX    100     325     355     370     415     435     450     515
2799        RY   1416    1412    1408    1404    1404    1408    1412    1408
            *

2800        KK    S713
2801        KM   Sub-Basin   S713
2802        KM
2803        KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2804        KM
2805        KM      The Clark Unit Hydrograph is used for this basin.
2806        KM          The Urban time-area relation is used for this basin.
2807        KM
2808        KM      Time of Concentration for this sub-basin is based on the following:
2809        KM          6-Hour Rainfall, Pattern No.  1.00
2810        KM          An rainfall areal reduction factor of 0.999
2811        KM
2812        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2813        KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2814        KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2815        KM
2816        KM          L=   0.545 miles, S=  220 feet/mile, Kb= .03
2817        KM
2818        BA   0.107
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2819        LG   0.20    0.18   10.10    0.03   12.00
2820        UC  0.167   0.111
2821        UA      0       5      16      30      65      77      84      90      94      97
2822        UA    100
            *

2823        KK   S713O
2824        KM   VOLUME RETAINED WITHIN SUB-BASIN S713
2825        DT  DIV713     2.9
2826        DI      0    3000
2827        DQ      0    3000
            *

2828        KK   C713O
2829        KM        Storage routing at crossing structure no. 59
2830        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2831        KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2832        KM        Detour, Jan 4, 1985
2833        RS      1    STOR      0
2834        SQ      0      60     120     180     240     300     326     420     480     540
2835        SQ    600
2836        SE   1420 1423.17 1425.30 1428.15 1432.22 1437.97 1438.04 1438.12 1438.15 1438.18
2837        SE  1438.2
2838        SV    0.0    2.35    5.72   10.11   15.52   26.19
2839        SE   1420    1424    1428    1432    1436    1440
            *

2840        KK  713714
2841        KM        Normal depth route from S713 to C714
2842        KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2843        RS      1    FLOW     -1
2844        RC    .05    .035     .05     831   .0421
2845        RX    100     260     270     280     305     315     335     490
2846        RY   1416    1416    1412    1408    1408    1412    1416    1420
            *

2847        KK    S714
2848        KM   Sub-Basin   S714
2849        KM
2850        KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
```

```
2851          KM
2852          KM      The Clark Unit Hydrograph is used for this basin.
2853          KM          The Urban time-area relation is used for this basin.
2854          KM
2855          KM      Time of Concentration for this sub-basin is based on the following:
2856          KM          6-Hour Rainfall, Pattern No.  1.00
2857          KM          An rainfall areal reduction factor of 0.999
2858          KM
2859          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2860          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2861          KM   .48 .48 .48 .17 .13 .12 .06 .06 .06 .04 .03 .00 .00 .00 .00 .00 .00 .00
2862          KM
2863          KM          L=   0.428 miles, S=  129 feet/mile, Kb= .04
2864          KM
2865          BA   0.060
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2866          LG    0.35    0.29    8.40    0.06    0.00
2867          UC   0.167   0.128
2868          UA       0       5      16      30      65      77      84      90      94      97
2869          UA     100
              *

2870          KK    C714
2871          KM        Combine routed hydrographs 712714 and 713714 w/runoff from S714
2872          HC       3
              *

2873          KK    S715
2874          KM   Sub-Basin   S715
2875          KM
2876          KM      The Clark Unit Hydrograph is used for this basin.
2877          KM          The Urban time-area relation is used for this basin.
2878          KM
2879          KM      Time of Concentration for this sub-basin is based on the following:
2880          KM          6-Hour Rainfall, Pattern No.  1.00
2881          KM          An rainfall areal reduction factor of 0.997
2882          KM
2883          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2884          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2885          KM   .50 .49 .49 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2886          KM
2887          KM          L=   0.959 miles, S=   63 feet/mile, Kb= .05
2888          KM
2889          BA   0.220
2890          LG    0.31    0.17   11.20    0.02    4.00
2891          UC   0.358   0.271
2892          UA       0       5      16      30      65      77      84      90      94      97
2893          UA     100
              *

2894          KK   S715O
2895          KM   VOLUME RETAINED WITHIN SUB-BASIN S715
2896          DT  DIV715     4.1
2897          DI       0    3000
2898          DQ       0    3000
              *

2899          KK    S716
2900          KM   Sub-Basin   S716
2901          KM
2902          KM      The Clark Unit Hydrograph is used for this basin.
2903          KM          The Urban time-area relation is used for this basin.
2904          KM
2905          KM      Time of Concentration for this sub-basin is based on the following:
2906          KM          6-Hour Rainfall, Pattern No.  1.47
2907          KM          An rainfall areal reduction factor of 0.986
2908          KM
2909          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2910          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2911          KM   .38 .38 .38 .20 .18 .18 .11 .11 .11 .08 .07 .07 .03 .03 .03 .02 .02 .02
2912          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2913          KM          L=   2.353 miles, S=   87 feet/mile, Kb= .03
2914          KM
2915          BA   1.128
```

```
2916        LG    0.26    0.14   10.10    0.04   23.00
2917        UC   0.438   0.274
2918        UA       0       5      16      30      65      77      84      90      94      97
2919        UA     100
            *

2920        KK   S716O
2921        KM   VOLUME RETAINED WITHIN SUB-BASIN S716
2922        DT  DIV716    77.8
2923        DI       0    3000
2924        DQ       0    3000
            *

2925        KK   C716O
2926        KM        Storage routing at crossing structure no. 74
2927        KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2928        KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2929        KM        Detour, Jan 4, 1985
2930        RS       1    STOR       0
2931        SQ       0     230     460     690     920    1150    1380    1610    1625    2070
2932        SQ    2300
2933        SE  1504.9 1509.94 1516.13 1526.53 1544.42 1592.19 1729.99 2074.29 2108.01 4241.67
2934        SE  6746.9
2935        SV       0    0.40    5.42   17.50   37.71   68.23  111.87
2936        SE  1504.9    1508    1512    1516    1520    1524    1528
            *

2937        KK  716717
2938        KM        Normal depth route from C716O to C717
2939        KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2940        RS       5    FLOW      -1
2941        RC     .05    .035     .05    4232   .0177
2942        RX     100     115     150     165     195     285     370     425
2943        RY    1504    1500    1496    1492    1492    1496    1500    1504
            *

2944        KK    S717
2945        KM   Sub-Basin   S717
2946        KM
2947        KM      The Clark Unit Hydrograph is used for this basin.
2948        KM          The Natural time-area relation is used for this basin.
2949        KM
2950        KM      Time of Concentration for this sub-basin is based on the following:
2951        KM          6-Hour Rainfall, Pattern No.  1.00
2952        KM          An rainfall areal reduction factor of 0.996
2953        KM
2954        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2955        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2956        KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .02 .01 .01 .01 .01 .01
2957        KM
2958        KM          L=   0.727 miles, S=  131 feet/mile, Kb= .05
2959        KM
```

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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2960        BA   0.286
2961        LG    0.26    0.15   11.20    0.02   10.00
2962        UC   0.229   0.114
2963        UA       0       3       5       8      12      20      43      75      90      96
2964        UA     100
            *

2965        KK   S717O
2966        KM   VOLUME RETAINED WITHIN SUB-BASIN S717
2967        DT  DIV717     8.1
2968        DI       0    3000
2969        DQ       0    3000
            *

2970        KK    C717
2971        KM        Combine routed hydrograph 716717 w/runoff from S717
2972        HC       2
            *

2973        KK  717718
2974        KM        Normal depth route from C717 to C718
2975        KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2976        RS      15    FLOW      -1
2977        RC     .05    .045     .05    7146   .0105
2978        RX     100     235     275     325     420     455     465     530
```

```
2979          RY    1364    1360    1356    1352    1352    1356    1360    1380
2980          RL                    0.03  1352.0
              *

2981          KK    S718
2982          KM   Sub-Basin   S718
2983          KM
2984          KM      The Clark Unit Hydrograph is used for this basin.
2985          KM          The Natural time-area relation is used for this basin.
2986          KM
2987          KM      Time of Concentration for this sub-basin is based on the following:
2988          KM          6-Hour Rainfall, Pattern No.  1.00
2989          KM          An rainfall areal reduction factor of 0.994
2990          KM
2991          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2992          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2993          KM   .50 .50 .49 .19 .16 .15 .08 .08 .07 .07 .07 .07 .01 .01 .01 .01 .01 .01
2994          KM
2995          KM          L=   2.103 miles, S=   45 feet/mile, Kb= .05
2996          KM
2997          BA   0.442
2998          LG    0.27    0.15   11.20    0.02    6.00
2999          UC   0.692   0.709
3000          UA       0       3       5       8      12      20      43      75      90      96
3001          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3002          KK   S718O
3003          KM   VOLUME RETAINED WITHIN SUB-BASIN S718
3004          DT  DIV718    13.2
3005          DI       0    3000
3006          DQ       0    3000
              *

3007          KK    C718
3008          KM        Combine routed hydrograph 717718 w/runoff from S718
3009          HC       2
              *

3010          KK    S719
3011          KM   Sub-Basin   S719
3012          KM
3013          KM      The Clark Unit Hydrograph is used for this basin.
3014          KM          The Urban time-area relation is used for this basin.
3015          KM
3016          KM      Time of Concentration for this sub-basin is based on the following:
3017          KM          6-Hour Rainfall, Pattern No.  1.00
3018          KM          An rainfall areal reduction factor of 0.998
3019          KM
3020          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3021          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3022          KM   .51 .50 .50 .20 .16 .16 .08 .08 .08 .08 .08 .08 .02 .02 .02 .02 .02 .02
3023          KM
3024          KM          L=   1.221 miles, S=   82 feet/mile, Kb= .04
3025          KM
3026          BA   0.154
3027          LG    0.31    0.07   12.40    0.01   12.00
3028          UC   0.321   0.357
3029          UA       0       5      16      30      65      77      84      90      94      97
3030          UA     100
              *

3031          KK   S719O
3032          KM   VOLUME RETAINED WITHIN SUB-BASIN S719
3033          DT  DIV719     8.6
3034          DI       0    3000
3035          DQ       0    3000
              *

3036          KK  EAST-1
3037          KM        Dummy combine of minor subbasins east of the Agua Fria River
3038          HC       6
              *

3039          KK    S720
3040          KM   Sub-Basin   S720
3041          KM
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```
3042          KM      The Clark Unit Hydrograph is used for this basin.
3043          KM          The Urban time-area relation is used for this basin.
3044          KM
3045          KM      Time of Concentration for this sub-basin is based on the following:
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3046          KM          6-Hour Rainfall, Pattern No.  1.00
3047          KM          An rainfall areal reduction factor of 0.995
3048          KM
3049          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3050          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3051          KM   .50 .50 .50 .19 .16 .15 .08 .08 .07 .07 .07 .07 .02 .01 .01 .01 .01 .01
3052          KM
3053          KM          L=   1.516 miles, S=   86 feet/mile, Kb= .03
3054          KM
3055          BA   0.370
3056          LG    0.28    0.11   11.20    0.03   19.00
3057          UC   0.300   0.239
3058          UA       0       5      16      30      65      77      84      90      94      97
3059          UA     100
              *

3060          KK   S720O
3061          KM   VOLUME RETAINED WITHIN SUB-BASIN S720
3062          DT  DIV720    23.2
3063          DI       0    3000
3064          DQ      .0    3000
              *

3065          KK    S721
3066          KM   Sub-Basin   S721
3067          KM
3068          KM      The Clark Unit Hydrograph is used for this basin.
3069          KM          The Urban time-area relation is used for this basin.
3070          KM
3071          KM      Time of Concentration for this sub-basin is based on the following:
3072          KM          6-Hour Rainfall, Pattern No.  1.00
3073          KM          An rainfall areal reduction factor of 0.996
3074          KM
3075          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3076          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3077          KM   .50 .49 .49 .18 .15 .15 .07 .07 .07 .07 .07 .06 .01 .01 .01 .01 .01 .01
3078          KM
3079          KM          L=   0.832 miles, S=  114 feet/mile, Kb= .03
3080          KM
3081          BA   0.335
3082          LG    0.21    0.15    7.30    0.11   50.00
3083          UC   0.196   0.098
3084          UA       0       5      16      30      65      77      84      90      94      97
3085          UA     100
              *

3086          KK   S721O
3087          KM   VOLUME RETAINED WITHIN SUB-BASIN S721
3088          DT  DIV721    30.1
3089          DI       0    3000
3090          DQ       0    3000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3091          KK   C721O
3092          KM        Storage routing at crossing structure no. 75
3093          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
3094          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
3095          KM        Detour, Jan 4, 1985
3096          RS       1    STOR       0
3097          SQ       0     120     240     360     480     600     720     840     866    1080
3098          SQ    1200
3099          SE    1490 1494.74 1499.14 1506.62 1517.09 1534.17 1572.06 1662.33 1693.69 2254.60
3100          SE  2968.5
3101          SV       0    1.83    7.58   17.18   30.63   47.92   69.05   94.03  122.85  155.51
3102          SV  192.02
3103          SE    1490    1493    1496    1499    1502    1505    1508    1511    1514    1517
3104          SE    1520
              *
```

```
3105          KK  721722
3106          KM        Normal depth route from C7210 to C722
3107          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
3108          RS      12    FLOW      -1
3109          RC     .05    .035     .05    8812   .0170
3110          RX     100     125     175     200     235     250     270     595
3111          RY    1420    1416    1412    1408    1408    1412    1420    1424
3112          RL                    0.03  1408.0
              *

3113          KK    S722
3114          KM   Sub-Basin   S722
3115          KM
3116          KM      The Clark Unit Hydrograph is used for this basin.
3117          KM          The Urban time-area relation is used for this basin.
3118          KM
3119          KM      Time of Concentration for this sub-basin is based on the following:
3120          KM          6-Hour Rainfall, Pattern No.  1.38
3121          KM          An rainfall areal reduction factor of 0.988
3122          KM
3123          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3124          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3125          KM   .40 .40 .40 .19 .17 .17 .10 .10 .10 .07 .07 .07 .03 .03 .03 .02 .02 .01
3126          KM
3127          KM          L=   2.334 miles, S=   79 feet/mile, Kb= .03
3128          KM
3129          BA   0.955
3130          LG    0.26    0.16    9.70    0.05   23.00
3131          UC   0.442   0.302
3132          UA       0       5      16      30      65      77      84      90      94      97
3133          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3134          KK   S722O
3135          KM   VOLUME RETAINED WITHIN SUB-BASIN S722
3136          DT  DIV722    63.0
3137          DI       0    3000
3138          DQ       0    3000
              *

3139          KK    C722
3140          KM        Combine routed hydrograph 721722 w/runoff from S722
3141          HC       2
              *

3142          KK    S723
3143          KM   Sub-Basin   S723
3144          KM
3145          KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
3146          KM
3147          KM      The Clark Unit Hydrograph is used for this basin.
3148          KM          The Urban time-area relation is used for this basin.
3149          KM
3150          KM      Time of Concentration for this sub-basin is based on the following:
3151          KM          6-Hour Rainfall, Pattern No.  1.00
3152          KM          An rainfall areal reduction factor of 0.999
3153          KM
3154          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3155          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3156          KM   .50 .50 .50 .19 .16 .16 .08 .08 .07 .07 .07 .07 .02 .01 .01 .01 .01 .01
3157          KM
3158          KM          L=   0.562 miles, S=  178 feet/mile, Kb= .04
3159          KM
3160          BA   0.085
3161          LG    0.22    0.17   10.10    0.03   28.00
3162          UC   0.167   0.130
3163          UA       0       5      16      30      65      77      84      90      94      97
3164          UA     100
              *

3165          KK   S723O
3166          KM   VOLUME RETAINED WITHIN SUB-BASIN S723
3167          DT  DIV723     4.5
3168          DI       0    3000
3169          DQ       0    3000
              *
```

```
3170          KK    S724
3171          KM   Sub-Basin   S724
3172          KM
3173          KM      The Clark Unit Hydrograph is used for this basin.
3174          KM          The Urban time-area relation is used for this basin.
3175          KM
3176          KM      Time of Concentration for this sub-basin is based on the following:
3177          KM          6-Hour Rainfall, Pattern No.  1.49
3178          KM          An rainfall areal reduction factor of 0.986
3179          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3180          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3181          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3182          KM   .39 .38 .38 .20 .19 .19 .12 .12 .11 .09 .09 .09 .04 .04 .04 .03 .03 .03
3183          KM
3184          KM          L=   2.319 miles, S=   97 feet/mile, Kb= .03
3185          KM
3186          BA   1.156
3187          LG    0.18    0.11   11.20    0.02   45.00
3188          UC   0.413   0.250
3189          UA       0       5      16      30      65      77      84      90      94      97
3190          UA     100
              *

3191          KK   S724O
3192          KM   VOLUME RETAINED WITHIN SUB-BASIN S724
3193          DT  DIV724   100.4
3194          DI       0    3000
3195          DQ       0    3000
              *

3196          KK    S725
3197          KM   Sub-Basin   S725
3198          KM
3199          KM      The Clark Unit Hydrograph is used for this basin.
3200          KM          The Urban time-area relation is used for this basin.
3201          KM
3202          KM      Time of Concentration for this sub-basin is based on the following:
3203          KM          6-Hour Rainfall, Pattern No.  1.49
3204          KM          An rainfall areal reduction factor of 0.986
3205          KM
3206          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3207          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3208          KM   .38 .38 .38 .20 .18 .18 .11 .11 .11 .08 .08 .08 .04 .04 .04 .02 .02 .02
3209          KM
3210          KM          L=   3.038 miles, S=   71 feet/mile, Kb= .03
3211          KM
3212          BA   1.158
3213          LG    0.18    0.16    8.80    0.06   50.00
3214          UC   0.550   0.426
3215          UA       0       5      16      30      65      77      84      90      94      97
3216          UA     100
              *

3217          KK   S725O
3218          KM   VOLUME RETAINED WITHIN SUB-BASIN S725
3219          DT  DIV725   106.2
3220          DI       0    3000
3221          DQ       0    3000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3222          KK  EAST-2
3223          KM        Dummy combine of minor subbasins east of the Agua Fria River
3224          HC       5
              *

3225          KK    S726
3226          KM   Sub-Basin   S726
3227          KM
3228          KM      The Clark Unit Hydrograph is used for this basin.
3229          KM          The Urban time-area relation is used for this basin.
3230          KM
3231          KM      Time of Concentration for this sub-basin is based on the following:
3232          KM          6-Hour Rainfall, Pattern No.  1.00
```

```
3233          KM          An rainfall areal reduction factor of 0.996
3234          KM
3235          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3236          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3237          KM   .47 .47 .47 .16 .12 .11 .05 .05 .05 .03 .03 .03 .01 .01 .01 .01 .01 .01
3238          KM
3239          KM          L=   1.036 miles, S=  295 feet/mile, Kb= .04
3240          KM
3241          BA   0.334
3242          LG    0.27    0.28    5.70    0.21   29.00
3243          UC   0.192   0.114
3244          UA       0       5      16      30      65      77      84      90      94      97
3245          UA     100
              *

3246          KK   S726O
3247          KM   VOLUME RETAINED WITHIN SUB-BASIN S726
3248          DT  DIV726    21.2
3249          DI       0    3000
3250          DQ       0    3000
              *

3251          KK  726727
3252          KM        Normal depth route from C726 to C727
3253          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
3254          RS       7    FLOW      -1
3255          RC     .05    .035     .05    6228   .0185
3256          RX     100     120     145     170     225     240     250     265
3257          RY    1308    1304    1300    1296    1296    1300    1304    1308
              *

3258          KK    S727
3259          KM   Sub-Basin   S727
3260          KM
3261          KM      The Clark Unit Hydrograph is used for this basin.
3262          KM          The Urban time-area relation is used for this basin.
3263          KM
3264          KM      Time of Concentration for this sub-basin is based on the following:
3265          KM          6-Hour Rainfall, Pattern No.  1.00
3266          KM          An rainfall areal reduction factor of 0.995
3267          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3268          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3269          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3270          KM   .50 .50 .50 .19 .16 .16 .08 .08 .08 .08 .08 .07 .02 .02 .02 .01 .01 .01
3271          KM
3272          KM          L=   1.815 miles, S=   85 feet/mile, Kb= .04
3273          KM
3274          BA   0.375
3275          LG    0.18    0.16    9.70    0.05   54.00
3276          UC   0.408   0.386
3277          UA       0       5      16      30      65      77      84      90      94      97
3278          UA     100
              *

3279          KK   S727O
3280          KM   VOLUME RETAINED WITHIN SUB-BASIN S727
3281          DT  DIV727    33.4
3282          DI       0    3000
3283          DQ       0    3000
              *

3284          KK    C727
3285          KM        Combine routed hydrograph 726727 w/runoff from S727
3286          HC       2
              *

3287          KK   TOTAL
3288          KM        Dummy combine of all operations
3289          HC       4
              *
3290          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW
```

```
 41        S100
              .
              .
 64           .-------> DIV100
 62       S100O
              V
              V
 67      100102
              .
              .
 74           .        S101
              .           .
              .           .
 95       C102R...........
              .
              .
 98           .        S102
              .           .
              .           .
121           .           .-------> DIV100
119           .       S102O
              .           V
              .           V
124           .      101102
              .           .
              .           .
131           .           .        S103
              .           .           .
              .           .           .
152           .       C102L...........
              .           .
              .           .
155        C102...........
              V
              V
158      102103
              .
              .
165           .        S104
              .           .
              .           .
188           .           .-------> DIV104
186           .       S104O
              .           .
              .           .
191       C103R...........
              .
              .
194           .        S105
              .           .
              .           .
217           .           .-------> DIV105
215           .       S105O
              .           .
              .           .
220        C103...........
              V
              V
223      103104
              .
              .
230           .        S106
              .           .
              .           .
251        C104...........
              V
              V
254      104105
              .
              .
261           .        S107
              .           .
              .           .
282       C105L...........
              .
              .
285           .        S200
              .           V
              .           V
306           .      200201
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                .          .
                .          .
313             .          .        S201
                .          .           .
                .          .           .
334             .       C201............
                .          V
                .          V
337             .     201203
                .          .
                .          .
344             .          .        S202
                .          .           V
                .          .           V
365             .          .      202203
                .          .           .
                .          .           .
372             .          .           .        S203
                .          .           .           .
                .          .           .           .
395             .          .           .           .-------> DIV203
393             .          .           .      S203O
                .          .           .           .
                .          .           .           .
398             .     C203R......................
                .          .
                .          .
401             .          .        S204
                .          .           .
                .          .           .
424             .          .           .-------> DIV204
422             .          .      S204O
                .          .           .
                .          .           .
427             .       C203............
                .          V
                .          V
430             .     203204
                .          .
                .          .
437             .          .        S205
                .          .           .
                .          .           .
460             .          .           .-------> DIV205
458             .          .      S205O
                .          .           .
                .          .           .
463             .       C204............
                .          V
                .          V
466             .     204205
                .          .
                .          .
473             .          .        S206
                .          .           .
                .          .           .
496             .          .           .-------> DIV206
494             .          .      S206O
                .          .           .
                .          .           .
499             .     C205L............
                .          .
                .          .
502             .          .        S207
                .          .           .
                .          .           .
525             .          .           .-------> DIV207
523             .          .      S207O
                .          .           .
                .          .           .
528             .       C205............
                .          V
                .          V
531             .     205206
                .          .
                .          .
538             .          .        S208
                .          .           .
                .          .           .
561             .          .           .-------> DIV208
559             .          .      S208O
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                .          .          .
                .          .          .
564             .       C206...........
                .          V
                .          V
567             .     206207
                .          .
                .          .
574             .          .       S209
                .          .          .
                .          .          .
595             .      C207R...........
                .          .
                .          .
598             .          .       S210
                .          .          .
                .          .          .
619             .       C207...........
                .          V
                .          V
622             .     207105
                .          .
                .          .
629             .          .       S211
                .          .          .
                .          .          .
650             .      C105R...........
                .          .
                .          .
653          C105...........
                .
                .
656             .       S300
                .          .
                .          .
679             .          .-------> DIV300
677             .      S300O
                .          .
                .          .
682             .          .       S301
                .          .          .
                .          .          .
705             .          .          .-------> DIV301
703             .          .      S301O
                .          .          .
                .          .          .
708             .       C300...........
                .          V
                .          V
711             .     300301
                .          .
                .          .
718             .          .       S302
                .          .          .
                .          .          .
741             .          .          .-------> DIV302
739             .          .      S302O
                .          .          .
                .          .          .
744             .       C301...........
                .          V
                .          V
747             .     301302
                .          .
                .          .
754             .          .       S303
                .          .          .
                .          .          .
775             .       C302...........
                .          V
                .          V
778             .     302303
                .          .
                .          .
785             .          .       S304
                .          .          .
                .          .          .
808             .          .          .-------> DIV304
806             .          .      S304O
                .          .          .
                .          .          .
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 811          .        C303............
              .           .
              .           .
 814     WEST-1............
              .
              .
 817          .        S400
              .           .
              .           .
 840          .           .-------> DIV400
 838          .       S400O
              .          V
              .          V
 843          .       C400O
              .          V
              .          V
 851          .      400401
              .           .
              .           .
 858          .           .        S401
              .           .           .
              .           .           .
 881          .           .           .-------> DIV401
 879          .           .       S401O
              .           .           .
              .           .           .
 884          .        C401............
              .          V
              .          V
 887          .      401402
              .           .
              .           .
 894          .           .        S402
              .           .           .
              .           .           .
 917          .           .           .-------> DIV402
 915          .           .       S402O
              .           .           .
              .           .           .
 920          .        C402............
              .          V
              .          V
 923          .      402403
              .           .
              .           .
 931          .           .        S403
              .           .           .
              .           .           .
 954          .           .           .-------> DIV403
 952          .           .       S403O
              .           .           .
              .           .           .
 957          .        C403............
              .          V
              .          V
 960          .      403404
              .           .
              .           .
 968          .           .        S404
              .           .           .
              .           .           .
 991          .           .           .-------> DIV404
 989          .           .       S404O
              .           .           .
              .           .           .
 994          .        C404............
              .           .
              .           .
 997     WEST-2............
              .
              .
1000          .        S500
              .           .
              .           .
1023          .           .-------> DIV500
1021          .       S500O
              .          V
              .          V
1026          .      500501
              .           .
              .           .
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1033          .           .        S501
              .           .           .
              .           .           .
1056          .           .           .-------> DIV501
1054          .           .       S501O
              .           .           .
              .           .           .
1059          .        C501............
              .           V
              .           V
1062          .      501502
              .           .
              .           .
1070          .           .        S502
              .           .           .
              .           .           .
1093          .           .           .-------> DIV502
1091          .           .       S502O
              .           .           .
              .           .           .
1096          .       C502L...........
              .           .
              .           .
1099          .           .        S503
              .           .           .
              .           .           .
1122          .           .           .-------> DIV503
1120          .           .       S503O
              .           .           .
              .           .           .
1125          .       C502I...........
              .           V
              .           V
1128          .       C502O
              .           V
              .           V
1136          .      502505
              .           .
              .           .
1144          .           .        S504
              .           .           .
              .           .           .
1167          .           .           .-------> DIV504
1165          .           .       S504O
              .           .           .
              .           .           .
1170          .       C505L...........
              .           .
              .           .
1173          .           .        S505
              .           .           .
              .           .           .
1196          .           .           .-------> DIV505
1194          .           .       S505O
              .           .           V
              .           .           V
1199          .           .       C503O
              .           .           V
              .           .           V
1207          .           .      503505
              .           .           .
              .           .           .
1215          .           .           .        S506
              .           .           .           .
              .           .           .           .
1238          .           .           .           .-------> DIV506
1236          .           .           .       S506O
              .           .           .           V
              .           .           .           V
1241          .           .           .       C504O
              .           .           .           V
              .           .           .           V
1249          .           .           .      504505
              .           .           .           .
              .           .           .           .
1256          .           .           .           .        S507
              .           .           .           .           .
              .           .           .           .           .
1279          .           .           .           .           .-------> DIV507
1277          .           .           .           .       S507O
              .           .           .           .           .
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1282          .          .       C505R.......................
              .          .           .
              .          .           .
1285          .       C505............
              .          V
              .          V
1288          .     505509
              .          .
              .          .
1296          .          .        S508
              .          .           .
              .          .           .
1319          .          .           .-------> DIV508
1317          .          .       S508O
              .          .           .
              .          .           .
1322          .      C509L............
              .          .
              .          .
1325          .          .        S509
              .          .           .
              .          .           .
1348          .          .           .-------> DIV509
1346          .          .       S509O
              .          .           V
              .          .           V
1351          .          .       C506O
              .          .           V
              .          .           V
1359          .          .     506508
              .          .           .
              .          .           .
1366          .          .           .        S510
              .          .           .           .
              .          .           .           .
1389          .          .           .           .-------> DIV510
1387          .          .           .       S510O
              .          .           .           .
              .          .           .           .
1392          .          .       C508R............
              .          .           .
              .          .           .
1395          .          .           .        S511
              .          .           .           .
              .          .           .           .
1418          .          .           .           .-------> DIV511
1416          .          .           .       S511O
              .          .           .           V
              .          .           .           V
1421          .          .           .       C507O
              .          .           .           V
              .          .           .           V
1429          .          .           .      507508
              .          .           .           .
              .          .           .           .
1437          .          .           .           .        S512
              .          .           .           .           .
              .          .           .           .           .
1460          .          .           .           .           .-------> DIV512
1458          .          .           .           .       S512O
              .          .           .           .           .
              .          .           .           .           .
1463          .          .           .       C508L............
              .          .           .           .
              .          .           .           .
1466          .          .        C508............
              .          .           V
              .          .           V
1469          .          .     508509
              .          .           .
              .          .           .
1477          .          .           .        S513
              .          .           .           .
              .          .           .           .
1500          .          .           .           .-------> DIV513
1498          .          .           .       S513O
              .          .           .           .
              .          .           .           .
1503          .          .       C509R............
              .          .           .
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                .          .          .
1506            .       C509...........
                .          V
                .          V
1509            .     509510
                .          .
                .          .
1517            .          .       S514
                .          .          .
                .          .          .
1540            .          .          .-------> DIV514
1538            .          .      S5140
                .          .          .
                .          .          .
1543            .       C510...........
                .          V
                .          V
1546            .     510511
                .          .
                .          .
1554            .          .       S515
                .          .          .
                .          .          .
1577            .          .          .-------> DIV515
1575            .          .      S5150
                .          .          .
                .          .          .
1580            .       C511...........
                .          V
                .          V
1583            .     511512
                .          .
                .          .
1591            .          .       S516
                .          .          .
                .          .          .
1614            .          .          .-------> DIV516
1612            .          .      S5160
                .          .          .
                .          .          .
1617            .       C512...........
                .          .
                .          .
1620      WEST-3...........
                .
                .
1623            .       S600
                .          V
                .          V
1644            .     600601
                .          .
                .          .
1651            .          .       S601
                .          .          .
                .          .          .
1672            .       C601...........
                .          V
                .          V
1675            .     601602
                .          .
                .          .
1682            .          .       S603
                .          .          .
                .          .          .
1703            .      C602L...........
                .          .
                .          .
1706            .          .       S602
                .          .          .
                .          .          .
1727            .       C602...........
                .          V
                .          V
1730            .     602603
                .          .
                .          .
1738            .          .       S606
                .          .          .
                .          .          .
1759            .      C603L...........
                .          .
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1762            .           .        S605
                .           .           .
                .           .           .
1783            .           .           .        S604
                .           .           .           .
                .           .           .           .
1804            .       C603.......................
                .          V
                .          V
1807            .     603604
                .           .
                .           .
1815            .           .        S609
                .           .           .
                .           .           .
1838            .           .           .-------> DIV609
1836            .           .      S609O
                .           .           .
                .           .           .
1841            .      C604R............
                .           .
                .           .
1844            .           .        S607
                .           .           .
                .           .           .
1867            .           .           .-------> DIV607
1865            .           .      S607O
                .           .           .
                .           .           .
1870            .       C604............
                .          V
                .          V
1873            .     604605
                .           .
                .           .
1880            .           .        S608
                .           .           .
                .           .           .
1903            .           .           .-------> DIV608
1901            .           .      S608O
                .           .           .
                .           .           .
1906            .       C605............
                .          V
                .          V
1909            .     605606
                .           .
                .           .
1917            .           .        S610
                .           .           .
                .           .           .
1938            .      C606L............
                .           .
                .           .
1941            .           .        S612
                .           .           .
                .           .           .
1962            .       C606............
                .          V
                .          V
1965            .     606608
                .           .
                .           .
1973            .           .        S611
                .           .           V
                .           .           V
1994            .           .     607608
                .           .           .
                .           .           .
2001            .           .           .        S613
                .           .           .           .
                .           .           .           .
2022            .       C608.......................
                .          V
                .          V
2025            .     608609
                .           .
                .           .
2033            .           .        S614
                .           .           .
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2054          .        C609............
              .           V
              .           V
2057          .      609611
              .           .
              .           .
2065          .           .        S617
              .           .           .
              .           .           .
2086          .       C611R...........
              .           .
              .           .
2089          .           .        S615
              .           .           V
              .           .           V
2110          .           .      610611
              .           .           .
              .           .           .
2117          .           .           .        S616
              .           .           .           .
              .           .           .           .
2140          .           .           .           .-------> DIV616
2138          .           .           .      S616O
              .           .           .           .
              .           .           .           .
2143          .           .       C611L...........
              .           .           .
              .           .           .
2146          .        C611............
              .           V
              .           V
2149          .      611613
              .           .
              .           .
2157          .           .        S618
              .           .           .
              .           .           .
2178          .       C613R...........
              .           .
              .           .
2181          .           .        S619
              .           .           V
              .           .           V
2202          .           .      612613
              .           .           .
              .           .           .
2209          .           .           .        S620
              .           .           .           .
              .           .           .           .
2230          .           .       C613L...........
              .           .           .
              .           .           .
2233          .        C613............
              .           V
              .           V
2236          .      613614
              .           .
              .           .
2244          .           .        S621
              .           .           .
              .           .           .
2265          .        C614............
              .           V
              .           V
2268          .      614615
              .           .
              .           .
2276          .           .        S622
              .           .           .
              .           .           .
2297          .        C615............
              .           .
              .           .
2300     WEST-4............
              .
              .
2303          .        S700
              .           .
              .           .
2324          .           .        S701
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2347                .-------> DIV703
2345            S703O

2350                    S702

2373                    .-------> DIV702
2371                S702O

2376                        S703

2399                        .-------> DIV703
2397                    S703O

2402                            S704
                                   V
                                   V
2423                        704705

2430                                    S705

2451                            C705............
                                   V
                                   V
2454                           C705O
                                   V
                                   V
2467                        705OAF

2474                                 S705AF

2497                                         .-------> DIV703
2495                                 705AFO

2500                        C705AF............

2503        WEST-5.............................................

2506            S706

2529                .-------> DIV706
2527            S706O

2532                    S707

2555                    .-------> DIV707
2553                S707O

2558                        S728

2581                        .-------> DIV728
2579                    S728O

2584    WEST...............................................

2587        S708

2610        .-------> DIV708
2608    S708O
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2613          .         .        S709
              .         .          .
              .         .          .
2636          .         .          .-------> DIV709
2634          .         .       S709O
              .         .          V
              .         .          V
2639          .         .       C709O
              .         .          V
              .         .          V
2653          .         .      709710
              .         .          .
              .         .          .
2660          .         .          .        S710
              .         .          .          .
              .         .          .          .
2685          .         .          .          .-------> DIV710
2683          .         .          .       S710O
              .         .          .          .
              .         .          .          .
2688          .         .       C710I............
              .         .          V
              .         .          V
2691          .         .       C710O
              .         .          .
              .         .          .
2703          .         .          .        S711
              .         .          .          .
              .         .          .          .
2728          .         .          .          .-------> DIV711
2726          .         .          .       S711O
              .         .          .          V
              .         .          .          V
2731          .         .          .       C711O
              .         .          .          V
              .         .          .          V
2743          .         .          .      711712
              .         .          .          .
              .         .          .          .
2750          .         .          .          .        S712
              .         .          .          .          .
              .         .          .          .          .
2775          .         .          .          .          .-------> DIV712
2773          .         .          .          .       S712O
              .         .          .          .          .
              .         .          .          .          .
2778          .         .          .       C712I............
              .         .          .          V
              .         .          .          V
2781          .         .          .       C712O
              .         .          .          V
              .         .          .          V
2793          .         .          .      712714
              .         .          .          .
              .         .          .          .
2800          .         .          .          .        S713
              .         .          .          .          .
              .         .          .          .          .
2825          .         .          .          .          .-------> DIV713
2823          .         .          .          .       S713O
              .         .          .          .          V
              .         .          .          .          V
2828          .         .          .          .       C713O
              .         .          .          .          V
              .         .          .          .          V
2840          .         .          .          .      713714
              .         .          .          .          .
              .         .          .          .          .
2847          .         .          .          .          .        S714
              .         .          .          .          .          .
              .         .          .          .          .          .
2870          .         .          .        C714........................
              .         .          .          .
              .         .          .          .
2873          .         .          .          .        S715
              .         .          .          .          .
              .         .          .          .          .
2896          .         .          .          .          .-------> DIV715
2894          .         .          .          .       S715O
              .         .          .          .          .
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2899                                                  S716
                                                        .
                                                        .
2922                                                    .-------> DIV716
2920                                                 S716O
                                                        V
                                                        V
2925                                                 C716O
                                                        V
                                                        V
2937                                                716717
                                                        .
                                                        .
2944                                                    .        S717
                                                        .          .
                                                        .          .
2967                                                    .          .-------> DIV717
2965                                                    .      S717O
                                                        .          .
                                                        .          .
2970                                                  C717............
                                                        V
                                                        V
2973                                                717718
                                                        .
                                                        .
2981                                                    .        S718
                                                        .          .
                                                        .          .
3004                                                    .          .-------> DIV718
3002                                                    .      S718O
                                                        .          .
                                                        .          .
3007                                                  C718............
                                                        .
                                                        .
3010                                                    .        S719
                                                        .          .
                                                        .          .
3033                                                    .          .-------> DIV719
3031                                                    .      S719O
                                                        .          .
                                                        .          .
3036          EAST-1.......................................................
                 .
                 .
3039             .        S720
                 .          .
                 .          .
3062             .          .-------> DIV720
3060             .      S720O
                 .          .
                 .          .
3065             .          .       S721
                 .          .         .
                 .          .         .
3088             .          .         .-------> DIV721
3086             .          .     S721O
                 .          .         V
                 .          .         V
3091             .          .     C721O
                 .          .         V
                 .          .         V
3105             .          .    721722
                 .          .         .
                 .          .         .
3113             .          .         .       S722
                 .          .         .         .
                 .          .         .         .
3136             .          .         .         .-------> DIV722
3134             .          .         .      S722O
                 .          .         .         .
                 .          .         .         .
3139             .          .       C722............
                 .          .         .
                 .          .         .
3142             .          .         .       S723
                 .          .         .         .
                 .          .         .         .
3167             .          .         .         .-------> DIV723
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3165          .          .          .          .      S7230
              .          .          .          .          .
              .          .          .          .          .
3170          .          .          .          .          .       S724
              .          .          .          .          .          .
              .          .          .          .          .          .
3193          .          .          .          .          .          .-------> DIV724
3191          .          .          .          .          .      S7240
              .          .          .          .          .          .
              .          .          .          .          .          .
3196          .          .          .          .          .          .       S725
              .          .          .          .          .          .          .
              .          .          .          .          .          .          .
3219          .          .          .          .          .          .          .-------> DIV725
3217          .          .          .          .          .          .      S7250
              .          .          .          .          .          .          .
              .          .          .          .          .          .          .
3222          .          .     EAST-2.............................................
              .          .          .
              .          .          .
3225          .          .          .       S726
              .          .          .          .
              .          .          .          .
3248          .          .          .          .-------> DIV726
3246          .          .          .      S7260
              .          .          .         V
              .          .          .         V
3251          .          .          .     726727
              .          .          .          .
              .          .          .          .
3258          .          .          .          .       S727
              .          .          .          .          .
              .          .          .          .          .
3281          .          .          .          .          .-------> DIV727
3279          .          .          .          .      S7270
              .          .          .          .          .
              .          .          .          .          .
3284          .          .          .       C727............
              .          .          .          .
              .          .          .          .
3287       TOTAL...................................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*              JUN  1998               *                    *   HYDROLOGIC ENGINEERING CENTER      *
*            VERSION 4.1               *                    *         609 SECOND STREET            *
*                                      *                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE   09AUG01  TIME  14:33:25  *                    *          (916) 756-1104              *
*                                      *                    *                                      *
****************************************                    ****************************************
```

N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File:FR100-6.IH1
Original:05-04-00 MCG
Revised:05-02-01 MMZ

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future condition 100-year, 6-hour storm event. A companion model is also created for the future condition 100-year, 24-hour storm event. Both models 100-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 100-year, 6-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

```
 22 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
```

```
IT          HYDROGRAPH TIME DATA
                 NMIN            2  MINUTES IN COMPUTATION INTERVAL
                IDATE      1     0  STARTING DATE
                ITIME         0000  STARTING TIME
                   NQ         1000  NUMBER OF HYDROGRAPH ORDINATES
               NDDATE      2     0  ENDING DATE
               NDTIME         0918  ENDING TIME
               ICENT            19  CENTURY MARK

          COMPUTATION INTERVAL     0.03 HOURS
               TOTAL TIME BASE    33.30 HOURS

     ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT

24 JD       INDEX STORM NO. 1
                 STRM        3.35  PRECIPITATION DEPTH
                 TRDA        0.01  TRANSPOSITION DRAINAGE AREA

25 PI        PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD       INDEX STORM NO. 2
                 STRM        3.33  PRECIPITATION DEPTH
                 TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI        PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

29 JD       INDEX STORM NO. 3
                 STRM        3.28  PRECIPITATION DEPTH
                 TRDA        2.80  TRANSPOSITION DRAINAGE AREA

30 PI        PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01
                0.01    0.01    0.01    0.01    0.01    0.03    0.03    0.03    0.03    0.03
                0.03    0.03    0.03    0.03    0.03    0.03    0.03    0.03    0.03    0.03
                0.02    0.02    0.02    0.02    0.02    0.02    0.02    0.01    0.01    0.01
                0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01
                0.01    0.01    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00

33 JD         INDEX STORM NO. 4
                  STRM        3.09  PRECIPITATION DEPTH
                  TRDA       16.00  TRANSPOSITION DRAINAGE AREA

34 PI          PRECIPITATION PATTERN
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01
                0.01    0.01    0.01    0.01    0.01    0.02    0.02    0.02    0.02    0.02
                0.02    0.02    0.02    0.03    0.03    0.03    0.03    0.03    0.03    0.03
                0.02    0.02    0.02    0.02    0.02    0.02    0.02    0.01    0.01    0.01
                0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01
                0.01    0.01    0.01    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00

37 JD         INDEX STORM NO. 5
                  STRM        2.71  PRECIPITATION DEPTH
                  TRDA       90.00  TRANSPOSITION DRAINAGE AREA

38 PI          PRECIPITATION PATTERN
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01
                0.01    0.01    0.01    0.01    0.01    0.02    0.02    0.02    0.02    0.02
                0.02    0.02    0.02    0.02    0.02    0.02    0.02    0.02    0.02    0.02
                0.02    0.02    0.02    0.02    0.02    0.02    0.02    0.01    0.01    0.01
                0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01
                0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01    0.01
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
                0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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        WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
1
                                        RUNOFF SUMMARY
                                   FLOW IN CUBIC FEET PER SECOND
                                TIME IN HOURS,  AREA IN SQUARE MILES

                                  PEAK   TIME OF    AVERAGE FLOW FOR MAXIMUM PERIOD      BASIN    MAXIMUM    TIME OF
        OPERATION       STATION   FLOW    PEAK                                           AREA     STAGE    MAX STAGE
+                                                    6-HOUR     24-HOUR     72-HOUR

        HYDROGRAPH AT
+                       S100      765.    4.43        124.        31.         23.       0.57
        DIVERSION TO
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+	DIV100	195.	4.03	13.	3.	2.	0.57
HYDROGRAPH AT +	S100O	765.	4.43	113.	28.	20.	0.57
ROUTED TO +	100102	720.	4.67	113.	28.	20.	0.57
HYDROGRAPH AT +	S101	1034.	4.33	126.	31.	23.	0.63
2 COMBINED AT +	C102R	1201.	4.53	223.	56.	41.	1.20
HYDROGRAPH AT +	S102	701.	4.20	102.	26.	19.	0.45
DIVERSION TO +	DIV100	611.	4.10	29.	7.	5.	0.45
HYDROGRAPH AT +	S102O	701.	4.20	74.	18.	13.	0.45
ROUTED TO +	101102	629.	4.47	74.	18.	13.	0.45
HYDROGRAPH AT +	S103	521.	4.47	83.	21.	15.	0.40
2 COMBINED AT +	C102L	1026.	4.47	149.	38.	27.	0.84
2 COMBINED AT +	C102	1954.	4.53	352.	89.	64.	2.05
ROUTED TO +	102103	1878.	4.80	351.	89.	64.	2.05
HYDROGRAPH AT +	S104	1359.	4.40	194.	49.	35.	0.90
DIVERSION TO +	DIV104	774.	4.17	41.	10.	7.	0.90
HYDROGRAPH AT +	S104O	1359.	4.40	154.	39.	28.	0.90
2 COMBINED AT +	C103R	2476.	4.73	479.	120.	87.	2.95
HYDROGRAPH AT +	S105	712.	4.30	131.	33.	24.	0.59
DIVERSION TO +	DIV105	626.	4.17	32.	8.	6.	0.59
HYDROGRAPH AT +	S105O	712.	4.30	100.	25.	18.	0.59
2 COMBINED AT +	C103	2813.	4.73	553.	139.	100.	3.54
ROUTED TO +	103104	2760.	4.87	553.	139.	100.	3.54
HYDROGRAPH AT +	S106	862.	4.20	114.	29.	21.	0.57
2 COMBINED AT +	C104	2920.	4.87	636.	161.	116.	4.11
ROUTED TO +	104105	2877.	5.03	636.	161.	116.	4.11
HYDROGRAPH AT +	S107	1153.	4.37	165.	41.	30.	0.94
2 COMBINED AT +	C105L	3135.	5.00	753.	190.	137.	5.05
HYDROGRAPH AT							

+	S200	1379.	4.40	204.	51.	37.	0.96
ROUTED TO +	200201	1344.	4.43	204.	51.	37.	0.96
HYDROGRAPH AT +	S201	603.	4.30	78.	20.	14.	0.35
2 COMBINED AT +	C201	1669.	4.43	272.	69.	49.	1.31
ROUTED TO +	201203	1629.	4.50	272.	69.	49.	1.31
HYDROGRAPH AT +	S202	274.	4.17	28.	7.	5.	0.13
ROUTED TO +	202203	263.	4.27	28.	7.	5.	0.13
HYDROGRAPH AT +	S203	468.	4.23	86.	22.	16.	0.37
DIVERSION TO +	DIV203	468.	4.23	31.	8.	6.	0.37
HYDROGRAPH AT +	S203O	463.	4.30	56.	14.	10.	0.37
3 COMBINED AT +	C203R	1965.	4.50	340.	86.	62.	1.81
HYDROGRAPH AT +	S204	1126.	4.50	196.	49.	36.	0.95
DIVERSION TO +	DIV204	20.	1.67	3.	1.	1.	0.95
HYDROGRAPH AT +	S204O	1126.	4.50	195.	49.	35.	0.95
2 COMBINED AT +	C203	2648.	4.50	508.	128.	92.	2.76
ROUTED TO +	203204	2639.	4.53	507.	128.	92.	2.76
HYDROGRAPH AT +	S205	784.	4.27	97.	24.	18.	0.41
DIVERSION TO +	DIV205	605.	4.13	29.	7.	5.	0.41
HYDROGRAPH AT +	S205O	784.	4.27	69.	17.	12.	0.41
2 COMBINED AT +	C204	2978.	4.50	558.	140.	101.	3.17
ROUTED TO +	204205	2938.	4.63	558.	140.	101.	3.17
HYDROGRAPH AT +	S206	878.	4.37	187.	47.	34.	0.85
DIVERSION TO +	DIV206	878.	4.37	85.	21.	15.	0.85
HYDROGRAPH AT +	S206O	755.	4.63	104.	26.	19.	0.85
2 COMBINED AT +	C205L	3352.	4.63	628.	158.	114.	4.03
HYDROGRAPH AT +	S207	1007.	4.57	207.	52.	38.	0.96
DIVERSION TO +	DIV207	605.	4.30	40.	10.	7.	0.96
HYDROGRAPH AT							

+	S207O	1007.	4.57	169.	42.	30.	0.96
2 COMBINED AT +	C205	3909.	4.63	757.	190.	137.	4.98
ROUTED TO +	205206	3666.	5.03	754.	190.	137.	4.98
HYDROGRAPH AT +	S208	1064.	4.73	242.	61.	44.	1.10
DIVERSION TO +	DIV208	345.	4.23	26.	7.	5.	1.10
HYDROGRAPH AT +	S208O	1064.	4.73	219.	55.	39.	1.10
2 COMBINED AT +	C206	4238.	5.03	925.	233.	168.	6.09
ROUTED TO +	206207	4206.	5.10	925.	233.	168.	6.09
HYDROGRAPH AT +	S209	1011.	4.40	131.	33.	24.	0.65
2 COMBINED AT +	C207R	4311.	5.10	1014.	257.	185.	6.74
HYDROGRAPH AT +	S210	855.	4.17	90.	23.	16.	0.48
2 COMBINED AT +	C207	4306.	5.10	1071.	271.	195.	7.22
ROUTED TO +	207105	4253.	5.20	1070.	271.	195.	7.22
HYDROGRAPH AT +	S211	808.	4.17	95.	24.	17.	0.49
2 COMBINED AT +	C105R	4258.	5.20	1130.	287.	207.	7.70
2 COMBINED AT +	C105	6310.	5.17	1722.	437.	315.	12.75
HYDROGRAPH AT +	S300	1195.	4.13	139.	35.	25.	0.62
DIVERSION TO +	DIV300	1195.	4.13	66.	16.	12.	0.62
HYDROGRAPH AT +	S300O	1016.	4.20	73.	18.	13.	0.62
HYDROGRAPH AT +	S301	1883.	4.13	232.	58.	42.	0.99
DIVERSION TO +	DIV301	1368.	3.97	76.	19.	14.	0.99
HYDROGRAPH AT +	S301O	1883.	4.13	156.	39.	28.	0.99
2 COMBINED AT +	C300	2161.	4.27	214.	54.	39.	1.61
ROUTED TO +	300301	2024.	4.37	214.	54.	39.	1.61
HYDROGRAPH AT +	S302	936.	4.27	103.	26.	19.	0.47
DIVERSION TO +	DIV302	332.	4.00	17.	4.	3.	0.47
HYDROGRAPH AT +	S302O	936.	4.27	87.	22.	16.	0.47
2 COMBINED AT							

+		C301	2499.	4.37	286.	71.	51.	2.07
	ROUTED TO							
+		301302	2283.	4.70	286.	71.	51.	2.07
	HYDROGRAPH AT							
+		S303	1024.	4.37	130.	32.	23.	0.71
	2 COMBINED AT							
+		C302	2651.	4.67	387.	97.	70.	2.78
	ROUTED TO							
+		302303	2586.	4.80	387.	97.	70.	2.78
	HYDROGRAPH AT							
+		S304	1080.	4.20	153.	38.	28.	0.82
	DIVERSION TO							
+		DIV304	1080.	4.20	67.	17.	12.	0.82
	HYDROGRAPH AT							
+		S304O	931.	4.40	87.	22.	16.	0.82
	2 COMBINED AT							
+		C303	2848.	4.77	439.	110.	80.	3.60
	2 COMBINED AT							
+		WEST-1	7308.	5.13	1997.	507.	365.	16.36
	HYDROGRAPH AT							
+		S400	1999.	4.27	253.	63.	46.	1.05
	DIVERSION TO							
+		DIV400	1918.	4.20	112.	28.	20.	1.05
	HYDROGRAPH AT							
+		S400O	1937.	4.30	142.	35.	26.	1.05
	ROUTED TO							
+		C400O	478.	4.80	142.	35.	26.	1.05
	ROUTED TO							
+		400401	476.	5.13	142.	35.	26.	1.05
	HYDROGRAPH AT							
+		S401	1316.	4.13	131.	33.	24.	0.65
	DIVERSION TO							
+		DIV401	1316.	4.13	73.	18.	13.	0.65
	HYDROGRAPH AT							
+		S401O	1002.	4.23	59.	15.	11.	0.65
	2 COMBINED AT							
+		C401	761.	4.33	185.	46.	33.	1.69
	ROUTED TO							
+		401402	557.	5.10	185.	46.	33.	1.69
	HYDROGRAPH AT							
+		S402	1696.	4.10	178.	45.	32.	0.74
	DIVERSION TO							
+		DIV402	1696.	4.10	104.	26.	19.	0.74
	HYDROGRAPH AT							
+		S402O	1191.	4.20	74.	19.	13.	0.74
	2 COMBINED AT							
+		C402	926.	4.30	241.	60.	43.	2.43
	ROUTED TO							
+		402403	640.	4.77	241.	60.	43.	2.43
	HYDROGRAPH AT							
+		S403	1440.	4.10	156.	39.	28.	0.56
	DIVERSION TO							
+		DIV403	1440.	4.10	100.	25.	18.	0.56
	HYDROGRAPH AT							

+	S4030	1022.	4.23	57.	14.	10.	0.56
2 COMBINED AT +	C403	868.	4.73	285.	71.	51.	2.99
ROUTED TO +	403404	812.	4.87	285.	71.	51.	2.99
HYDROGRAPH AT +	S404	672.	4.17	56.	14.	10.	0.26
DIVERSION TO +	DIV404	182.	3.87	6.	1.	1.	0.26
HYDROGRAPH AT +	S4040	672.	4.17	50.	13.	9.	0.26
2 COMBINED AT +	C404	845.	4.87	324.	81.	58.	3.26
2 COMBINED AT +	WEST-2	7383.	5.13	2137.	542.	391.	19.61
HYDROGRAPH AT +	S500	1236.	4.27	237.	60.	43.	1.05
DIVERSION TO +	DIV500	1236.	4.27	94.	23.	17.	1.05
HYDROGRAPH AT +	S5000	1186.	4.40	145.	36.	26.	1.05
ROUTED TO +	500501	1088.	4.60	145.	36.	26.	1.05
HYDROGRAPH AT +	S501	1118.	4.17	132.	33.	24.	0.61
DIVERSION TO +	DIV501	1064.	4.10	51.	13.	9.	0.61
HYDROGRAPH AT +	S5010	1083.	4.20	82.	20.	15.	0.61
2 COMBINED AT +	C501	1390.	4.60	210.	53.	38.	1.67
ROUTED TO +	501502	1302.	4.70	207.	52.	37.	1.67
HYDROGRAPH AT +	S502	819.	4.27	85.	21.	15.	0.40
DIVERSION TO +	DIV502	640.	4.13	27.	7.	5.	0.40
HYDROGRAPH AT +	S5020	819.	4.27	58.	15.	10.	0.40
2 COMBINED AT +	C502L	1485.	4.70	251.	63.	45.	2.07
HYDROGRAPH AT +	S503	1459.	4.20	220.	55.	40.	0.99
DIVERSION TO +	DIV503	990.	4.03	51.	13.	9.	0.99
HYDROGRAPH AT +	S5030	1459.	4.20	169.	42.	30.	0.99
2 COMBINED AT +	C502I	2069.	4.40	391.	98.	70.	3.07
ROUTED TO +	C5020	1832.	4.80	391.	98.	70.	3.07
ROUTED TO +	502505	1792.	5.00	382.	95.	69.	3.07
HYDROGRAPH AT							

+		S504	513.	4.17	76.	19.	14.	0.33
	DIVERSION TO							
+		DIV504	513.	4.17	53.	13.	9.	0.33
	HYDROGRAPH AT							
+		S504O	283.	4.57	24.	6.	4.	0.33
	2 COMBINED AT							
+		C505L	1863.	4.97	391.	98.	70.	3.39
	HYDROGRAPH AT							
+		S505	395.	4.10	29.	7.	5.	0.14
	DIVERSION TO							
+		DIV505	83.	3.80	4.	1.	1.	0.14
	HYDROGRAPH AT							
+		S505O	395.	4.10	26.	6.	5.	0.14
	ROUTED TO							
+		C503O	98.	4.37	26.	6.	5.	0.14
	ROUTED TO							
+		503505	96.	4.87	25.	6.	5.	0.14
	HYDROGRAPH AT							
+		S506	394.	4.13	36.	9.	6.	0.15
	DIVERSION TO							
+		DIV506	318.	4.03	12.	3.	2.	0.15
	HYDROGRAPH AT							
+		S506O	394.	4.13	24.	6.	4.	0.15
	ROUTED TO							
+		C504O	92.	4.53	24.	6.	4.	0.15
	ROUTED TO							
+		504505	91.	4.97	24.	6.	4.	0.15
	HYDROGRAPH AT							
+		S507	1460.	4.10	140.	35.	25.	0.67
	DIVERSION TO							
+		DIV507	1460.	4.10	92.	23.	17.	0.67
	HYDROGRAPH AT							
+		S507O	912.	4.27	49.	12.	9.	0.67
	3 COMBINED AT							
+		C505R	682.	4.27	91.	23.	16.	0.96
	2 COMBINED AT							
+		C505	2025.	4.80	445.	111.	80.	4.35
	ROUTED TO							
+		505509	1974.	5.23	429.	107.	77.	4.35
	HYDROGRAPH AT							
+		S508	786.	4.07	66.	17.	12.	0.29
	DIVERSION TO							
+		DIV508	786.	4.07	42.	10.	8.	0.29
	HYDROGRAPH AT							
+		S508O	604.	4.17	25.	6.	4.	0.29
	2 COMBINED AT							
+		C509L	1970.	5.23	442.	110.	80.	4.65
	HYDROGRAPH AT							
+		S509	520.	4.03	40.	10.	7.	0.17
	DIVERSION TO							
+		DIV509	226.	3.83	10.	3.	2.	0.17
	HYDROGRAPH AT							
+		S509O	520.	4.03	30.	7.	5.	0.17
	ROUTED TO							

+	C506O	93.	4.33	30.	7.	5.	0.17
ROUTED TO +	506508	93.	4.53	30.	7.	5.	0.17
HYDROGRAPH AT +	S510	329.	4.07	36.	9.	7.	0.13
DIVERSION TO +	DIV510	329.	4.07	22.	6.	4.	0.13
HYDROGRAPH AT +	S510O	261.	4.20	14.	4.	3.	0.13
2 COMBINED AT +	C508R	326.	4.20	44.	11.	8.	0.30
HYDROGRAPH AT +	S511	1018.	4.07	91.	23.	16.	0.38
DIVERSION TO +	DIV511	902.	4.00	35.	9.	6.	0.38
HYDROGRAPH AT +	S511O	1018.	4.07	56.	14.	10.	0.38
ROUTED TO +	C507O	96.	4.63	56.	14.	10.	0.38
ROUTED TO +	507508	95.	4.93	55.	15.	11.	0.38
HYDROGRAPH AT +	S512	536.	4.10	64.	16.	12.	0.21
DIVERSION TO +	DIV512	536.	4.10	40.	10.	7.	0.21
HYDROGRAPH AT +	S512O	395.	4.27	24.	6.	4.	0.21
2 COMBINED AT +	C508L	354.	4.27	78.	20.	15.	0.60
2 COMBINED AT +	C508	571.	4.33	118.	30.	22.	0.90
ROUTED TO +	508509	443.	4.93	115.	31.	22.	0.90
HYDROGRAPH AT +	S513	1317.	4.13	166.	42.	30.	0.78
DIVERSION TO +	DIV513	1317.	4.13	115.	29.	21.	0.78
HYDROGRAPH AT +	S513O	692.	4.40	52.	13.	9.	0.78
2 COMBINED AT +	C509R	645.	4.90	153.	41.	29.	1.67
2 COMBINED AT +	C509	2295.	5.17	533.	135.	98.	6.32
ROUTED TO +	509510	2276.	5.27	532.	135.	98.	6.32
HYDROGRAPH AT +	S514	1427.	4.10	175.	44.	32.	0.65
DIVERSION TO +	DIV514	1427.	4.10	104.	26.	19.	0.65
HYDROGRAPH AT +	S514O	1002.	4.27	71.	18.	13.	0.65
2 COMBINED AT +	C510	2327.	5.23	577.	147.	106.	6.97
ROUTED TO							

+	510511	2257.	5.63	575.	147.	106.	6.97
HYDROGRAPH AT +	S515	2390.	4.10	301.	75.	54.	1.10
DIVERSION TO +	DIV515	2390.	4.10	171.	43.	31.	1.10
HYDROGRAPH AT +	S515O	1871.	4.27	131.	33.	24.	1.10
2 COMBINED AT +	C511	2244.	5.63	666.	170.	122.	8.07
ROUTED TO +	511512	2184.	5.97	660.	169.	122.	8.07
HYDROGRAPH AT +	S516	1115.	4.13	142.	36.	26.	0.54
DIVERSION TO +	DIV516	1115.	4.13	79.	20.	14.	0.54
HYDROGRAPH AT +	S516O	906.	4.27	63.	16.	11.	0.54
2 COMBINED AT +	C512	2187.	5.97	694.	178.	128.	8.61
2 COMBINED AT +	WEST-3	7327.	5.13	2490.	637.	459.	28.22
HYDROGRAPH AT +	S600	1843.	4.53	339.	85.	61.	2.02
ROUTED TO +	600601	1823.	4.60	339.	85.	61.	2.02
HYDROGRAPH AT +	S601	1460.	4.37	226.	57.	41.	0.90
2 COMBINED AT +	C601	2625.	4.57	538.	136.	98.	2.92
ROUTED TO +	601602	2597.	4.67	538.	136.	98.	2.92
HYDROGRAPH AT +	S603	1467.	4.23	166.	42.	30.	0.67
2 COMBINED AT +	C602L	3040.	4.57	678.	171.	123.	3.58
HYDROGRAPH AT +	S602	1882.	4.57	386.	97.	70.	1.88
2 COMBINED AT +	C602	4393.	4.57	1002.	253.	183.	5.47
ROUTED TO +	602603	4278.	4.80	958.	240.	173.	5.47
HYDROGRAPH AT +	S606	910.	4.37	148.	37.	27.	0.66
2 COMBINED AT +	C603L	4628.	4.77	1071.	269.	194.	6.13
HYDROGRAPH AT +	S605	1250.	4.50	231.	58.	42.	1.09
HYDROGRAPH AT +	S604	1924.	4.87	523.	134.	97.	2.66
3 COMBINED AT +	C603	6527.	4.77	1667.	423.	305.	9.87
ROUTED TO +	603604	6391.	4.90	1618.	407.	293.	9.87
HYDROGRAPH AT							

+	S609	622.	4.47	115.	29.	21.	0.56
+ DIVERSION TO	DIV609	376.	4.23	21.	5.	4.	0.56
+ HYDROGRAPH AT	S609O	622.	4.47	96.	24.	17.	0.56
+ 2 COMBINED AT	C604R	6593.	4.90	1675.	421.	304.	10.43
+ HYDROGRAPH AT	S607	952.	4.50	189.	48.	34.	0.82
+ DIVERSION TO	DIV607	51.	3.63	11.	3.	2.	0.82
+ HYDROGRAPH AT	S607O	952.	4.50	180.	45.	32.	0.82
+ 2 COMBINED AT	C604	7002.	4.90	1807.	454.	328.	11.25
+ ROUTED TO	604605	6972.	4.93	1807.	454.	328.	11.25
+ HYDROGRAPH AT	S608	1072.	4.27	126.	32.	23.	0.51
+ DIVERSION TO	DIV608	288.	3.93	18.	5.	3.	0.51
+ HYDROGRAPH AT	S608O	1072.	4.27	108.	27.	19.	0.51
+ 2 COMBINED AT	C605	7106.	4.93	1884.	474.	341.	11.76
+ ROUTED TO	605606	7024.	5.03	1874.	471.	340.	11.76
+ HYDROGRAPH AT	S610	952.	4.20	149.	37.	27.	0.60
+ 2 COMBINED AT	C606L	7174.	5.03	1981.	499.	360.	12.36
+ HYDROGRAPH AT	S612	1082.	4.27	201.	51.	36.	0.81
+ 2 COMBINED AT	C606	7469.	5.00	2133.	539.	388.	13.17
+ ROUTED TO	606608	7460.	5.03	2130.	538.	388.	13.17
+ HYDROGRAPH AT	S611	1068.	4.30	127.	32.	23.	0.57
+ ROUTED TO	607608	968.	4.47	127.	32.	23.	0.57
+ HYDROGRAPH AT	S613	1854.	4.63	392.	99.	71.	1.80
+ 3 COMBINED AT	C608	8609.	4.97	2509.	635.	458.	15.53
+ ROUTED TO	608609	8540.	5.10	2496.	632.	455.	15.53
+ HYDROGRAPH AT	S614	1126.	4.60	234.	59.	43.	1.08
+ 2 COMBINED AT	C609	8945.	5.07	2653.	673.	485.	16.61
+ ROUTED TO	609611	8842.	5.27	2622.	663.	478.	16.61
HYDROGRAPH AT							

+		S617	1206.	4.17	144.	36.	26.	0.68
	2 COMBINED AT							
+		C611R	8839.	5.23	2706.	685.	494.	17.29
	HYDROGRAPH AT							
+		S615	1313.	4.60	286.	72.	52.	1.05
	ROUTED TO							
+		610611	1286.	4.77	285.	72.	52.	1.05
	HYDROGRAPH AT							
+		S616	803.	4.33	109.	27.	20.	0.50
	DIVERSION TO							
+		DIV616	591.	4.20	25.	6.	5.	0.50
	HYDROGRAPH AT							
+		S616O	803.	4.33	84.	21.	15.	0.50
	2 COMBINED AT							
+		C611L	1581.	4.70	358.	90.	65.	1.56
	2 COMBINED AT							
+		C611	9478.	5.20	2955.	751.	541.	18.85
	ROUTED TO							
+		611613	9457.	5.27	2945.	747.	539.	18.85
	HYDROGRAPH AT							
+		S618	1055.	4.53	198.	50.	36.	0.96
	2 COMBINED AT							
+		C613R	9675.	5.23	3062.	778.	561.	19.81
	HYDROGRAPH AT							
+		S619	1395.	4.43	209.	52.	38.	0.83
	ROUTED TO							
+		612613	1333.	4.57	209.	52.	38.	0.83
	HYDROGRAPH AT							
+		S620	613.	4.43	111.	28.	20.	0.44
	2 COMBINED AT							
+		C613L	1716.	4.57	312.	79.	57.	1.27
	2 COMBINED AT							
+		C613	10151.	5.20	3276.	835.	602.	21.08
	ROUTED TO							
+		613614	10101.	5.27	3264.	831.	599.	21.08
	HYDROGRAPH AT							
+		S621	1493.	4.30	159.	40.	29.	0.92
	2 COMBINED AT							
+		C614	10093.	5.27	3346.	852.	614.	22.00
	ROUTED TO							
+		614615	9999.	5.37	3326.	846.	609.	22.00
	HYDROGRAPH AT							
+		S622	806.	4.67	153.	38.	28.	0.90
	2 COMBINED AT							
+		C615	10130.	5.37	3396.	863.	622.	22.90
	2 COMBINED AT							
+		WEST-4	13648.	5.30	4934.	1267.	913.	51.12
	HYDROGRAPH AT							
+		S700	1197.	4.10	120.	30.	22.	0.61
	HYDROGRAPH AT							
+		S701	740.	4.33	152.	38.	28.	0.72
	DIVERSION TO							
+		DIV703	7.	1.27	1.	0.	0.	0.72
	HYDROGRAPH AT							

+	S703O	740.	4.33	152.	38.	28.	0.72
HYDROGRAPH AT +	S702	556.	4.10	59.	15.	11.	0.26
DIVERSION TO +	DIV702	556.	4.10	33.	8.	6.	0.26
HYDROGRAPH AT +	S702O	435.	4.23	26.	6.	5.	0.26
HYDROGRAPH AT +	S703	451.	4.23	46.	12.	8.	0.26
DIVERSION TO +	DIV703	355.	4.13	10.	3.	2.	0.26
HYDROGRAPH AT +	S703O	451.	4.23	36.	9.	6.	0.26
HYDROGRAPH AT +	S704	945.	4.10	83.	21.	15.	0.41
ROUTED TO +	704705	836.	4.30	83.	21.	15.	0.41
HYDROGRAPH AT +	S705	1657.	4.10	192.	48.	35.	0.75
2 COMBINED AT +	C705	1853.	4.17	266.	67.	48.	1.16
ROUTED TO +	C705O	783.	4.63	266.	67.	48.	1.16
ROUTED TO +	705OAF	780.	4.83	266.	67.	48.	1.16
HYDROGRAPH AT +	S705AF	351.	4.30	46.	12.	8.	0.18
DIVERSION TO +	DIV703	255.	4.13	11.	3.	2.	0.18
HYDROGRAPH AT +	705AFO	351.	4.30	35.	9.	6.	0.18
2 COMBINED AT +	C705AF	954.	4.57	298.	75.	54.	1.34
5 COMBINED AT +	WEST-5	2543.	4.33	571.	144.	103.	3.19
HYDROGRAPH AT +	S706	1656.	4.10	179.	45.	32.	0.71
DIVERSION TO +	DIV706	1656.	4.10	102.	25.	18.	0.71
HYDROGRAPH AT +	S706O	1253.	4.17	78.	19.	14.	0.71
HYDROGRAPH AT +	S707	1524.	4.10	180.	45.	32.	0.64
DIVERSION TO +	DIV707	1524.	4.10	106.	26.	19.	0.64
HYDROGRAPH AT +	S707O	1128.	4.20	75.	19.	13.	0.64
HYDROGRAPH AT +	S728	496.	4.17	74.	19.	13.	0.28
DIVERSION TO +	DIV728	496.	4.17	35.	9.	6.	0.28
HYDROGRAPH AT +	S728O	453.	4.27	39.	10.	7.	0.28
5 COMBINED AT							

+	WEST	14162.	5.30	5242.	1349.	973.	55.94
HYDROGRAPH AT +	S708	1828.	4.07	178.	45.	32.	0.71
DIVERSION TO +	DIV708	1759.	4.03	86.	21.	15.	0.71
HYDROGRAPH AT +	S708O	1708.	4.13	93.	23.	17.	0.71
HYDROGRAPH AT +	S709	1142.	4.10	124.	31.	22.	0.44
DIVERSION TO +	DIV709	957.	4.00	44.	11.	8.	0.44
HYDROGRAPH AT +	S709O	1142.	4.10	81.	20.	15.	0.44
ROUTED TO +	C709O	387.	4.50	81.	20.	15.	0.44
ROUTED TO +	709710	386.	4.57	81.	20.	15.	0.44
HYDROGRAPH AT +	S710	369.	4.03	30.	8.	5.	0.11
DIVERSION TO +	DIV710	230.	3.87	9.	2.	2.	0.11
HYDROGRAPH AT +	S710O	369.	4.03	21.	5.	4.	0.11
2 COMBINED AT +	C710I	440.	4.30	101.	25.	18.	0.55
ROUTED TO +	C710O	362.	4.90	101.	25.	18.	0.55
HYDROGRAPH AT +	S711	565.	4.03	46.	12.	8.	0.16
DIVERSION TO +	DIV711	498.	3.93	21.	5.	4.	0.16
HYDROGRAPH AT +	S711O	565.	4.03	25.	6.	4.	0.16
ROUTED TO +	C711O	163.	4.23	25.	6.	4.	0.16
ROUTED TO +	711712	162.	4.30	25.	6.	4.	0.16
HYDROGRAPH AT +	S712	238.	4.03	19.	5.	3.	0.07
DIVERSION TO +	DIV712	207.	3.93	8.	2.	2.	0.07
HYDROGRAPH AT +	S712O	238.	4.03	10.	3.	2.	0.07
2 COMBINED AT +	C712I	321.	4.07	35.	9.	6.	0.23
ROUTED TO +	C712O	205.	4.33	35.	9.	6.	0.23
ROUTED TO +	712714	204.	4.40	35.	9.	6.	0.23
HYDROGRAPH AT +	S713	362.	4.03	29.	7.	5.	0.11
DIVERSION TO +	DIV713	125.	3.77	6.	1.	1.	0.11
HYDROGRAPH AT							

+		S713O	362.	4.03	24.	6.	4.	0.11
	ROUTED TO							
+		C713O	173.	4.20	24.	6.	4.	0.11
	ROUTED TO							
+		713714	173.	4.20	24.	6.	4.	0.11
	HYDROGRAPH AT							
+		S714	188.	4.03	13.	3.	2.	0.06
	3 COMBINED AT							
+		C714	428.	4.23	72.	18.	13.	0.39
	HYDROGRAPH AT							
+		S715	510.	4.13	60.	15.	11.	0.22
	DIVERSION TO							
+		DIV715	217.	3.87	8.	2.	1.	0.22
	HYDROGRAPH AT							
+		S715O	510.	4.13	51.	13.	9.	0.22
	HYDROGRAPH AT							
+		S716	2132.	4.17	312.	78.	56.	1.13
	DIVERSION TO							
+		DIV716	2132.	4.17	157.	39.	28.	1.13
	HYDROGRAPH AT							
+		S716O	1865.	4.30	156.	39.	28.	1.13
	ROUTED TO							
+		C716O	540.	4.83	156.	39.	28.	1.13
	ROUTED TO							
+		716717	539.	5.00	156.	39.	28.	1.13
	HYDROGRAPH AT							
+		S717	936.	4.10	81.	20.	15.	0.29
	DIVERSION TO							
+		DIV717	350.	3.83	16.	4.	3.	0.29
	HYDROGRAPH AT							
+		S717O	936.	4.10	64.	16.	12.	0.29
	2 COMBINED AT							
+		C717	692.	4.10	218.	55.	39.	1.41
	ROUTED TO							
+		717718	586.	5.27	218.	54.	39.	1.41
	HYDROGRAPH AT							
+		S718	586.	4.50	122.	31.	22.	0.44
	DIVERSION TO							
+		DIV718	519.	4.37	27.	7.	5.	0.44
	HYDROGRAPH AT							
+		S718O	586.	4.50	96.	24.	17.	0.44
	2 COMBINED AT							
+		C718	1000.	4.57	311.	78.	56.	1.86
	HYDROGRAPH AT							
+		S719	329.	4.13	47.	12.	8.	0.15
	DIVERSION TO							
+		DIV719	327.	4.10	17.	4.	3.	0.15
	HYDROGRAPH AT							
+		S719O	320.	4.17	29.	7.	5.	0.15
	6 COMBINED AT							
+		EAST-1	2534.	4.43	622.	156.	112.	3.88
	HYDROGRAPH AT							
+		S720	935.	4.10	105.	26.	19.	0.37
	DIVERSION TO							

+		DIV720	917.	4.07	47.	12.	8.	0.37
	HYDROGRAPH AT							
+		S720O	911.	4.13	59.	15.	11.	0.37
	HYDROGRAPH AT							
+		S721	1140.	4.03	99.	25.	18.	0.34
	DIVERSION TO							
+		DIV721	1111.	4.00	61.	15.	11.	0.34
	HYDROGRAPH AT							
+		S721O	1091.	4.07	38.	10.	7.	0.34
	ROUTED TO							
+		C721O	183.	4.37	38.	10.	7.	0.34
	ROUTED TO							
+		721722	174.	4.80	38.	10.	7.	0.34
	HYDROGRAPH AT							
+		S722	1779.	4.17	257.	64.	46.	0.95
	DIVERSION TO							
+		DIV722	1779.	4.17	127.	32.	23.	0.95
	HYDROGRAPH AT							
+		S722O	1576.	4.30	131.	33.	24.	0.95
	2 COMBINED AT							
+		C722	1505.	4.30	165.	41.	30.	1.29
	HYDROGRAPH AT							
+		S723	279.	4.03	25.	6.	4.	0.09
	DIVERSION TO							
+		DIV723	205.	3.90	9.	2.	2.	0.09
	HYDROGRAPH AT							
+		S723O	279.	4.03	16.	4.	3.	0.09
	HYDROGRAPH AT							
+		S724	2345.	4.13	363.	91.	66.	1.16
	DIVERSION TO							
+		DIV724	2345.	4.13	202.	51.	36.	1.16
	HYDROGRAPH AT							
+		S724O	1970.	4.30	162.	41.	29.	1.16
	HYDROGRAPH AT							
+		S725	1780.	4.23	344.	87.	62.	1.16
	DIVERSION TO							
+		DIV725	1780.	4.23	214.	54.	39.	1.16
	HYDROGRAPH AT							
+		S725O	1253.	4.60	132.	33.	24.	1.16
	5 COMBINED AT							
+		EAST-2	3238.	4.60	497.	124.	90.	4.06
	HYDROGRAPH AT							
+		S726	1036.	4.03	80.	20.	14.	0.33
	DIVERSION TO							
+		DIV726	999.	4.00	43.	11.	8.	0.33
	HYDROGRAPH AT							
+		S726O	999.	4.07	37.	9.	7.	0.33
	ROUTED TO							
+		726727	602.	4.30	37.	9.	7.	0.33
	HYDROGRAPH AT							
+		S727	736.	4.17	115.	29.	21.	0.38
	DIVERSION TO							
+		DIV727	736.	4.17	67.	17.	12.	0.38
	HYDROGRAPH AT							

+	S7270	590.	4.37	49.	12.	9.	0.38
2 COMBINED AT +	C727	915.	4.37	84.	21.	15.	0.71
4 COMBINED AT +	TOTAL	15598.	5.20	5756.	1478.	1065.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 100-Year, 24-Hour HEC-1 Model Output

```
1*****************************************
 *                                       *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
 *              JUN   1998               *
 *            VERSION 4.1                *
 *                                       *
 *  RUN DATE   09AUG01  TIME  14:42:12   *
 *                                       *
 *****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID     N. Peoria Area Drainage Master Plan                  File:FR100-24.IH1
  2           ID        For Maricopa County FCD 99-45                 Original:05-04-00     MCG
  3           ID        By Stantec Consulting, Inc. P82000146          Revised:05-02-01     MMZ
  4           ID
  5           ID     The N. Peoria ADMP study limits consists of several small tributary
  6           ID     watersheds to the Agua Fria River.  This model is for the future
  7           ID     condition 100-year, 24-hour storm event.  A companion model is also created
  8           ID     for the future condition 100-year, 6-hour storm event.  Both models
  9           ID     100-year, 6- and 24-hour) should be referenced for the determination of
 10           ID     storm event produces the highest peak discharge.
 11           ID
 12           ID     Modeling of the watersheds is performed using the following:
 13           ID        100-year, 24-hour rainfall with FCDMC design rainfall distributions
 14           ID        Green & Ampt Loss Rate Method
 15           ID        NMIN = 2 minutes
 16           ID        Clark Unit Hydrograph
 17           ID        Modified Puls channel storage routing
 18           ID
 19           ID     Watershed delineation performed using USGS 7.5 Minute Series Quadrangles
              *
              *DIAGRAM
              *
              *
 20           IT       2                    1000
 21           IO       5
 22           IN      15
              *
              *       Depth-area reduction factors taken from Table 2.2 of FCDMC Drainage
              *       Design Manual
              *       The following PC records are a 24-hour SCS Type II rainfall distribution
              *
 23           JD    4.20    0.01
 24           PC   0.000   0.002   0.005   0.008   0.011   0.013   0.016   0.019   0.022   0.025
 25           PC   0.028   0.032   0.035   0.038   0.041   0.044   0.048   0.053   0.056   0.060
 26           PC   0.063   0.067   0.071   0.075   0.080   0.084   0.089   0.093   0.098   0.103
 27           PC   0.109   0.114   0.120   0.127   0.133   0.140   0.147   0.155   0.163   0.172
 28           PC   0.181   0.192   0.204   0.220   0.235   0.259   0.283   0.473   0.663   0.699
 29           PC   0.735   0.754   0.772   0.785   0.799   0.810   0.820   0.829   0.838   0.846
 30           PC   0.854   0.861   0.868   0.874   0.880   0.885   0.891   0.900   0.902   0.910
 31           PC   0.912   0.920   0.921   0.926   0.929   0.930   0.937   0.941   0.945   0.950
 32           PC   0.952   0.957   0.959   0.962   0.965   0.970   0.972   0.973   0.978   0.981
 33           PC   0.984   0.987   0.989   0.992   0.995   0.998   1.000
 34           JD    4.18       1
 35           JD    4.07       5
 36           JD    3.95      10
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 37          JD    3.80      25
 38          JD    3.59      70
             *
             *  ***********************************************************************
             *                 Begin Major Basin 100 (Unnamed Wash 1)
             *  ***********************************************************************
             *
1                                          HEC-1 INPUT                                                    PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 39          KK    S100
 40          KM   Sub-Basin   S100
 41          KM
 42          KM      The Clark Unit Hydrograph is used for this basin.
 43          KM          The Natural time-area relation is used for this basin.
 44          KM
 45          KM      Time of Concentration for this sub-basin is based on the following:
 46          KM          An rainfall areal reduction factor of 1.000
 47          KM
 48          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 49          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 50          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
 51          KM
 52          KM          L=   1.811 miles, S=  149 feet/mile, Kb= .09
 53          KM
 54          BA   0.574
 55          LG    0.21    0.33    4.65    0.33   26.00
 56          UC   0.688   0.539
 57          UA       0       3       5       8      12      20      43      75      90      96
 58          UA     100
             *

 59          KK   S100O
 60          KM   VOLUME RETAINED WITHIN SUB-BASIN S100
 61          DT  DIV100     6.3
 62          DI       0    3000
 63          DQ       0    3000
             *

 64          KK  100102
 65          KM       Normal depth route from S100 to C102R
 66          KM       Source: Field Reconnaissance
 67          RS       8    FLOW      -1
 68          RC     .05    .039     .06    6535   .0138
 69          RX    1000  1012.7  1037.5  1047.7    1060  1072.4  1087.8  1098.8
 70          RY   104.8   102.3   102.3   100.1     100   102.7   103.5   106.7
             *

 71          KK    S101
 72          KM   Sub-Basin   S101
 73          KM
 74          KM      The Clark Unit Hydrograph is used for this basin.
 75          KM          The Natural time-area relation is used for this basin.
 76          KM
 77          KM      Time of Concentration for this sub-basin is based on the following:
 78          KM          An rainfall areal reduction factor of 1.000
 79          KM
 80          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 81          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 82          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
 83          KM
 84          KM          L=   1.544 miles, S=  155 feet/mile, Kb= .08
 85          KM
 86          BA   0.631
1                                          HEC-1 INPUT                                                    PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 87          LG    0.26    0.37    5.30    0.25   15.00
 88          UC   0.542   0.345
 89          UA       0       3       5       8      12      20      43      75      90      96
 90          UA     100
             *

 91          KK   C102R
 92          KM       Combine routed hydrograph from S100 w/runoff from S101
 93          HC       2
             *
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```
 94          KK    S102
 95          KM   Sub-Basin   S102
 96          KM
 97          KM      The Clark Unit Hydrograph is used for this basin.
 98          KM          The Urban time-area relation is used for this basin.
 99          KM
100          KM      Time of Concentration for this sub-basin is based on the following:
101          KM          An rainfall areal reduction factor of 1.000
102          KM
103          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
104          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
105          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
106          KM
107          KM          L=   1.487 miles, S=  108 feet/mile, Kb= .07
108          KM
109          BA   0.449
110          LG    0.22    0.30    4.45    0.38   32.00
111          UC   0.558   0.420
112          UA       0       5      16      30      65      77      84      90      94      97
113          UA     100
             *

114          KK   S102O
115          KM   VOLUME RETAINED WITHIN SUB-BASIN S102
116          DT  DIV102    14.4
117          DI       0    3000
118          DQ       0    3000
             *

119          KK  101102
120          KM        Normal depth route from S102 to C102
121          KM        Source: Field Reconnaissance
122          RS       6    FLOW      -1
123          RC    .045     .04    .045    7254  0.0138
124          RX     100     106     114     120     134     143     155     164
125          RY     110     107     103     100     100     103     107     110
             *

126          KK    S103
127          KM   Sub-Basin   S103
128          KM
129          KM      The Clark Unit Hydrograph is used for this basin.
130          KM          The Natural time-area relation is used for this basin.
131          KM
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

132          KM      Time of Concentration for this sub-basin is based on the following:
133          KM          An rainfall areal reduction factor of 1.000
134          KM
135          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
136          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
137          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
138          KM
139          KM          L=   1.321 miles, S=   76 feet/mile, Kb= .09
140          KM
141          BA   0.395
142          LG    0.24    0.38    5.60    0.22   17.00
143          UC   0.742   0.563
144          UA       0       3       5       8      12      20      43      75      90      96
145          UA     100
             *

146          KK   C102L
147          KM        Combine routed hydrgraph from S102 with runoff from S103
148          HC       2
             *

149          KK    C102
150          KM        Combine hydrgraphs from C102L and C102R
151          HC       2
             *

152          KK  102103
153          KM        Normal depth route from C102 to C103R
154          KM        Source: Field Reconnaissance
155          RS       8    FLOW      -1
156          RC     .05    .039     .06    8068  0.0124
157          RX    1000    1029  1057.9    1072  1089.6  1099.4  1109.9  1173.1
158          RY     106   103.9   101.8   100.3     100   102.2   103.3   110.0
```

```
                 *
159              KK    S104
160              KM   Sub-Basin   S104
161              KM
162              KM      The Clark Unit Hydrograph is used for this basin.
163              KM          The Natural time-area relation is used for this basin.
164              KM
165              KM      Time of Concentration for this sub-basin is based on the following:
166              KM          An rainfall areal reduction factor of 1.000
167              KM
168              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
169              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
170              KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01 .01
171              KM
172              KM          L=   1.624 miles, S=  111 feet/mile, Kb= .08
173              KM
174              BA   0.900
175              LG    0.21    0.35    5.60    0.22   23.00
176              UC   0.646   0.356
177              UA       0       3       5       8      12      20      43      75      90      96
178              UA     100
                 *
1                                                HEC-1 INPUT                                          PAGE  5

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


179              KK   S104O
180              KM   VOLUME RETAINED WITHIN SUB-BASIN S104
181              DT  DIV104    20.2
182              DI       0    3000
183              DQ       0    3000
                 *

184              KK   C103R
185              KM        Combine routed hydrograph from 102103 w/runoff from S104
186              HC       2
                 *

187              KK    S105
188              KM   Sub-Basin   S105
189              KM
190              KM      The Clark Unit Hydrograph is used for this basin.
191              KM          The Urban time-area relation is used for this basin.
192              KM
193              KM      Time of Concentration for this sub-basin is based on the following:
194              KM          An rainfall areal reduction factor of 1.000
195              KM
196              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
197              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
198              KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
199              KM
200              KM          L=   1.976 miles, S=   96 feet/mile, Kb= .07
201              KM
202              BA   0.594
203              LG    0.24    0.31    5.60    0.23   23.00
204              UC   0.721   0.597
205              UA       0       5      16      30      65      77      84      90      94      97
206              UA     100
                 *

207              KK   S105O
208              KM   VOLUME RETAINED WITHIN SUB-BASIN S105
209              DT  DIV105    16.1
210              DI       0    3000
211              DQ       0    3000
                 *

212              KK    C103
213              KM        Combine hydrograph from C103R w/runoff from S105
214              HC       2
                 *

215              KK  103104
216              KM        Normal depth route from C103 to C104
217              KM        Source: Field Reconnaissance
218              RS       5    FLOW      -1
219              RC    .053    .053    .053    8625  0.0162
220              RX   998.5  1001.5    1003    1011    1033    1047  1050.6  1067.2
221              RY   108.4   106.4   105.4     100   100.5   104.4   105.4   110.0
```

```
                  *
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  222             KK    S106
  223             KM   Sub-Basin   S106
  224             KM
  225             KM      The Clark Unit Hydrograph is used for this basin.
  226             KM          The Urban time-area relation is used for this basin.
  227             KM
  228             KM      Time of Concentration for this sub-basin is based on the following:
  229             KM          An rainfall areal reduction factor of 1.000
  230             KM
  231             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
  232             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
  233             KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
  234             KM
  235             KM          L=   1.770 miles, S=  158 feet/mile, Kb= .07
  236             KM
  237             BA   0.567
  238             LG    0.27    0.28    5.20    0.26   11.00
  239             UC   0.533   0.402
  240             UA       0       5      16      30      65      77      84      90      94      97
  241             UA     100
                  *

  242             KK    C104
  243             KM        Combine routed hydrograph 103104 w/runoff from S106
  244             HC       2
                  *

  245             KK  104105
  246             KM       Normal depth route from C104 to C105
  247             KM       Source: Field Reconnaissance
  248             RS       6    FLOW      -1
  249             RC    .053    .053    .053    6956  0.0115
  250             RX    1000  1002.3  1004.6  1019.3  1041.1  1069.4  1111.7  1128.8
  251             RY     108   107.5     107   100.2     100   103.4   102.3   107.3
                  *

  252             KK    S107
  253             KM   Sub-Basin   S107
  254             KM
  255             KM      The Clark Unit Hydrograph is used for this basin.
  256             KM          The Natural time-area relation is used for this basin.
  257             KM
  258             KM      Time of Concentration for this sub-basin is based on the following:
  259             KM          An rainfall areal reduction factor of 1.000
  260             KM
  261             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
  262             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
  263             KM   .25 .25 .24 .24 .24 .24 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
  264             KM
  265             KM          L=   2.593 miles, S=  204 feet/mile, Kb= .06
  266             KM
  267             BA   0.936
  268             LG    0.25    0.28    4.90    0.29    3.00
  269             UC   0.571   0.442
```



```
LINE              ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  270             UA       0       3       5       8      12      20      43      75      90      96
  271             UA     100
                  *

  272             KK   C105L
  273             KM        Combine routed hydrograph from 104105 w/runoff from S107
  274             HC       2
                  *
                  *  ******************************************************************************
                  *                 Begin Major Basin 200 (Unnamed Wash 2)
                  *  ******************************************************************************
                  *

  275             KK    S200
  276             KM   Sub-Basin   S200
  277             KM
  278             KM      The Clark Unit Hydrograph is used for this basin.
```

```
279          KM          The Natural time-area relation is used for this basin.
280          KM
281          KM      Time of Concentration for this sub-basin is based on the following:
282          KM          An rainfall areal reduction factor of 1.000
283          KM
284          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
285          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
286          KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
287          KM
288          KM          L=   1.665 miles, S=  192 feet/mile, Kb= .10
289          KM
290          BA   0.959
291          LG    0.25    0.35    4.25    0.44   35.00
292          UC   0.629   0.341
293          UA       0       3       5       8      12      20      43      75      90      96
294          UA     100
             *

295          KK  200201
296          KM        Normal depth route from hydrograph S200 to C201
297          KM        Source: Field Reconnaissance
298          RS       1    FLOW      -1
299          RC     .05     .03     .05    3952  0.0228
300          RX    1000    1001    1002    1005    1026    1032    1034    1036
301          RY     105     104     103     100     100     103     104     105
             *

302          KK    S201
303          KM   Sub-Basin   S201
304          KM
305          KM      The Clark Unit Hydrograph is used for this basin.
306          KM          The Natural time-area relation is used for this basin.
307          KM
308          KM      Time of Concentration for this sub-basin is based on the following:
309          KM          An rainfall areal reduction factor of 1.000
310          KM
311          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
312          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

313          KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
314          KM
315          KM          L=   1.182 miles, S=  195 feet/mile, Kb= .11
316          KM
317          BA   0.350
318          LG    0.25    0.35    4.25    0.44   35.00
319          UC   0.517   0.370
320          UA       0       3       5       8      12      20      43      75      90      96
321          UA     100
             *

322          KK    C201
323          KM        Combine routed hydrograph 200201 w/runoff from S201
324          HC       2
             *

325          KK  201203
326          KM        Normal depth route from C201 to C203R
327          KM        Source: Field Reconnaissance
328          RS       3    FLOW      -1
329          RC    .055    .039    .055    3233  0.0155
330          RX    1000  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1107.6
331          RY     105   101.1     102   100.3     100     102     103   104.2
             *

332          KK    S202
333          KM   Sub-Basin   S202
334          KM
335          KM      The Clark Unit Hydrograph is used for this basin.
336          KM          The Natural time-area relation is used for this basin.
337          KM
338          KM      Time of Concentration for this sub-basin is based on the following:
339          KM          An rainfall areal reduction factor of 1.000
340          KM
341          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
342          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
343          KM   .25 .25 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
344          KM
345          KM          L=   0.689 miles, S=  271 feet/mile, Kb= .12
```

```
346          KM
347          BA   0.127
348          LG    0.25    0.35    4.25    0.44   35.00
349          UC   0.367   0.292
350          UA       0       3       5       8      12      20      43      75      90      96
351          UA     100
             *

352          KK  202203
353          KM        Normal depth route from S202 to C203R
354          KM         Source: Field Reconnaissance
355          RS       2    FLOW      -1
356          RC     .05     .03     .05    2353   .0170
357          RX    1000  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1107.6
358          RY   103.6   101.1     102   100.3     100     102    103.   104.2
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

359          KK    S203
360          KM   Sub-Basin   S203
361          KM
362          KM      The Clark Unit Hydrograph is used for this basin.
363          KM          The Urban time-area relation is used for this basin.
364          KM
365          KM      Time of Concentration for this sub-basin is based on the following:
366          KM          An rainfall areal reduction factor of 1.000
367          KM
368          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
369          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
370          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
371          KM
372          KM          L=   1.683 miles, S=  154 feet/mile, Kb= .09
373          KM
374          BA   0.373
375          LG    0.28    0.29    4.25    0.43   37.00
376          UC   0.633   0.593
377          UA       0       5      16      30      65      77      84      90      94      97
378          UA     100
             *

379          KK   S203O
380          KM   VOLUME RETAINED WITHIN SUB-BASIN S203
381          DT  DIV203    15.2
382          DI       0    3000
383          DQ       0    3000
             *

384          KK   C203R
385          KM        Combine routed hydrographs 201203 and 202203 with runoff from S203
386          HC       3
             *

387          KK    S204
388          KM   Sub-Basin   S204
389          KM
390          KM      The Clark Unit Hydrograph is used for this basin.
391          KM          The Natural time-area relation is used for this basin.
392          KM
393          KM      Time of Concentration for this sub-basin is based on the following:
394          KM          An rainfall areal reduction factor of 1.000
395          KM
396          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
397          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
398          KM   .25 .24 .24 .24 .24 .23 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
399          KM
400          KM          L=   1.959 miles, S=  174 feet/mile, Kb= .10
401          KM
402          BA   0.951
403          LG    0.25    0.35    4.25    0.44   32.00
404          UC   0.750   0.474
405          UA       0       3       5       8      12      20      43      75      90      96
406          UA     100
             *
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
407          KK   S204O
408          KM   VOLUME RETAINED WITHIN SUB-BASIN S204
409          DT  DIV204     1.5
410          DI       0    3000
411          DQ       0    3000
             *

412          KK    C203
413          KM        Combine hydrograph from C203R with runoff from S204
414          HC       2
             *

415          KK  203204
416          KM        Normal depth route from C203 to C204
417          KM        Source: Field Reconnaissance
418          RS       1    FLOW      -1
419          RC    .055    .039    .055    1325  0.0151
420          RX   989.2  1008.4  1057.5  1066.3  1098.4  1102.8    1105  1120.2
421          RY     110   101.1     102   100.3     100     102     103   110.0
             *

422          KK    S205
423          KM   Sub-Basin   S205
424          KM
425          KM      The Clark Unit Hydrograph is used for this basin.
426          KM          The Natural time-area relation is used for this basin.
427          KM
428          KM      Time of Concentration for this sub-basin is based on the following:
429          KM          An rainfall areal reduction factor of 1.000
430          KM
431          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
432          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
433          KM   .26 .26 .26 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
434          KM
435          KM          L=   1.485 miles, S=  175 feet/mile, Kb= .07
436          KM
437          BA   0.413
438          LG    0.21    0.31    4.60    0.34   34.00
439          UC   0.458   0.354
440          UA       0       3       5       8      12      20      43      75      90      96
441          UA     100
             *

442          KK   S205O
443          KM   VOLUME RETAINED WITHIN SUB-BASIN S205
444          DT  DIV205    14.2
445          DI       0    3000
446          DQ       0    3000
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

447          KK    C204
448          KM        Combine routed hydrograph 203204 w/runoff from S205
449          HC       2
             *

450          KK  204205
451          KM        Normal depth route from C204 to C205L
452          KM        Source: Field Reconnaissance
453          RS       3    FLOW      -1
454          RC     .05    .039     .05    5007  0.0140
455          RX    1000  1010.6  1053.2  1064.9  1094.7  1103.1  1105.9  1113.8
456          RY   105.6   102.5   103.3   100.4     100     103     104   106.8
             *

457          KK    S206
458          KM   Sub-Basin   S206
459          KM
460          KM      The Clark Unit Hydrograph is used for this basin.
461          KM          The Urban time-area relation is used for this basin.
462          KM
463          KM      Time of Concentration for this sub-basin is based on the following:
464          KM          An rainfall areal reduction factor of 1.000
465          KM
466          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
467          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
468          KM   .26 .25 .25 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
469          KM
```

```
470          KM          L=   2.296 miles, S=  118 feet/mile, Kb= .08
471          KM
472          BA   0.853
473          LG    0.29    0.28    4.65    0.33   30.00
474          UC   0.829   0.640
475          UA       0       5      16      30      65      77      84      90      94      97
476          UA     100
             *

477          KK   S206O
478          KM   VOLUME RETAINED WITHIN SUB-BASIN S206
479          DT  DIV206    42.2
480          DI       0    3000
481          DQ       0    3000
             *

482          KK   C205L
483          KM        Combine routed hydrograph 204205 w/runoff from S206
484          HC       2
             *

485          KK    S207
486          KM   Sub-Basin   S207
487          KM
488          KM      The Clark Unit Hydrograph is used for this basin.
489          KM          The Natural time-area relation is used for this basin.
490          KM
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

491          KM      Time of Concentration for this sub-basin is based on the following:
492          KM          An rainfall areal reduction factor of 1.000
493          KM
494          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
495          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
496          KM   .25 .25 .25 .25 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
497          KM
498          KM          L=   2.315 miles, S=  117 feet/mile, Kb= .08
499          KM
500          BA   0.957
501          LG    0.27    0.32    4.35    0.41   35.00
502          UC   0.846   0.617
503          UA       0       3       5       8      12      20      43      75      90      96
504          UA     100
             *

505          KK   S207O
506          KM   VOLUME RETAINED WITHIN SUB-BASIN S207
507          DT  DIV207    20.0
508          DI       0    3000
509          DQ       0    3000
             *

510          KK    C205
511          KM        Combine hydrograph from C205L w/runoff from S207
512          HC       2
             *

513          KK  205206
514          KM        Normal depth route from C205 to C206
515          KM        Source: Field Reconnaissance
516          RS      10    FLOW      -1
517          RC     .05    .039     .05   11893  0.0063
518          RX    1000  1002.5    1005  1019.1  1052.5  1070.5  1120.8  1146.9
519          RY   110.1   107.6   105.1     100   100.2   104.6   103.7   109.5
             *

520          KK    S208
521          KM   Sub-Basin   S208
522          KM
523          KM      The Clark Unit Hydrograph is used for this basin.
524          KM          The Natural time-area relation is used for this basin.
525          KM
526          KM      Time of Concentration for this sub-basin is based on the following:
527          KM          An rainfall areal reduction factor of 1.000
528          KM
529          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
530          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
531          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
532          KM
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```
 533          KM          L=   2.205 miles, S=   93 feet/mile, Kb= .10
 534          KM
 535          BA   1.103
 536          LG    0.25    0.32    5.30    0.25   29.00
 537          UC   1.054   0.698
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 538          UA       0       3       5       8      12      20      43      75      90      96
 539          UA     100
              *

 540          KK   S208O
 541          KM   VOLUME RETAINED WITHIN SUB-BASIN S208
 542          DT  DIV208    12.9
 543          DI       0    3000
 544          DQ       0    3000
              *

 545          KK    C206
 546          KM        Combine routed hydrograph 205206 w/runoff from S208
 547          HC       2
              *

 548          KK  206207
 549          KM        Normal depth route from C206 to C207R
 550          KM        Source: Field Reconnaissance
 551          RS       2    FLOW      -1
 552          RC    .055    .039    .055    4972  0.0312
 553          RX    1000  1007.4  1014.8  1022.2  1057.6  1068.1  1088.2  1094.2
 554          RY     106     104     102     100   100.2   102.2   102.9   105.9
              *

 555          KK    S209
 556          KM   Sub-Basin   S209
 557          KM
 558          KM      The Clark Unit Hydrograph is used for this basin.
 559          KM          The Natural time-area relation is used for this basin.
 560          KM
 561          KM      Time of Concentration for this sub-basin is based on the following:
 562          KM          An rainfall areal reduction factor of 1.000
 563          KM
 564          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 565          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 566          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
 567          KM
 568          KM          L=   1.358 miles, S=  133 feet/mile, Kb= .10
 569          KM
 570          BA   0.650
 571          LG    0.23    0.34    5.00    0.28   16.00
 572          UC   0.638   0.367
 573          UA       0       3       5       8      12      20      43      75      90      96
 574          UA     100
              *

 575          KK   C207R
 576          KM        Combine routed hydrograph 206207 w/runoff from S209
 577          HC       2
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 578          KK    S210
 579          KM   Sub-Basin   S210
 580          KM
 581          KM      The Clark Unit Hydrograph is used for this basin.
 582          KM          The Urban time-area relation is used for this basin.
 583          KM
 584          KM      Time of Concentration for this sub-basin is based on the following:
 585          KM          An rainfall areal reduction factor of 1.000
 586          KM
 587          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 588          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 589          KM   .25 .24 .24 .24 .24 .24 .01 .01 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
 590          KM
 591          KM          L=   1.274 miles, S=  181 feet/mile, Kb= .09
 592          KM
 593          BA   0.481
```

```
594          LG    0.22    0.31    5.00    0.28    4.00
595          UC   0.488   0.307
596          UA       0       5      16      30      65      77      84      90      94      97
597          UA     100
             *

598          KK    C207
599          KM        Combine hydrograph from C207R w/runoff from S210
600          HC       2
             *

601          KK  207105
602          KM        Normal depth route from C207 to C105
603          KM        Source: Field Reconnaissance
604          RS       3    FLOW      -1
605          RC    .055    .039    .055    7176  0.0167
606          RX    1000    1003    1006    1009  1038.5  1041.5  1047.5  1053.5
607          RY     109     106     103     100     100     102     106     110
             *

608          KK    S211
609          KM   Sub-Basin   S211
610          KM
611          KM      The Clark Unit Hydrograph is used for this basin.
612          KM          The Urban time-area relation is used for this basin.
613          KM
614          KM      Time of Concentration for this sub-basin is based on the following:
615          KM          An rainfall areal reduction factor of 1.000
616          KM
617          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
618          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
619          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
620          KM
621          KM          L=   1.359 miles, S=  162 feet/mile, Kb= .09
622          KM
623          BA   0.488
624          LG    0.25    0.30    5.20    0.26    7.00
625          UC   0.529   0.351
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

626          UA       0       5      16      30      65      77      84      90      94      97
627          UA     100
             *

628          KK   C105R
629          KM        Combine routed hydrograph 207105 w/runoff from S211
630          HC       2
             *

631          KK    C105
632          KM        Combine hydrographs from C105L and C105R
633          HC       2
             *
             *  ******************************************************************************
             *                Begin Major Basin 300 (Unnamed Wash 3)
             *  ******************************************************************************
             *

634          KK    S300
635          KM   Sub-Basin   S300
636          KM
637          KM      The Clark Unit Hydrograph is used for this basin.
638          KM          The Urban time-area relation is used for this basin.
639          KM
640          KM      Time of Concentration for this sub-basin is based on the following:
641          KM          An rainfall areal reduction factor of 1.000
642          KM
643          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
644          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
645          KM   .26 .25 .25 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
646          KM
647          KM          L=   1.776 miles, S=  129 feet/mile, Kb= .04
648          KM
649          BA   0.615
650          LG    0.28    0.28    4.55    0.37   32.00
651          UC   0.413   0.289
652          UA       0       5      16      30      65      77      84      90      94      97
653          UA     100
             *
```

```
654          KK   S3000
655          KM   VOLUME RETAINED WITHIN SUB-BASIN S300
656          DT  DIV300    32.6
657          DI       0    3000
658          DQ       0    3000
             *

659          KK    S301
660          KM   Sub-Basin   S301
661          KM
662          KM      The Clark Unit Hydrograph is used for this basin.
663          KM          The Urban time-area relation is used for this basin.
664          KM
665          KM      Time of Concentration for this sub-basin is based on the following:
666          KM          An rainfall areal reduction factor of 1.000
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

667          KM
668          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
669          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
670          KM   .26 .25 .25 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
671          KM
672          KM          L=   2.001 miles, S=  190 feet/mile, Kb= .04
673          KM
674          BA   0.994
675          LG    0.29    0.26    4.25    0.45   42.00
676          UC   0.388   0.226
677          UA       0       5      16      30      65      77      84      90      94      97
678          UA     100
             *

679          KK   S3010
680          KM   VOLUME RETAINED WITHIN SUB-BASIN S301
681          DT  DIV301    37.9
682          DI       0    3000
683          DQ       0    3000
             *

684          KK    C300
685          KM        Combine runoff from S300 and S301
686          HC       2
             *

687          KK  300301
688          KM        Normal depth route from C300 to C301
689          KM        Source: Field Reconnaissance
690          RS       4    FLOW      -1
691          RC    .051    .044    .051    5117  0.0137
692          RX    1000    1001    1002    1010    1047    1059  1060.5    1062
693          RY     110     109     108     100     100     108     109     110
             *

694          KK    S302
695          KM   Sub-Basin   S302
696          KM
697          KM      The Clark Unit Hydrograph is used for this basin.
698          KM          The Natural time-area relation is used for this basin.
699          KM
700          KM      Time of Concentration for this sub-basin is based on the following:
701          KM          An rainfall areal reduction factor of 1.000
702          KM
703          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
704          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
705          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
706          KM
707          KM          L=   1.095 miles, S=  137 feet/mile, Kb= .09
708          KM
709          BA   0.465
710          LG    0.26    0.31    4.55    0.36   29.00
711          UC   0.492   0.280
712          UA       0       3       5       8      12      20      43      75      90      96
713          UA     100
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
```

```
714          KK   S3020
715          KM   VOLUME RETAINED WITHIN SUB-BASIN S302
716          DT  DIV302     8.3
717          DI       0    3000
718          DQ       0    3000
             *

719          KK    C301
720          KM        Combine routed hydrograph 300301 w/runoff from S302
721          HC       2
             *

722          KK  301302
723          KM        Normal depth route from C301 to C302
724          KM        Source: Field Reconnaissance
725          RS      11    FLOW      -1
726          RC    .051    .039    .051    8124  0.0086
727          RX    1000    1004  1200.3  1213.6  1240.6  1249.9  1344.4  1369.6
728          RY   110.6   108.6   103.5   100.2     100   104.2   107.4   110.4
             *

729          KK    S303
730          KM   Sub-Basin   S303
731          KM
732          KM      The Clark Unit Hydrograph is used for this basin.
733          KM          The Natural time-area relation is used for this basin.
734          KM
735          KM      Time of Concentration for this sub-basin is based on the following:
736          KM          An rainfall areal reduction factor of 1.000
737          KM
738          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
739          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
740          KM   .24 .24 .24 .24 .23 .23 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
741          KM
742          KM          L=   1.539 miles, S=  188 feet/mile, Kb= .10
743          KM
744          BA   0.708
745          LG    0.24    0.32    4.60    0.35   11.00
746          UC   0.608   0.366
747          UA       0       3       5       8      12      20      43      75      90      96
748          UA     100
             *

749          KK    C302
750          KM        Combine routed hydrograph 301302 w/runoff from S303
751          HC       2
             *

752          KK  302303
753          KM        Normal depth route from C302 to C303
754          KM        Source: Field Reconniassance
755          RS       4    FLOW      -1
756          RC    .055    .048    .055    7304  0.0192
757          RX  995.97  1009.4  1017.8  1026.5  1067.3  1068.7  1071.5 1077.82
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

758          RY   107.0     104     102     100     101     102     104   107.0
             *

759          KK    S304
760          KM   Sub-Basin   S304
761          KM
762          KM      The Clark Unit Hydrograph is used for this basin.
763          KM          The Urban time-area relation is used for this basin.
764          KM
765          KM      Time of Concentration for this sub-basin is based on the following:
766          KM          An rainfall areal reduction factor of 1.000
767          KM
768          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
769          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
770          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
771          KM
772          KM          L=   2.314 miles, S=  186 feet/mile, Kb= .06
773          KM
774          BA   0.823
775          LG    0.25    0.29    5.10    0.27    7.00
776          UC   0.542   0.410
777          UA       0       5      16      30      65      77      84      90      94      97
778          UA     100
```

```
                 *

779              KK   S304O
780              KM   VOLUME RETAINED WITHIN SUB-BASIN S304
781              DT  DIV304    33.2
782              DI       0    3000
783              DQ       0    3000
                 *

784              KK    C303
785              KM        Combine routed hydrograph 302303 w/runoff from S304
786              HC       2
                 *

787              KK  WEST-1
788              KM        Dummy combine of major basins 100, 200 and 300
789              HC       2
                 *
                 *  ******************************************************************************
                 *                  Begin Major Basin 400 (Caterpillar Tanks Wash)
                 *  ******************************************************************************
                 *

790              KK    S400
791              KM   Sub-Basin   S400
792              KM
793              KM      The Clark Unit Hydrograph is used for this basin.
794              KM          The Natural time-area relation is used for this basin.
795              KM
796              KM      Time of Concentration for this sub-basin is based on the following:
797              KM          An rainfall areal reduction factor of 1.000
798              KM
1                                                HEC-1 INPUT                                                    PAGE 19

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

799              KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
800              KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
801              KM   .27 .27 .27 .27 .27 .26 .03 .03 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
802              KM
803              KM          L=   1.864 miles, S=  110 feet/mile, Kb= .04
804              KM
805              BA   1.048
806              LG    0.24    0.30    5.40    0.22   36.00
807              UC   0.438   0.237
808              UA       0       3       5       8      12      20      43      75      90      96
809              UA     100
                 *

810              KK   S4000
811              KM   VOLUME RETAINED WITHIN SUB-BASIN S400
812              DT  DIV400    55.3
813              DI       0    3000
814              DQ       0    3000
                 *

815              KK   C4000
816              KM        Storage routing at crossing structure no. 78 (see Plate 5)
817              KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
818              RS       1    STOR       0
819              SQ       0      62     200     400     540     625     750
820              SE    1508    1511    1514    1520    1526    1532    1540
821              SV       0     5.2    18.6    40.7    71.7   115.5   178.1   266.3
822              SE    1508    1516    1520    1524    1528    1532    1536    1540
                 *

823              KK  400401
824              KM        Normal depth route from S400 to C401
825              KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
826              RS       9    FLOW      -1
827              RC    .045    .040    .045    7424  0.0101
828              RX  9729.2  9772.7  9849.9   10000 10007.8 10090.6 10147.3 10185.4
829              RY  1509.6  1508.8  1500.2  1475.5  1475.3  1495.3    1496  1497.5
                 *

830              KK    S401
831              KM   Sub-Basin   S401
832              KM
833              KM      The Clark Unit Hydrograph is used for this basin.
834              KM          The Urban time-area relation is used for this basin.
835              KM
```

```
836          KM      Time of Concentration for this sub-basin is based on the following:
837          KM          An rainfall areal reduction factor of 1.000
838          KM
839          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
840          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
841          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
842          KM
843          KM          L=   1.349 miles, S=   74 feet/mile, Kb= .04
844          KM
845          BA   0.646
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

846          LG    0.29    0.27    5.10    0.26   13.00
847          UC   0.429   0.236
848          UA       0       5      16      30      65      77      84      90      94      97
849          UA     100
             *

850          KK   S401O
851          KM   VOLUME RETAINED WITHIN SUB-BASIN S401
852          DT  DIV401    36.2
853          DI       0    3000
854          DQ       0    3000
             *

855          KK    C401
856          KM        Combine routed hydrograph 400401 w/runoff from S401
857          HC       2
             *

858          KK  401402
859          KM       Normal depth route from C401 to C402
860          KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09
861          RS      23    FLOW      -1
862          RC    .045    .043    .045    8029  0.0112
863          RX  9581.3  9756.6  9997.5   10000 10022.2 10086.4 10119.5 10362.5
864          RY  1455.4  1419.3  1413.3  1410.9  1409.8  1414.4    1419  1428.6
             *

865          KK    S402
866          KM   Sub-Basin   S402
867          KM
868          KM      The Clark Unit Hydrograph is used for this basin.
869          KM          The Urban time-area relation is used for this basin.
870          KM
871          KM      Time of Concentration for this sub-basin is based on the following:
872          KM          An rainfall areal reduction factor of 1.000
873          KM
874          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
875          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
876          KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
877          KM
878          KM          L=   1.468 miles, S=   75 feet/mile, Kb= .03
879          KM
880          BA   0.740
881          LG    0.25    0.28    5.60    0.22   33.00
882          UC   0.375   0.201
883          UA       0       5      16      30      65      77      84      90      94      97
884          UA     100
             *

885          KK   S402O
886          KM   VOLUME RETAINED WITHIN SUB-BASIN S402
887          DT  DIV402    51.8
888          DI       0    3000
889          DQ       0    3000
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

890          KK    C402
891          KM        Combine routed hydrograph 401402 w/runoff from S402
892          HC       2
             *

893          KK  402403
894          KM       Normal depth route from C402 to C403
```

```
895          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
896          RS      12    FLOW      -1
897          RC    .045    .043    .045    6138  0.0049
898          RX   9267.  9571.2  9916.2  9988.7  9997.4 10095.3 10157.8   10641
899          RY  1395.9  1388.7  1383.7    1355    1355  1361.4  1359.6    1378
900          RL                    0.03  1355.0
             *

901          KK    S403
902          KM   Sub-Basin   S403
903          KM
904          KM      The Clark Unit Hydrograph is used for this basin.
905          KM          The Urban time-area relation is used for this basin.
906          KM
907          KM      Time of Concentration for this sub-basin is based on the following:
908          KM          An rainfall areal reduction factor of 1.000
909          KM
910          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
911          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
912          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
913          KM
914          KM          L=   1.638 miles, S=   52 feet/mile, Kb= .02
915          KM
916          BA   0.559
917          LG    0.23    0.16    8.00    0.09   37.00
918          UC   0.350   0.239
919          UA       0       5      16      30      65      77      84      90      94      97
920          UA     100
             *

921          KK   S403O
922          KM   VOLUME RETAINED WITHIN SUB-BASIN S403
923          DT  DIV403    49.4
924          DI       0    3000
925          DQ       0    3000
             *

926          KK    C403
927          KM        Combine routed hydrograph 402403 w/runoff from S403
928          HC       2
             *
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

929          KK  403404
930          KM        Normal depth route from C403 to C404
931          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
932          RS       5    FLOW      -1
933          RC    .045    .045    .045    4256   .0164
934          RX  9506.5  9551.7  9955.5    9995 10007.4 10060.9 10227.2 10315.3
935          RY  1300.9  1282.3  1282.7  1276.7  1276.5  1283.5  1283.3  1302.1
936          RL                    0.03  1276.5
             *

937          KK    S404
938          KM   Sub-Basin   S404
939          KM
940          KM      The Clark Unit Hydrograph is used for this basin.
941          KM          The Natural time-area relation is used for this basin.
942          KM
943          KM      Time of Concentration for this sub-basin is based on the following:
944          KM          An rainfall areal reduction factor of 1.000
945          KM
946          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
947          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
948          KM   .27 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .00 .00 .00 .00 .00 .00
949          KM
950          KM          L=   0.773 miles, S=  181 feet/mile, Kb= .09
951          KM
952          BA   0.263
953          LG    0.26    0.33    6.60    0.14    8.00
954          UC   0.371   0.214
955          UA       0       3       5       8      12      20      43      75      90      96
956          UA     100
             *

957          KK   S404O
958          KM   VOLUME RETAINED WITHIN SUB-BASIN 404
959          DT  DIV404     2.9
```

```
 960          DI       0    3000
 961          DQ       0    3000
              *

 962          KK    C404
 963          KM        Combine routed hydrograph C403 w/runoff S404
 964          HC       2
              *

 965          KK  WEST-2
 966          KM        Dummy combine of major basins 100, 200, 300 and 400
 967          HC       2
              *
              *  ****************************************************************************
              *                  Begin Major Basin 500 (Twin Buttes Wash)
              *  ****************************************************************************
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 968          KK    S500
 969          KM   Sub-Basin   S500
 970          KM
 971          KM      The Clark Unit Hydrograph is used for this basin.
 972          KM          The Urban time-area relation is used for this basin.
 973          KM
 974          KM      Time of Concentration for this sub-basin is based on the following:
 975          KM          An rainfall areal reduction factor of 1.000
 976          KM
 977          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
 978          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
 979          KM   .26 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
 980          KM
 981          KM          L=   2.399 miles, S=  117 feet/mile, Kb= .06
 982          KM
 983          BA   1.054
 984          LG    0.28    0.29    4.25    0.43   39.00
 985          UC   0.688   0.477
 986          UA       0       5      16      30      65      77      84      90      94      97
 987          UA     100
              *

 988          KK   S500O
 989          KM   VOLUME RETAINED WITHIN SUB-BASIN S500
 990          DT  DIV500    46.6
 991          DI       0    3000
 992          DQ       0    3000
              *

 993          KK  500501
 994          KM        Normal depth route from S500 to C501
 995          KM        Source: Field Reconnaissance
 996          RS       4    FLOW      -1
 997          RC    0.05   0.035    0.05    5972  0.0134
 998          RX    1000    1004    1032    1047    1069 1072.75  1075.9  1081.9
 999          RY   105.7   101.7    99.6    96.8    97.1    99.6   101.7   105.7
              *

1000          KK    S501
1001          KM   Sub-Basin   S501
1002          KM
1003          KM      The Clark Unit Hydrograph is used for this basin.
1004          KM          The Urban time-area relation is used for this basin.
1005          KM
1006          KM      Time of Concentration for this sub-basin is based on the following:
1007          KM          An rainfall areal reduction factor of 1.000
1008          KM
1009          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1010          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1011          KM   .25 .25 .25 .25 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1012          KM
1013          KM          L=   1.486 miles, S=  135 feet/mile, Kb= .06
1014          KM
1015          BA   0.614
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1016          LG    0.27    0.29    4.45    0.38   27.00
```

```
1017          UC   0.467   0.288
1018          UA       0       5      16      30      65      77      84      90      94      97
1019          UA     100
              *

1020          KK   S501O
1021          KM   VOLUME RETAINED WITHIN SUB-BASIN S501
1022          DT  DIV501    25.1
1023          DI       0    3000
1024          DQ       0    3000
              *

1025          KK    C501
1026          KM        Combine routed hydrograph 500501 w/runoff from S501
1027          HC       2
              *

1028          KK  501502
1029          KM        Normal depth route from C501 to C502L
1030          KM        Source: Field Reconniassance
1031          RS       3    FLOW      -1
1032          RC    0.05   0.035    0.05    5021  0.0159
1033          RX    1000    1001    1002    1006    1035    1039    1040    1041
1034          RY     106     105     104     100     100     104     105     106
1035          RL                    0.94   100.0
              *

1036          KK    S502
1037          KM   Sub-Basin   S502
1038          KM
1039          KM      The Clark Unit Hydrograph is used for this basin.
1040          KM          The Natural time-area relation is used for this basin.
1041          KM
1042          KM      Time of Concentration for this sub-basin is based on the following:
1043          KM          An rainfall areal reduction factor of 1.000
1044          KM
1045          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1046          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1047          KM   .25 .25 .24 .24 .24 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1048          KM
1049          KM          L=   1.053 miles, S=  209 feet/mile, Kb= .11
1050          KM
1051          BA   0.403
1052          LG    0.27    0.30    4.50    0.36   22.00
1053          UC   0.471   0.281
1054          UA       0       3       5       8      12      20      43      75      90      96
1055          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1056          KK   S502O
1057          KM   VOLUME RETAINED WITHIN SUB-BASIN S502
1058          DT  DIV502    13.3
1059          DI       0    3000
1060          DQ       0    3000
              *

1061          KK   C502L
1062          KM        Combine routed hydrograph 501502 w/runoff from S502
1063          HC       2
              *

1064          KK    S503
1065          KM   Sub-Basin   S503
1066          KM
1067          KM      The Clark Unit Hydrograph is used for this basin.
1068          KM          The Urban time-area relation is used for this basin.
1069          KM
1070          KM      Time of Concentration for this sub-basin is based on the following:
1071          KM          An rainfall areal reduction factor of 1.000
1072          KM
1073          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1074          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1075          KM   .26 .26 .26 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1076          KM
1077          KM          L=   1.891 miles, S=  116 feet/mile, Kb= .06
1078          KM
1079          BA   0.994
```

```
1080          LG    0.27    0.28    4.65    0.33   31.00
1081          UC   0.567   0.329
1082          UA       0       5      16      30      65      77      84      90      94      97
1083          UA     100
              *

1084          KK   S503O
1085          KM   VOLUME RETAINED WITHIN SUB-BASIN S503
1086          DT  DIV503    25.5
1087          DI       0    3000
1088          DQ       0    3000
              *

1089          KK   C502I
1090          KM        Combine hydrograph from C502L w/runoff from S503
1091          HC       2
              *

1092          KK   C502O
1093          KM        Storage routing at crossing structure no. 81
1094          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1095          RS       1    STOR       0
1096          SQ       0     248     800    1600    2160    2500    2900    3200
1097          SE    1500    1503    1506    1512    1518    1524    1530    1536
1098          SV       0    2.37    9.23   20.95   37.67  122.58   212.7  516.24
1099          SE    1500    1508    1512    1516    1520    1528    1532    1540
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1100          KK  502505
1101          KM        Normal depth route from C502 to C505L
1102          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1103          RS       7    FLOW      -1
1104          RC    .046     .04    .046    8775  0.0091
1105          RX  9875.7  9921.8  9941.2  9962.7 10048.7 10088.3 10258.2 10339.9
1106          RY  1488.4  1476.5  1472.2    1469  1470.4  1480.9  1485.4  1497.1
1107          RL                    0.94    1469
              *

1108          KK    S504
1109          KM   Sub-Basin   S504
1110          KM
1111          KM      The Clark Unit Hydrograph is used for this basin.
1112          KM          The Urban time-area relation is used for this basin.
1113          KM
1114          KM      Time of Concentration for this sub-basin is based on the following:
1115          KM          An rainfall areal reduction factor of 1.000
1116          KM
1117          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1118          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85 * 90
1119          KM   .26 .25 .25 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1120          KM
1121          KM          L=   1.571 miles, S=   64 feet/mile, Kb= .04
1122          KM
1123          BA   0.326
1124          LG    0.24    0.25    4.40    0.39   33.00
1125          UC   0.483   0.449
1126          UA       0       5      16      30      65      77      84      90      94      97
1127          UA     100
              *

1128          KK   S504O
1129          KM   VOLUME RETAINED WITHIN SUB-BASIN S504
1130          DT  DIV504    26.1
1131          DI       0    3000
1132          DQ       0    3000
              *

1133          KK   C505L
1134          KM        Combine routed hydrograph 502505 w/runoff from S504
1135          HC       2
              *

1136          KK    S505
1137          KM   Sub-Basin   S505
1138          KM
1139          KM      The Clark Unit Hydrograph is used for this basin.
1140          KM          The Natural time-area relation is used for this basin.
```

```
1141          KM
1142          KM      Time of Concentration for this sub-basin is based on the following:
1143          KM          An rainfall areal reduction factor of 1.000
1144          KM
1145          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1146          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1147          KM   .25 .24 .24 .24 .24 .23 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1148          KM
1149          KM          L=   0.472 miles, S=  365 feet/mile, Kb= .14
1150          KM
1151          BA   0.143
1152          LG    0.24    0.33    4.40    0.37   20.00
1153          UC   0.300   0.162
1154          UA       0       3      .5       8      12      20      43      75      90      96
1155          UA     100
              *

1156          KK   S505O
1157          KM   VOLUME RETAINED WITHIN SUB-BASIN S505
1158          DT  DIV505     1.8
1159          DI       0    3000
1160          DQ       0    3000
              *

1161          KK   C503O
1162          KM        Storage routing at crossing structure no. 94
1163          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1164          RS       1    STOR       0
1165          SQ       0     7.5      22      45      71      93     110
1166          SE    1519  1520.25 1521.5    1524    1529    1534    1540
1167          SV       0    0.61    2.78    8.03   18.24
1168          SE    1519    1528    1532    1536    1540
              *

1169          KK  503505
1170          KM        Normal depth route from S505 to C505
1171          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1172          RS      14    FLOW      -1
1173          RC    .045    .047    .043    9136   .0115
1174          RX    9715  9892.4    9965  9996.6   10000 10044.9 10077.4 10088.5
1175          RY  1504.8  1497.4  1487.9  1471.1  1471.6  1487.4  1484.4  1483.1
1176          RL                    0.63  1471.1
              *

1177          KK    S506
1178          KM   Sub-Basin   S506
1179          KM
1180          KM      The Clark Unit Hydrograph is used for this basin.
1181          KM          The Natural time-area relation is used for this basin.
1182          KM
1183          KM      Time of Concentration for this sub-basin is based on the following:
1184          KM          An rainfall areal reduction factor of 1.000
1185          KM
1186          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1187          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1188          KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1189          KM
1190          KM          L=   0.726 miles, S=  307 feet/mile, Kb= .10
1191          KM
1192          BA   0.151
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1193          LG    0.23    0.32    5.70    0.19   27.00
1194          UC   0.321   0.238
1195          UA       0       3       5       8      12      20      43      75      90      96
1196          UA     100
              *

1197          KK   S506O
1198          KM   VOLUME RETAINED WITHIN SUB-BASIN S506
1199          DT  DIV506     6.0
1200          DI       0    3000
1201          DQ       0    3000
              *
```

```
1202          KK   C5040
1203          KM        Storage routing at crossing structure no. 93
1204          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1205          RS       1    STOR       0
1206          SQ       0     7.5      22      52      72      90     103     115
1207          SE  1513.9  1515.2  1516.4  1520.2  1524.2  1528.2  1532.2    1540
1208          SV       0     0.1    0.18    1.89    5.34   11.99   24.05    43.4
1209          SE  1513.9  1517.8    1520    1524    1528    1532    1536    1540
              *

1210          KK  504505
1211          KM        Normal depth route from S506 to C505
1212          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1213          RS      14    FLOW      -1
1214          RC    .045    .043    .044    7754  0.0129
1215          RX  9785.2  9855.2  9914.4  9959.2 10013.6 10041.2 10119.8 10183.2
1216          RY    1501  1493.8  1487.5    1473  1468.9  1480.7  1487.9  1494.5
              *

1217          KK    S507
1218          KM   Sub-Basin   S507
1219          KM
1220          KM      The Clark Unit Hydrograph is used for this basin.
1221          KM          The Urban time-area relation is used for this basin.
1222          KM
1223          KM      Time of Concentration for this sub-basin is based on the following:
1224          KM          An rainfall areal reduction factor of 1.000
1225          KM
1226          KM     EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1227          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1228          KM   .26 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .00 .00 .00 .00 .00 .00
1229          KM
1230          KM          L=   1.467 miles, S=   68 feet/mile, Kb= .03
1231          KM
1232          BA   0.666
1233          LG    0.28    0.25    5.70    0.21   12.00
1234          UC   0.392   0.224
1235          UA       0       5      16      30      65      77      84      90      94      97
1236          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1237          KK   S507O
1238          KM   VOLUME RETAINED WITHIN SUB-BASIN S507
1239          DT  DIV507    45.5
1240          DI       0    3000
1241          DQ       0    3000
              *

1242          KK   C505R
1243          KM        Combine routed hydrographs 503505 and 504505 w/runoff from S507
1244          HC       3
              *

1245          KK    C505
1246          KM        Combine hydrographs from C505L and C505R
1247          HC       2
              *

1248          KK  505509
1249          KM        Normal depth route from C505 to C509L
1250          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1251          RS      10    FLOW      -1
1252          RC    .046    .047    .036    6213  0.0064
1253          RX  9136.7  9456.9  9928.8   10000 10150.9 10209.7   10414 10505.9
1254          RY  1419.5  1401.9    1395    1390  1390.3  1398.3  1395.1  1398.3
1255          RL                    0.94  1390.0
              *

1256          KK    S508
1257          KM   Sub-Basin   S508
1258          KM
1259          KM      The Clark Unit Hydrograph is used for this basin.
1260          KM          The Urban time-area relation is used for this basin.
1261          KM
1262          KM      Time of Concentration for this sub-basin is based on the following:
1263          KM          An rainfall areal reduction factor of 1.000
1264          KM
```

```
1265          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1266          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1267          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1268          KM
1269          KM          L=   1.082 miles, S=   92 feet/mile, Kb= .03
1270          KM
1271          BA   0.295
1272          LG    0.28    0.26    5.30    0.25   22.00
1273          UC   0.304   0.211
1274          UA       0       5      16      30      65      77      84      90      94      97
1275          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 30

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1276          KK   S508O
1277          KM   VOLUME RETAINED WITHIN SUB-BASIN S508
1278          DT  DIV508    20.7
1279          DI       0    3000
1280          DQ       0    3000
              *

1281          KK   C509L
1282          KM        Combine routed hydrograph 505509 w/runoff from S508
1283          HC       2
              *

1284          KK    S509
1285          KM   Sub-Basin   S509
1286          KM
1287          KM      The Clark Unit Hydrograph is used for this basin.
1288          KM          The Urban time-area relation is used for this basin.
1289          KM
1290          KM      Time of Concentration for this sub-basin is based on the following:
1291          KM          An rainfall areal reduction factor of 1.000
1292          KM
1293          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1294          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1295          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1296          KM
1297          KM          L=   0.721 miles, S=  304 feet/mile, Kb= .05
1298          KM
1299          BA   0.170
1300          LG    0.28    0.26    4.65    0.33   33.00
1301          UC   0.225   0.149
1302          UA       0       5      16      30      65      77      84      90      94      97
1303          UA     100
              *

1304          KK   S509O
1305          KM   VOLUME RETAINED WITHIN SUB-BASIN S509
1306          DT  DIV509     5.2
1307          DI       0    3000
1308          DQ       0    3000
              *

1309          KK   C506O
1310          KM        Storage routing at crossing structure no. 84
1311          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1312          RS       1    STOR       0
1313          SQ       0     7.5      22      45      71      93     110
1314          SE    1519 1520.25  1521.5    1524    1529    1534    1540
1315          SV       0     .77    4.36   15.19   35.89
1316          SE    1519    1528    1532    1536    1540
              *
1                                          HEC-1 INPUT                                          PAGE 31

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1317          KK  506508
1318          KM        Normal depth route from S506 to C508
1319          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1320          RS       6    FLOW      -1
1321          RC    .045    .045    .035    4023   .0149
1322          RX  9717.6  9800.2  9981.4   10000 10010.3 10036.3 10068.8 10227.2
1323          RY  1512.9  1510.9  1508.9    1502    1499  1505.7  1511.5  1512.3
              *
```

```
1324          KK    S510
1325          KM   Sub-Basin   S510
1326          KM
1327          KM      The Clark Unit Hydrograph is used for this basin.
1328          KM          The Urban time-area relation is used for this basin.
1329          KM
1330          KM      Time of Concentration for this sub-basin is based on the following:
1331          KM          An rainfall areal reduction factor of 1.000
1332          KM
1333          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1334          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1335          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
1336          KM
1337          KM          L=   0.803 miles, S=   75 feet/mile, Kb= .04
1338          KM
1339          BA   0.127
1340          LG    0.24    0.15    7.30    0.11   44.00
1341          UC   0.317   0.281
1342          UA       0       5      16      30      65      77      84      90      94      97
1343          UA     100
              *

1344          KK   S510O
1345          KM   VOLUME RETAINED WITHIN SUB-BASIN S510
1346          DT  DIV510    11.0
1347          DI       0    3000
1348          DQ       0    3000
              *

1349          KK   C508R
1350          KM        Combine routed hydrograph 506508 w/runoff from S510
1351          HC       2
              *

1352          KK    S511
1353          KM   Sub-Basin   S511
1354          KM
1355          KM      The Clark Unit Hydrograph is used for this basin.
1356          KM          The Urban time-area relation is used for this basin.
1357          KM
1358          KM      Time of Concentration for this sub-basin is based on the following:
1359          KM          An rainfall areal reduction factor of 1.000
1360          KM
1361          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1362          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1363          KM   .27 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1364          KM
1365          KM          L=   1.319 miles, S=  270 feet/mile, Kb= .05
1366          KM
1367          BA   0.385
1368          LG    0.29    0.28    5.70    0.22   29.00
1369          UC   0.313   0.219
1370          UA       0       5      16      30      65      77      84      90      94      97
1371          UA     100
              *

1372          KK   S511O
1373          KM   VOLUME RETAINED WITHIN SUB-BASIN S511
1374          DT  DIV511    17.6
1375          DI       0    3000
1376          DQ       0    3000
              *

1377          KK   C507O
1378          KM        Storage routing at crossing structure no. 82
1379          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1380          RS       1    STOR       0
1381          SQ       0     7.5      22      45      71      93     108     115
1382          SE    1516 1517.25  1518.5    1521    1526    1531    1536    1540
1383          SV       0     .75    4.47   19.99   60.85  133.63
1384          SE    1520    1524    1528    1532    1536    1540
              *

1385          KK  507508
1386          KM        Normal depth route from S511 to C508
1387          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1388          RS      12    FLOW      -1
```

```
1389          RC    .045    .045    .035    5400   .0111
1390          RX  9723.2  9781.7   9912.  9989.1   10000 10022.9 10089.7 10209.7
1391          RY  1491.1  1490.1  1489.9  1476.5  1477.1  1483.3  1486.2  1492.1
1392          RL                    0.39  1476.5
              *

1393          KK    S512
1394          KM   Sub-Basin   S512
1395          KM
1396          KM      The Clark Unit Hydrograph is used for this basin.
1397          KM          The Urban time-area relation is used for this basin.
1398          KM
1399          KM      Time of Concentration for this sub-basin is based on the following:
1400          KM          An rainfall areal reduction factor of 1.000
1401          KM
1402          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1403          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1404          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .02 .02 .02
1405          KM
1406          KM          L=   0.974 miles, S=   62 feet/mile, Kb= .04
1407          KM
1408          BA   0.214
1409          LG    0.19    0.15    8.00    0.08   48.00
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1410          UC   0.367   0.286
1411          UA       0       5      16      30      65      77      84      90      94      97
1412          UA     100
              *

1413          KK   S512O
1414          KM   VOLUME RETAINED WITHIN SUB-BASIN S512
1415          DT  DIV512    19.6
1416          DI       0    3000
1417          DQ       0    3000
              *

1418          KK   C508L
1419          KM        Combine routed hydrograph 507508 w/runoff from S512
1420          HC       2
              *

1421          KK    C508
1422          KM        Combine hydrographs from C508L and C508R
1423          HC       2
              *

1424          KK  508509
1425          KM        Normal depth route from C508 to C509
1426          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1427          RS      22    FLOW      -1
1428          RC    .045    .041    .045   10349  0.0077
1429          RX  9573.3  9869.3    9973  9985.2   10000   10053 10231.6 10511.6
1430          RY  1439.9  1425.1  1424.7  1422.1  1419.1  1425.1  1437.1  1444.5
1431          RL                    0.94  1419.1
              *

1432          KK    S513
1433          KM   Sub-Basin   S513
1434          KM
1435          KM      The Clark Unit Hydrograph is used for this basin.
1436          KM          The Urban time-area relation is used for this basin.
1437          KM
1438          KM      Time of Concentration for this sub-basin is based on the following:
1439          KM          An rainfall areal reduction factor of 1.000
1440          KM
1441          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1442          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1443          KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01 .01
1444          KM
1445          KM          L=   2.301 miles, S=   52 feet/mile, Kb= .02
1446          KM
1447          BA   0.778
1448          LG    0.28    0.25    5.40    0.25   19.00
1449          UC   0.433   0.329
1450          UA       0       5      16      30      65      77      84      90      94      97
1451          UA     100
              *
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1452          KK   S513O
1453          KM   VOLUME RETAINED WITHIN SUB-BASIN S513
1454          DT  DIV513    57.1
1455          DI       0    3000
1456          DQ       0    3000
              *

1457          KK   C509R
1458          KM        Combine routed hydrograph 508509 w/runoff from S513
1459          HC       2
              *

1460          KK    C509
1461          KM        Combine hydrographs from C509L and C509R
1462          HC       2
              *

1463          KK  509510
1464          KM        Normal depth route from C509 to C510
1465          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1466          RS       3    FLOW      -1
1467          RC    .046    .043    .045    1958   .0102
1468          RX  9605.5  9805.1  9911.8   10000 10026.3 10119.6 10293.4 10613.5
1469          RY  1374.6  1369.2  1370.3  1365.5  1365.6  1379.6  1383.9  1390.1
1470          RL                    0.38  1365.5
              *

1471          KK    S514
1472          KM   Sub-Basin   S514
1473          KM
1474          KM      The Clark Unit Hydrograph is used for this basin.
1475          KM          The Urban time-area relation is used for this basin.
1476          KM
1477          KM      Time of Concentration for this sub-basin is based on the following:
1478          KM          An rainfall areal reduction factor of 1.000
1479          KM
1480          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1481          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1482          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
1483          KM
1484          KM          L=   2.147 miles, S=   65 feet/mile, Kb= .02
1485          KM
1486          BA   0.650
1487          LG    0.24    0.16    7.60    0.10   31.00
1488          UC   0.375   0.293
1489          UA       0       5      16      30      65      77      84      90      94      97
1490          UA     100
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1491          KK   S514O
1492          KM   VOLUME RETAINED WITHIN SUB-BASIN S514
1493          DT  DIV514    51.8
1494          DI       0    3000
1495          DQ       0    3000
              *

1496          KK    C510
1497          KM        Combine routed hydrograph 509510 w/runoff from S514
1498          HC       2
              *

1499          KK  510511
1500          KM        Normal depth route from C510 to C511
1501          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1502          RS      11    FLOW      -1
1503          RC    .046    .044    .046    6722  0.0067
1504          RX  9361.9  9781.7  9944.4  9985.6   10000 10040.8   10420 11470.9
1505          RY  1382.6  1375.5  1364.2  1355.1  1355.4  1360.8  1363.1  1381.1
1506          RL                    0.38  1355.1
              *

1507          KK    S515
1508          KM   Sub-Basin   S515
```

```
1509          KM
1510          KM      The Clark Unit Hydrograph is used for this basin.
1511          KM          The Urban time-area relation is used for this basin.
1512          KM
1513          KM      Time of Concentration for this sub-basin is based on the following:
1514          KM          An rainfall areal reduction factor of 1.000
1515          KM
1516          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1517          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1518          KM   .29 .29 .29 .29 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
1519          KM
1520          KM          L=   1.948 miles, S=   54 feet/mile, Kb= .02
1521          KM
1522          BA   1.102
1523          LG    0.25    0.16    8.80    0.06   29.00
1524          UC   0.379   0.203
1525          UA       0       5      16      30      65      77      84      90      94      97
1526          UA     100
              *

1527          KK   S515O
1528          KM   VOLUME RETAINED WITHIN SUB-BASIN S515
1529          DT  DIV515    84.7
1530          DI       0    3000
1531          DQ       0    3000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1532          KK    C511
1533          KM        Combine routed hydrograph 510511 w/runoff from S515
1534          HC       2
              *

1535          KK  511512
1536          KM        Normal depth route from C511 to C512
1537          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09
1538          RS      10    FLOW      -1
1539          RC    .046    .044    .046    9226  0.0081
1540          RX  9565.4  9665.5  9852.4   10000 10019.5 10074.2 10242.6   10760
1541          RY  1305.6  1305.6  1303.1  1297.8  1296.9  1336.3  1339.9  1336.5
1542          RL                    0.40  1296.9
              *

1543          KK    S516
1544          KM   Sub-Basin   S516
1545          KM
1546          KM      The Clark Unit Hydrograph is used for this basin.
1547          KM          The Urban time-area relation is used for this basin.
1548          KM
1549          KM      Time of Concentration for this sub-basin is based on the following:
1550          KM          An rainfall areal reduction factor of 1.000
1551          KM
1552          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1553          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1554          KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .02 .02 .02 .02 .02 .02 .02
1555          KM
1556          KM          L=   1.747 miles, S=   66 feet/mile, Kb= .03
1557          KM
1558          BA   0.540
1559          LG    0.22    0.27    4.80    0.29   47.00
1560          UC   0.425   0.318
1561          UA       0       5      16      30      65      77      84      90      94      97
1562          UA     100
              *

1563          KK   S516O
1564          KM   VOLUME RETAINED WITHIN SUB-BASIN S516
1565          DT  DIV516    39.4
1566          DI       0    3000
1567          DQ       0    3000
              *

1568          KK    C512
1569          KM        Combine routed hydrograph 511512 w/runoff from S516
1570          HC       2
              *
```

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1571          KK  WEST-3
1572          KM        Dummy combine of major basins S100, S200, S300, S400 and S500
1573          HC       2
              *
              *  ******************************************************************************
              *                Begin Major Basin 600 (Morgan City Wash)
              *  ******************************************************************************
              *

1574          KK    S600
1575          KM   Sub-Basin   S600
1576          KM
1577          KM      The Clark Unit Hydrograph is used for this basin.
1578          KM          The Natural time-area relation is used for this basin.
1579          KM
1580          KM      Time of Concentration for this sub-basin is based on the following:
1581          KM          An rainfall areal reduction factor of 1.000
1582          KM
1583          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1584          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1585          KM   .23 .23 .23 .23 .22 .22 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1586          KM
1587          KM          L=   2.796 miles, S=  271 feet/mile, Kb= .09
1588          KM
1589          BA   2.018
1590          LG    0.25    0.35    4.00    0.49   22.00
1591          UC   0.763   0.418
1592          UA       0       3       5       8      12      20      43      75      90      96
1593          UA     100
              *

1594          KK  600601
1595          KM        Normal depth route from S600 to C601
1596          KM        Source: Morgan City Wash FDS, FCD 89-15
1597          RS       1    FLOW      -1
1598          RC    0.05   0.035    0.05    3463   .0332
1599          RX     100     110     135     200     220     260     275     290
1600          RY    2516    2512    2504    2500    2510    2520    2530    2540
              *

1601          KK    S601
1602          KM   Sub-Basin   S601
1603          KM
1604          KM      The Clark Unit Hydrograph is used for this basin.
1605          KM          The Natural time-area relation is used for this basin.
1606          KM
1607          KM      Time of Concentration for this sub-basin is based on the following:
1608          KM          An rainfall areal reduction factor of 1.000
1609          KM
1610          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1611          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1612          KM   .27 .27 .27 .27 .26 .26 .03 .03 .03 .02 .02 .02 .01 .01 .01 .01 .01 .01
1613          KM
1614          KM          L=   1.840 miles, S=  232 feet/mile, Kb= .10
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1615          KM
1616          BA   0.901
1617          LG    0.25    0.39    5.70    0.21   44.00
1618          UC   0.588   0.354
1619          UA       0       3       5       8      12      20      43      75      90      96
1620          UA     100
              *

1621          KK    C601
1622          KM        Combine routed hydrograph from S600 w/runoff from S601
1623          HC       2
              *

1624          KK  601602
1625          KM        Normal depth route from S601 to C602
1626          KM        Source: Morgan City Wash FDS, FCD 89-15
1627          RS       3    FLOW      -1
1628          RC    0.05   0.035    0.05    6017   .0266
1629          RX     100     130     140     155     245     255     270     340
1630          RY    2380    2360    2356    2352    2352    2356    2360    2380
```

```
                 *
1631             KK    S603
1632             KM   Sub-Basin   S603
1633             KM
1634             KM      The Clark Unit Hydrograph is used for this basin.
1635             KM          The Natural time-area relation is used for this basin.
1636             KM
1637             KM      Time of Concentration for this sub-basin is based on the following:
1638             KM          An rainfall areal reduction factor of 1.000
1639             KM
1640             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1641             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1642             KM   .27 .27 .27 .26 .26 .26 .03 .03 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1643             KM
1644             KM          L=   1.377 miles, S=  326 feet/mile, Kb= .10
1645             KM
1646             BA   0.665
1647             LG    0.25    0.39    5.80    0.20   41.00
1648             UC   0.433   0.238
1649             UA      0       3       5       8      12      20      43      75      90      96
1650             UA    100
                 *

1651             KK   C602L
1652             KM        Combine routed hydrogaph 601602 w/runoff from S603
1653             HC       2
                 *

1654             KK    S602
1655             KM   Sub-Basin   S602
1656             KM
1657             KM      The Clark Unit Hydrograph is used for this basin.
1658             KM          The Natural time-area relation is used for this basin.
1659             KM
```



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LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1660             KM      Time of Concentration for this sub-basin is based on the following:
1661             KM          An rainfall areal reduction factor of 1.000
1662             KM
1663             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1664             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1665             KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1666             KM
1667             KM          L=   3.035 miles, S=  258 feet/mile, Kb= .09
1668             KM
1669             BA   1.883
1670             LG    0.25    0.35    4.35    0.41   35.00
1671             UC   0.788   0.481
1672             UA      0       3       5       8      12      20      43      75      90      96
1673             UA    100
                 *

1674             KK    C602
1675             KM        Combine hydrograph at C602L w/runoff from S602
1676             HC       2
                 *

1677             KK  602603
1678             KM        Normal depth route from C602 to C603L
1679             KM        Source: Morgan City Wash FDS, FCD 89-15
1680             RS       7    FLOW      -1
1681             RC    0.05   0.035    0.05    7614   .0171
1682             RX    1000    1020    1045    1065    1322    1340    1372    1405
1683             RY    2228    2224    2220    2212    2212    2220    2240    2260
1684             RL                    0.96  2212.0
                 *

1685             KK    S606
1686             KM   Sub-Basin   S606
1687             KM
1688             KM      The Clark Unit Hydrograph is used for this basin.
1689             KM          The Natural time-area relation is used for this basin.
1690             KM
1691             KM      Time of Concentration for this sub-basin is based on the following:
1692             KM          An rainfall areal reduction factor of 1.000
1693             KM
1694             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1695             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
```

```
1696          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1697          KM
1698          KM          L=   2.111 miles, S=  300 feet/mile, Kb= .10
1699          KM
1700          BA   0.660
1701          LG    0.26    0.35    4.50    0.37   35.00
1702          UC   0.600   0.484
1703          UA       0       3       5       8      12      20      43      75      90      96
1704          UA     100
              *
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1705          KK   C603L
1706          KM        Combine routed hydrograph 602603 w/runoff from S606
1707          HC       2
              *

1708          KK    S605
1709          KM   Sub-Basin   S605
1710          KM
1711          KM      The Clark Unit Hydrograph is used for this basin.
1712          KM          The Natural time-area relation is used for this basin.
1713          KM
1714          KM      Time of Concentration for this sub-basin is based on the following:
1715          KM          An rainfall areal reduction factor of 1.000
1716          KM
1717          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1718          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1719          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1720          KM
1721          KM          L=   2.322 miles, S=  229 feet/mile, Kb= .10
1722          KM
1723          BA   1.085
1724          LG    0.25    0.35    4.35    0.41   35.00
1725          UC   0.742   0.497
1726          UA       0       3       5       8      12      20      43      75      90      96
1727          UA     100
              *

1728          KK    S604
1729          KM   Sub-Basin   S604
1730          KM
1731          KM      The Clark Unit Hydrograph is used for this basin.
1732          KM          The Natural time-area relation is used for this basin.
1733          KM
1734          KM      Time of Concentration for this sub-basin is based on the following:
1735          KM          An rainfall areal reduction factor of 1.000
1736          KM
1737          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1738          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1739          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1740          KM
1741          KM          L=   4.105 miles, S=  207 feet/mile, Kb= .09
1742          KM
1743          BA   2.656
1744          LG    0.25    0.35    4.35    0.41   35.00
1745          UC   1.100   0.729
1746          UA       0       3       5       8      12      20      43      75      90      96
1747          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 41

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1748          KK    C603
1749          KM        Combine hydrograph from C603L w/runoff from  S605, and S604
1750          HC       3
              *

1751          KK  603604
1752          KM        Normal depth route from C603 to C604R
1753          KM        Source: Morgan City Wash FDS, FCD 89-15
1754          RS       4    FLOW      -1
1755          RC    0.05   0.035    0.05    7830   .0192
1756          RX    1000    1022    1038    1053    1328    1375    1410    1430
1757          RY    2108    2104    2100    2088    2088    2100    2108    2112
1758          RL                    0.96  2088.0
```

```
                 *
1759             KK    S609
1760             KM   Sub-Basin   S609
1761             KM
1762             KM      The Clark Unit Hydrograph is used for this basin.
1763             KM          The Natural time-area relation is used for this basin.
1764             KM
1765             KM      Time of Concentration for this sub-basin is based on the following:
1766             KM          An rainfall areal reduction factor of 1.000
1767             KM
1768             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1769             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1770             KM   .24 .24 .24 .24 .23 .23 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
1771             KM
1772             KM          L=   2.239 miles, S=  214 feet/mile, Kb= .09
1773             KM
1774             BA   0.560
1775             LG    0.28    0.32    4.10    0.47   28.00
1776             UC   0.700   0.660
1777             UA       0       3       5       8      12      20      43      75      90      96
1778             UA     100
                 *

1779             KK   S609O
1780             KM   VOLUME RETAINED WITHIN SUB-BASIN S609
1781             DT  DIV609    10.2
1782             DI       0    3000
1783             DQ       0    3000
                 *

1784             KK   C604R
1785             KM        Combine routed hydrograph 603604 w/runoff from S609
1786             HC       2
                 *
```



```
LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1787             KK    S607
1788             KM   Sub-Basin   S607
1789             KM
1790             KM      The Clark Unit Hydrograph is used for this basin.
1791             KM          The Natural time-area relation is used for this basin.
1792             KM
1793             KM      Time of Concentration for this sub-basin is based on the following:
1794             KM          An rainfall areal reduction factor of 1.000
1795             KM
1796             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1797             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1798             KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1799             KM
1800             KM          L=   2.567 miles, S=  257 feet/mile, Kb= .10
1801             KM
1802             BA   0.822
1803             LG    0.26    0.35    5.10    0.27   35.00
1804             UC   0.733   0.623
1805             UA       0       3       5       8      12      20      43      75      90      96
1806             UA     100
                 *

1807             KK   S607O
1808             KM   VOLUME RETAINED WITHIN SUB-BASIN S607
1809             DT  DIV607     5.4
1810             DI       0    3000
1811             DQ       0    3000
                 *

1812             KK    C604
1813             KM        Combine hydrograph from C604R w/runoff from S607
1814             HC       2
                 *

1815             KK  604605
1816             KM        Normal depth route from C604 to C605
1817             KM        Source: Morgan City Wash FDS, FCD 89-15
1818             RS       1    FLOW      -1
1819             RC    0.05   0.035    0.05    1543   .0065
1820             RX    1000    1080    1110    1125    1210    1292    1340    1375
1821             RY    2016    2112    2000    1984    1984    1992    2000    2008
```

```
                 *
1822             KK    S608
1823             KM   Sub-Basin   S608
1824             KM
1825             KM      The Clark Unit Hydrograph is used for this basin.
1826             KM          The Natural time-area relation is used for this basin.
1827             KM
1828             KM      Time of Concentration for this sub-basin is based on the following:
1829             KM          An rainfall areal reduction factor of 1.000
1830             KM
1831             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1832             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1                                                HEC-1 INPUT                                                    PAGE 43

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1833             KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1834             KM
1835             KM          L=   1.398 miles, S=  230 feet/mile, Kb= .09
1836             KM
1837             BA   0.508
1838             LG    0.27    0.36    5.80    0.20   37.00
1839             UC   0.458   0.299
1840             UA       0       3       5       8      12      20      43      75      90      96
1841             UA     100
                 *

1842             KK   S608O
1843             KM   VOLUME RETAINED WITHIN SUB-BASIN S608
1844             DT  DIV608     9.0
1845             DI       0    3000
1846             DQ       0    3000
                 *

1847             KK    C605
1848             KM        Combine routed hydrograph from 604605 w/runoff from S608
1849             HC       2
                 *

1850             KK  605606
1851             KM        Normal depth route from C605 to C606L
1852             KM        Source: Morgan City Wash FDS, FCD 89-15
1853             RS       3    FLOW      -1
1854             RC    0.05   0.035    0.05    5520   .0199
1855             RX    1000    1052    1190    1248    1281    1340    1368    1395
1856             RY    1940    1928    1928    1924    1924    1928    1936    1940
1857             RL                    0.96  1924.0
                 *

1858             KK    S610
1859             KM   Sub-Basin   S610
1860             KM
1861             KM      The Clark Unit Hydrograph is used for this basin.
1862             KM          The Urban time-area relation is used for this basin.
1863             KM
1864             KM      Time of Concentration for this sub-basin is based on the following:
1865             KM          An rainfall areal reduction factor of 1.000
1866             KM
1867             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1868             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1869             KM   .27 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1870             KM
1871             KM          L=   1.869 miles, S=  118 feet/mile, Kb= .06
1872             KM
1873             BA   0.603
1874             LG    0.28    0.30    5.10    0.27   40.00
1875             UC   0.546   0.416
1876             UA       0       5      16      30      65      77      84      90      94      97
1877             UA     100
                 *
1                                                HEC-1 INPUT                                                    PAGE 44

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1878             KK   C606L
1879             KM        Combine routed hydrograph 605606 w/runoff from S610
1880             HC       2
                 *
```

```
1881          KK    S612
1882          KM   Sub-Basin   S612
1883          KM
1884          KM      The Clark Unit Hydrograph is used for this basin.
1885          KM          The Urban time-area relation is used for this basin.
1886          KM
1887          KM      Time of Concentration for this sub-basin is based on the following:
1888          KM          An rainfall areal reduction factor of 1.000
1889          KM
1890          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1891          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1892          KM   .28 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
1893          KM
1894          KM          L=   2.531 miles, S=  230 feet/mile, Kb= .08
1895          KM
1896          BA   0.808
1897          LG    0.29    0.26    6.40    0.16   34.00
1898          UC   0.617   0.514
1899          UA       0       5      16      30      65      77      84      90      94      97
1900          UA     100
              *

1901          KK    C606
1902          KM        Combine hydrograph from C606L w/runoff from S612
1903          HC       2
              *

1904          KK  606608
1905          KM        Normal depth route from C606 to C608
1906          KM        Source: Morgan City Wash FDS, FCD 89-15
1907          RS       1    FLOW      -1
1908          RC    0.05   0.035    0.05    1141   .0175
1909          RX    1000    1034    1070    1150    1237    1280    1378    1420
1910          RY    1888    1880    1876    1868    1868    1876    1900    1920
1911          RL                    0.96  1868.0
              *

1912          KK    S611
1913          KM   Sub-Basin   S611
1914          KM
1915          KM      The Clark Unit Hydrograph is used for this basin.
1916          KM          The Natural time-area relation is used for this basin.
1917          KM
1918          KM      Time of Concentration for this sub-basin is based on the following:
1919          KM          An rainfall areal reduction factor of 1.000
1920          KM
1921          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1922          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1923          KM   .25 .25 .24 .24 .24 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1924          KM
1925          KM          L=   1.286 miles, S=  270 feet/mile, Kb= .12
1926          KM
1927          BA   0.569
1928          LG    0.25    0.35    4.35    0.41   35.00
1929          UC   0.504   0.292
1930          UA       0       3       5       8      12      20      43      75      90      96
1931          UA     100
              *

1932          KK  607608
1933          KM        Normal depth route from S611 to S613
1934          KM        Source: Field Reconnaissance
1935          RS       6    FLOW      -1
1936          RC    .075     .03    .075   11167  0.0242
1937          RX     100     106     114     120     168     172     232     292
1938          RY     110     107     103     100     100     104     107     110
              *

1939          KK    S613
1940          KM   Sub-Basin   S613
1941          KM
1942          KM      The Clark Unit Hydrograph is used for this basin.
1943          KM          The Natural time-area relation is used for this basin.
1944          KM
1945          KM      Time of Concentration for this sub-basin is based on the following:
1946          KM          An rainfall areal reduction factor of 1.000
1947          KM
```

```
1948          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1949          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1950          KM   .26 .26 .26 .25 .25 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1951          KM
1952          KM          L=   2.525 miles, S=  131 feet/mile, Kb= .09
1953          KM
1954          BA   1.797
1955          LG    0.28    0.29    4.55    0.35   36.00
1956          UC   0.925   0.510
1957          UA       0       3       5       8      12      20      43      75      90      96
1958          UA     100
              *

1959          KK    C608
1960          KM        Combine routed hydrograph 606608 and 607608 w/runoff from S613
1961          HC       3
              *

1962          KK  608609
1963          KM        Normal depth route from C608 to C609
1964          KM        Source: Morgan City Wash FDS, FCD 89-15
1965          RS       3    FLOW      -1
1966          RC    0.05   0.035    0.05    6518   .0123
1967          RX    1000    1031    1052    1090    1132    1290    1320    1360
1968          RY    1860    1848    1844    1836    1836    1844    1848    1860
1969          RL                    0.94  1836.0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1970          KK    S614
1971          KM   Sub-Basin   S614
1972          KM
1973          KM      The Clark Unit Hydrograph is used for this basin.
1974          KM          The Natural time-area relation is used for this basin.
1975          KM
1976          KM      Time of Concentration for this sub-basin is based on the following:
1977          KM          An rainfall areal reduction factor of 1.000
1978          KM
1979          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
1980          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
1981          KM   .25 .25 .25 .25 .25 .24 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
1982          KM
1983          KM          L=   2.285 miles, S=  149 feet/mile, Kb= .10
1984          KM
1985          BA   1.079
1986          LG    0.26    0.32    4.40    0.39   35.00
1987          UC   0.888   0.601
1988          UA       0       3       5       8      12      20      43      75      90      96
1989          UA     100
              *

1990          KK    C609
1991          KM        Combine routed hydrograph 608609 w/runoff from S614
1992          HC       2
              *

1993          KK  609611
1994          KM        Normal depth route from C609 to C611R
1995          KM        Source: Morgan City Wash FDS, FCD 89-15
1996          RS       5    FLOW      -1
1997          RC    0.05   0.035    0.05    6519   .0031
1998          RX    1000    1070    1145    1230    1410    1430    1550    1642
1999          RY    1732    1720    1716    1708    1708    1716    1720    1740
2000          RL                    0.94  1708.0
              *

2001          KK    S617
2002          KM   Sub-Basin   S617
2003          KM
2004          KM      The Clark Unit Hydrograph is used for this basin.
2005          KM          The Urban time-area relation is used for this basin.
2006          KM
2007          KM      Time of Concentration for this sub-basin is based on the following:
2008          KM          An rainfall areal reduction factor of 1.000
2009          KM
2010          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2011          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2012          KM   .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
```

```
2013          KM
2014          KM          L=   1.368 miles, S=  154 feet/mile, Kb= .08
2015          KM
2016          BA   0.675
2017          LG    0.26    0.31    4.80    0.31   24.00
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2018          UC   0.496   0.273
2019          UA       0       5      16      30      65      77      84      90      94      97
2020          UA     100
              *

2021          KK   C611R
2022          KM        Combine routed hydrograph 609611 w/runoff from S617
2023          HC       2
              *

2024          KK    S615
2025          KM   Sub-Basin   S615
2026          KM
2027          KM      The Clark Unit Hydrograph is used for this basin.
2028          KM          The Natural time-area relation is used for this basin.
2029          KM
2030          KM      Time of Concentration for this sub-basin is based on the following:
2031          KM          An rainfall areal reduction factor of 1.000
2032          KM
2033          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2034          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2035          KM   .28 .28 .28 .27 .27 .27 .03 .03 .03 .03 .03 .03 .02 .02 .02 .02 .02 .02
2036          KM
2037          KM          L=   2.059 miles, S=  136 feet/mile, Kb= .12
2038          KM
2039          BA   1.055
2040          LG    0.25    0.39    6.20    0.17   55.00
2041          UC   0.913   0.578
2042          UA       0       3       5       8      12      20      43      75      90      96
2043          UA     100
              *

2044          KK  610611
2045          KM        Normal depth route from S615 to C611
2046          KM        Source: Morgan City Wash FDS, FCD 89-15
2047          RS       5    FLOW      -1
2048          RC    0.05   0.035    0.05    7981   .0100
2049          RX    1000    1028    1041    1078    1087    1092    1100    1108
2050          RY    1860    1840    1820    1800    1800    1820    1840    1860
              *

2051          KK    S616
2052          KM   Sub-Basin   S616
2053          KM
2054          KM      The Clark Unit Hydrograph is used for this basin.
2055          KM          The Natural time-area relation is used for this basin.
2056          KM
2057          KM      Time of Concentration for this sub-basin is based on the following:
2058          KM          An rainfall areal reduction factor of 1.000
2059          KM
2060          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2061          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2062          KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
2063          KM
2064          KM          L=   1.738 miles, S=  213 feet/mile, Kb= .09
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2065          KM
2066          BA   0.505
2067          LG    0.25    0.32    5.20    0.26   21.00
2068          UC   0.554   0.441
2069          UA       0       3       5       8      12      20      43      75      90      96
2070          UA     100
              *

2071          KK   S616O
2072          KM   VOLUME RETAINED WITHIN SUB-BASIN S616
2073          DT  DIV616    12.6
2074          DI       0    3000
2075          DQ       0    3000
```

```
                 *
2076             KK   C611L
2077             KM        Combine routed hydrograph 6110611 w/runoff frm S616
2078             HC       2
                 *

2079             KK    C611
2080             KM        Combine hydrographs C611L and C611R
2081             HC       2
                 *

2082             KK  611613
2083             KM        Normal depth route from C611 to C613
2084             KM        Source: Morgan City Wash FDS, FCD 89-15
2085             RS       1    FLOW      -1
2086             RC    0.05   0.035    0.05    4445   .0382
2087             RX    1000    1050    1080    1122    1210    1250    1305    1338
2088             RY    1644    1644    1628    1620    1620    1628    1660    1680
2089             RL                    0.94  1620.0
                 *

2090             KK    S618
2091             KM   Sub-Basin   S618
2092             KM
2093             KM      The Clark Unit Hydrograph is used for this basin.
2094             KM          The Natural time-area relation is used for this basin.
2095             KM
2096             KM      Time of Concentration for this sub-basin is based on the following:
2097             KM          An rainfall areal reduction factor of 1.000
2098             KM
2099             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2100             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2101             KM   .26 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01 .01
2102             KM
2103             KM          L=   2.364 miles, S=  199 feet/mile, Kb= .10
2104             KM
2105             BA   0.958
2106             LG    0.21    0.36    5.20    0.26   22.00
2107             UC   0.796   0.586
2108             UA       0       3       5       8      12      20      43      75      90      96
2109             UA     100
                 *
1                                          HEC-1 INPUT                                          PAGE 49

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2110             KK   C613R
2111             KM        Combine routed hydrograph 611613 w/runoff from S618
2112             HC       2
                 *

2113             KK    S619
2114             KM   Sub-Basin   S619
2115             KM
2116             KM      The Clark Unit Hydrograph is used for this basin.
2117             KM          The Natural time-area relation is used for this basin.
2118             KM
2119             KM      Time of Concentration for this sub-basin is based on the following:
2120             KM          An rainfall areal reduction factor of 1.000
2121             KM
2122             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2123             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2124             KM   .28 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2125             KM
2126             KM          L=   1.212 miles, S=   99 feet/mile, Kb= .12
2127             KM
2128             BA   0.827
2129             LG    0.27    0.36    6.80    0.14   39.00
2130             UC   0.721   0.334
2131             UA       0       3       5       8      12      20      43      75      90      96
2132             UA     100
                 *

2133             KK  612613
2134             KM        Normal depth route from S619 to S620
2135             KM        Source: Morgan City Wash FDS, FCD 89-15
2136             RS       5    FLOW      -1
2137             RC    0.05   0.035    0.05    8752   .0331
2138             RX     100     103     106     110     180     184     187     190
```

```
2139        RY     110     107     104     100     100     104     107     110
            *

2140        KK    S620
2141        KM   Sub-Basin   S620
2142        KM
2143        KM      The Clark Unit Hydrograph is used for this basin.
2144        KM          The Natural time-area relation is used for this basin.
2145        KM
2146        KM      Time of Concentration for this sub-basin is based on the following:
2147        KM          An rainfall areal reduction factor of 1.000
2148        KM
2149        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2150        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2151        KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2152        KM
2153        KM          L=   1.763 miles, S=  228 feet/mile, Kb= .13
2154        KM
2155        BA   0.444
2156        LG    0.23    0.38    6.40    0.16   37.00
2157        UC   0.696   0.619
1                                          HEC-1 INPUT                                          PAGE 50

            LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2158        UA       0       3       5       8      12      20      43      75      90      96
2159        UA     100
            *

2160        KK   C613L
2161        KM        Combine routed hydrograph 612613 w/runoff from S620
2162        HC       2
            *

2163        KK    C613
2164        KM        Combine hydrographs C613R and C613L
2165        HC       2
            *

2166        KK  613614
2167        KM        Normal depth route from C613 to C614
2168        KM        Source: Morgan City Wash FDS, FCD 89-15
2169        RS       3    FLOW      -1
2170        RC    0.05   0.035    0.05    5557   .0108
2171        RX    1000    1022    1050    1100    1180    1225    1260    1360
2172        RY    1640    1620    1580    1552    1552    1564    1576    1580
2173        RL                    0.94  1552.0
            *

2174        KK    S621
2175        KM   Sub-Basin   S621
2176        KM
2177        KM      The Clark Unit Hydrograph is used for this basin.
2178        KM          The Natural time-area relation is used for this basin.
2179        KM
2180        KM      Time of Concentration for this sub-basin is based on the following:
2181        KM          An rainfall areal reduction factor of 1.000
2182        KM
2183        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2184        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2185        KM   .24 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2186        KM
2187        KM          L=   1.470 miles, S=  170 feet/mile, Kb= .08
2188        KM
2189        BA   0.923
2190        LG    0.22    0.31    4.80    0.31    4.00
2191        UC   0.508   0.249
2192        UA       0       3       5       8      12      20      43      75      90      96
2193        UA     100
            *

2194        KK    C614
2195        KM        Combine routed hydrograph 613614 w/runoff from S621
2196        HC       2
            *
1                                          HEC-1 INPUT                                          PAGE 51

            LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2197        KK  614615
```

```
2198        KM        Normal depth route from C614 to C615
2199        KM        Source: Morgan City Wash FDS, FCD 89-15
2200        RS       4    FLOW      -1
2201        RC    0.05   0.035    0.05    7995   .0144
2202        RX    1000    1050    1088    1150    1195    1290    1340    1405
2203        RY    1496    1484    1476    1460    1460    1476    1484    1516
2204        RL                    0.94  1460.0
            *

2205        KK    S622
2206        KM   Sub-Basin   S622
2207        KM
2208        KM      The Clark Unit Hydrograph is used for this basin.
2209        KM          The Natural time-area relation is used for this basin.
2210        KM
2211        KM      Time of Concentration for this sub-basin is based on the following:
2212        KM          An rainfall areal reduction factor of 1.000
2213        KM
2214        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2215        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2216        KM   .24 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2217        KM
2218        KM          L=   2.004 miles, S=  152 feet/mile, Kb= .12
2219        KM
2220        BA   0.897
2221        LG    0.19    0.35    4.90    0.30    4.00
2222        UC   0.975   0.667
2223        UA       0       3       5       8      12      20      43      75      90      96
2224        UA     100
            *

2225        KK    C615
2226        KM        Combine routed hydrograph from 614615 w/runoff from S622
2227        HC       2
            *

2228        KK  WEST-4
2229        KM        Dummy combine for all major basins, west of the Agua Fria River
2230        HC       2
            *

2231        KK    S700
2232        KM   Sub-Basin   S700
2233        KM
2234        KM      The Clark Unit Hydrograph is used for this basin.
2235        KM          The Urban time-area relation is used for this basin.
2236        KM
2237        KM      Time of Concentration for this sub-basin is based on the following:
2238        KM          An rainfall areal reduction factor of 1.000
2239        KM
2240        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2241        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2242        KM   .25 .25 .25 .25 .25 .25 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2243        KM
2244        KM          L=   1.923 miles, S=  185 feet/mile, Kb= .04
2245        KM
2246        BA   0.610
2247        LG    0.28    0.26    5.10    0.27    9.00
2248        UC   0.388   0.289
2249        UA       0       5      16      30      65      77      84      90      94      97
2250        UA     100
            *

2251        KK    S701
2252        KM   Sub-Basin   S701
2253        KM
2254        KM      The Clark Unit Hydrograph is used for this basin.
2255        KM          The Urban time-area relation is used for this basin.
2256        KM
2257        KM      Time of Concentration for this sub-basin is based on the following:
2258        KM          An rainfall areal reduction factor of 1.000
2259        KM
2260        KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2261        KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2262        KM   .26 .26 .26 .26 .26 .25 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
2263        KM
2264        KM          L=   2.821 miles, S=  136 feet/mile, Kb= .06
```

```
2265          KM
2266          BA   0.720
2267          LG    0.28    0.29    5.60    0.22   18.00
2268          UC   0.708   0.698
2269          UA       0       5      16      30      65      77      84      90      94      97
2270          UA     100
              *

2271          KK   S701O
2272          KM   VOLUME RETAINED WITHIN SUB-BASIN S701
2273          DT  DIV701     0.4
2274          DI       0    3000
2275          DQ       0    3000
              *

2276          KK    S702
2277          KM   Sub-Basin   S702
2278          KM
2279          KM      The Clark Unit Hydrograph is used for this basin.
2280          KM          The Urban time-area relation is used for this basin.
2281          KM
2282          KM      Time of Concentration for this sub-basin is based on the following:
2283          KM          An rainfall areal reduction factor of 1.000
2284          KM
2285          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2286          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2287          KM   .26 .26 .26 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
2288          KM
2289          KM          L=   1.395 miles, S=  215 feet/mile, Kb= .05
2290          KM
2291          BA   0.257
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2292          LG    0.23    0.27    5.10    0.26   24.00
2293          UC   0.350   0.327
2294          UA       0       5      16      30      65      77      84      90      94      97
2295          UA     100
              *

2296          KK   S702O
2297          KM   VOLUME RETAINED WITHIN SUB-BASIN S702
2298          DT  DIV702    16.5
2299          DI       0    3000
2300          DQ       0    3000
              *

2301          KK    S703
2302          KM   Sub-Basin   S703
2303          KM
2304          KM      The Clark Unit Hydrograph is used for this basin.
2305          KM          The Natural time-area relation is used for this basin.
2306          KM
2307          KM      Time of Concentration for this sub-basin is based on the following:
2308          KM          An rainfall areal reduction factor of 1.000
2309          KM
2310          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2311          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2312          KM   .24 .24 .24 .24 .24 .23 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00
2313          KM
2314          KM          L=   1.126 miles, S=  204 feet/mile, Kb= .09
2315          KM
2316          BA   0.257
2317          LG    0.19    0.32    4.90    0.30    1.00
2318          UC   0.446   0.360
2319          UA       0       3       5       8      12      20      43      75      90      96
2320          UA     100
              *

2321          KK   S703O
2322          KM   VOLUME RETAINED WITHIN SUB-BASIN S703
2323          DT  DIV703     5.1
2324          DI       0    3000
2325          DQ       0    3000
              *

2326          KK    S704
2327          KM   Sub-Basin   S704
2328          KM
2329          KM      The Clark Unit Hydrograph is used for this basin.
```

```
2330          KM         The Urban time-area relation is used for this basin.
2331          KM
2332          KM     Time of Concentration for this sub-basin is based on the following:
2333          KM         An rainfall areal reduction factor of 1.000
2334          KM
2335          KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2336          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2337          KM  .25 .25 .25 .25 .25 .24 .01 .01 .01 .01 .01 .01 .00 .00 .00 .00 .00 .00
2338          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2339          KM         L=   1.266 miles, S=  300 feet/mile, Kb= .07
2340          KM
2341          BA   0.408
2342          LG    0.28    0.29    4.90    0.29   14.00
2343          UC   0.363   0.241
2344          UA       0       5      16      30      65      77      84      90      94      97
2345          UA     100
              *

2346          KK  704705
2347          KM       Normal depth route from S704 to C705
2348          KM       Source: Field reconnaissance
2349          RS       7    FLOW      -1
2350          RC    .035    .045    .025    7534   .0186
2351          RX     100     123   159.5   162.8   186.8   205.3   206.3   207.3
2352          RY   108.5   102.7   101.3   100.2     100   108.3   109.3   110.3
              *

2353          KK    S705
2354          KM   Sub-Basin   S705
2355          KM
2356          KM     The Clark Unit Hydrograph is used for this basin.
2357          KM         The Urban time-area relation is used for this basin.
2358          KM
2359          KM     Time of Concentration for this sub-basin is based on the following:
2360          KM         An rainfall areal reduction factor of 1.000
2361          KM
2362          KM      EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2363          KM    5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2364          KM  .28 .28 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2365          KM
2366          KM         L=   2.145 miles, S=  253 feet/mile, Kb= .04
2367          KM
2368          BA   0.754
2369          LG    0.25    0.21    6.40    0.16   33.00
2370          UC   0.358   0.256
2371          UA       0       5      16      30      65      77      84      90      94      97
2372          UA     100
              *

2373          KK    C705
2374          KM       Combine routed hydrograph 704705 w/runoff from S705
2375          HC       2
              *

2376          KK   C705O
2377          KM       Storage routing at crossing structure no. 63
2378          KM       Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2379          KM       Cooper Aerial Photography extended from Agua Fria FDS
2380          RS       1    STOR       0
2381          SQ       0     200     400     600     800    1000    1200    1400    1420    1800
2382          SQ    2000
2383          SE  1338.2 1342.26 1344.68 1347.93 1352.52 1359.03 1367.08 1376.59 1377.62    1400
2384          SE  1413.9
2385          SV       0    0.08    0.46    1.29    2.71    4.72    7.32   10.63   14.77   19.75
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2386          SV   25.57   32.07   39.09   46.63   54.70   63.28   72.40   82.03   92.19  102.87
2387          SE  1338.2    1339    1340    1341    1342    1343    1344    1345    1346    1347
2388          SE    1348    1349    1350    1351    1352    1353    1354    1355    1356    1357
              *

2389          KK  705OAF
2390          KM       Normal depth route from C70SO to C705AF
2391          KM       Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2392          RS       5    FLOW      -1
```

```
2393          RC    .045    .045    .045 2253.82   .0082
2394          RX     100  147.63  203.16  349.46  505.89  666.35  920.07 1239.80
2395          RY    1324 1324.30    1324 1321.84 1321.64 1322.54    1324    1326
              *

2396          KK  S705AF
2397          KM   Sub-Basin S705AF
2398          KM
2399          KM      The Clark Unit Hydrograph is used for this basin.
2400          KM          The Natural time-area relation is used for this basin.
2401          KM
2402          KM      Time of Concentration for this sub-basin is based on the following:
2403          KM          An rainfall areal reduction factor of 1.000
2404          KM
2405          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2406          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2407          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2408          KM
2409          KM          L=   0.933 miles, S=   34 feet/mile, Kb= .05
2410          KM
2411          BA   0.183
2412          LG    0.31    0.22   10.10    0.03    0.00
2413          UC   0.488   0.415
2414          UA       0       3       5       8      12      20      43      75      90      96
2415          UA     100
              *

2416          KK  705AFO
2417          KM   VOLUME RETAINED WITHIN SUB-BASIN S705AF
2418          DT  DIV705     5.4
2419          DI       0    3000
2420          DQ       0    3000
              *

2421          KK  C705AF
2422          KM        Combine routed hydrograph 705OAF w/runoff from S705
2423          HC       2
              *

2424          KK  WEST-5
2425          KM        Dummy combine for minor basins, west of the Agua Fria River
2426          HC       5
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2427          KK    S706
2428          KM   Sub-Basin   S706
2429          KM
2430          KM      The Clark Unit Hydrograph is used for this basin.
2431          KM          The Urban time-area relation is used for this basin.
2432          KM
2433          KM      Time of Concentration for this sub-basin is based on the following:
2434          KM          An rainfall areal reduction factor of 1.000
2435          KM
2436          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2437          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2438          KM   .27 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2439          KM
2440          KM          L=   2.022 miles, S=  185 feet/mile, Kb= .03
2441          KM
2442          BA   0.713
2443          LG    0.26    0.25    5.70    0.21   37.00
2444          UC   0.329   0.230
2445          UA       0       5      16      30      65      77      84      90      94      97
2446          UA     100
              *

2447          KK   S706O
2448          KM   VOLUME RETAINED WITHIN SUB-BASIN S706
2449          DT  DIV706    50.4
2450          DI       0    3000
2451          DQ       0    3000
              *

2452          KK    S707
2453          KM   Sub-Basin   S707
2454          KM
2455          KM      The Clark Unit Hydrograph is used for this basin.
```

```
2456          KM          The Urban time-area relation is used for this basin.
2457          KM
2458          KM      Time of Concentration for this sub-basin is based on the following:
2459          KM          An rainfall areal reduction factor of 1.000
2460          KM
2461          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2462          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2463          KM   .28 .28 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2464          KM
2465          KM          L=   2.256 miles, S=  217 feet/mile, Kb= .03
2466          KM
2467          BA   0.638
2468          LG    0.21    0.23    6.20    0.17   51.00
2469          UC   0.329   0.267
2470          UA       0       5      16      30      65      77      84      90      94      97
2471          UA     100
              *
1                                          HEC-1 INPUT                                          PAGE 57

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


2472          KK   S707O
2473          KM   VOLUME RETAINED WITHIN SUB-BASIN S707
2474          DT  DIV707    52.4
2475          DI       0    3000
2476          DQ       0    3000
              *

2477          KK    S728
2478          KM   Sub-Basin   S728
2479          KM
2480          KM      The Clark Unit Hydrograph is used for this basin.
2481          KM          The Urban time-area relation is used for this basin.
2482          KM
2483          KM      Time of Concentration for this sub-basin is based on the following:
2484          KM          An rainfall areal reduction factor of 1.000
2485          KM
2486          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2487          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2488          KM   .28 .27 .27 .27 .27 .27 .03 .03 .03 .03 .03 .03 .02 .02 .02 .02 .02 .02
2489          KM
2490          KM          L=   1.550 miles, S=   77 feet/mile, Kb= .04
2491          KM
2492          BA   0.276
2493          LG    0.21    0.30    5.20    0.22   46.00
2494          UC   0.442   0.442
2495          UA       0       5      16      30      65      77      84      90      94      97
2496          UA     100
              *

2497          KK   S728O
2498          KM   VOLUME RETAINED WITHIN SUB-BASIN S728
2499          DT  DIV728    17.4
2500          DI       0    3000
2501          DQ       0    3000
              *

2502          KK    WEST
2503          KM       Dummy combine for all operations in the stack, west of the Agua Fria R.
2504          HC       5
              *

2505          KK    S708
2506          KM   Sub-Basin   S708
2507          KM
2508          KM      The Clark Unit Hydrograph is used for this basin.
2509          KM          The Urban time-area relation is used for this basin.
2510          KM
2511          KM      Time of Concentration for this sub-basin is based on the following:
2512          KM          An rainfall areal reduction factor of 1.000
2513          KM
2514          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2515          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2516          KM   .29 .29 .28 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2517          KM
1                                          HEC-1 INPUT                                          PAGE 58

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2518          KM          L=   1.594 miles, S=  194 feet/mile, Kb= .04
```

```
2519          KM
2520          BA   0.706
2521          LG    0.29    0.16    9.70    0.05    7.00
2522          UC   0.329   0.191
2523          UA       0       5      16      30      65      77      84      90      94      97
2524          UA     100
              *

2525          KK   S708O
2526          KM   VOLUME RETAINED WITHIN SUB-BASIN S708
2527          DT  DIV708    42.4
2528          DI       0    3000
2529          DQ       0    3000
              *

2530          KK    S709
2531          KM   Sub-Basin   S709
2532          KM
2533          KM      The Clark Unit Hydrograph is used for this basin.
2534          KM          The Urban time-area relation is used for this basin.
2535          KM
2536          KM      Time of Concentration for this sub-basin is based on the following:
2537          KM          An rainfall areal reduction factor of 1.000
2538          KM
2539          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2540          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2541          KM   .29 .29 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
2542          KM
2543          KM          L=   1.417 miles, S=  155 feet/mile, Kb= .05
2544          KM
2545          BA   0.441
2546          LG    0.29    0.13   11.20    0.02    9.00
2547          UC   0.371   0.259
2548          UA       0       5      16      30      65      77      84      90      94      97
2549          UA     100
              *

2550          KK   S709O
2551          KM   VOLUME RETAINED WITHIN SUB-BASIN S709
2552          DT  DIV709    21.6
2553          DI       0    3000
2554          DQ       0    3000
              *

2555          KK   C709O
2556          KM        Storage routing at crossing structure no. (South of 95)
2557          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2558          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2559          KM        Detour, Jan 4, 1985
2560          RS       1    STOR       0
2561          SQ       0     120     240     360     480     600     720     840     903    1080
2562          SQ    1200
2563          SE    1496 1500.80 1505.20 1512.68 1523.15 1525.11 1525.18 1525.23 1525.26 1525.33
2564          SE  1525.4
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2565          SV     0.0    1.59    4.55    8.36   13.04   20.12   29.31   42.75   51.34   63.40
2566          SV   78.92   97.91
2567          SE    1496    1500    1504    1508    1512    1516    1520    1524    1528    1532
2568          SE    1536    1540
              *

2569          KK  709710
2570          KM        Normal depth route from S709 to C710
2571          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2572          RS       3    FLOW      -1
2573          RC     .05    .035     .05    2683   .0261
2574          RX     100     160     200     220     255     265     280     305
2575          RY    1448    1444    1440    1436    1436    1440    1444    1448
              *

2576          KK    S710
2577          KM   Sub-Basin   S710
2578          KM
2579          KM      The Clark Unit Hydrograph is used for this basin.
2580          KM          The Urban time-area relation is used for this basin.
2581          KM
2582          KM      Time of Concentration for this sub-basin is based on the following:
2583          KM          An rainfall areal reduction factor of 1.000
```

```
2584          KM
2585          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2586          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2587          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2588          KM
2589          KM          L=   0.633 miles, S=  198 feet/mile, Kb= .03
2590          KM
2591          BA   0.112
2592          LG    0.23    0.16   10.10    0.04   13.00
2593          UC   0.179   0.133
2594          UA       0       5      16      30      65      77      84      90      94      97
2595          UA     100
              *

2596          KK   S710O
2597          KM   VOLUME RETAINED WITHIN SUB-BASIN S710
2598          DT  DIV710     4.7
2599          DI       0    3000
2600          DQ       0    3000
              *

2601          KK   C710I
2602          KM        Combine routed hydrograph 709710 w/runoff from S710
2603          HC       2
              *

2604          KK   C710O
2605          KM        Storage routing at crossing structure no. 58
2606          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2607          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2608          KM        Detour, Jan 4, 1985
2609          RS       1    STOR       0
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2610          SQ       0     120     240     360     480     600     720     840     960    1058
2611          SQ    1200
2612          SE  1424.2 1428.52 1431.70 1436.37 1442.23 1442.33 1442.39 1442.45 1442.50 1442.54
2613          SE  1442.6
2614          SV     0.0    1.08    3.46    7.13   13.17   22.51
2615          SE    1424    1428    1432    1436    1440    1444          *
              *

2616          KK    S711
2617          KM   Sub-Basin   S711
2618          KM
2619          KM      The Clark Unit Hydrograph is used for this basin.
2620          KM          The Urban time-area relation is used for this basin.
2621          KM
2622          KM      Time of Concentration for this sub-basin is based on the following:
2623          KM          An rainfall areal reduction factor of 1.000
2624          KM
2625          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2626          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2627          KM   .29 .29 .29 .29 .29 .29 .05 .05 .05 .05 .05 .04 .03 .03 .03 .03 .03 .03
2628          KM
2629          KM          L=   0.520 miles, S=  154 feet/mile, Kb= .03
2630          KM
2631          BA   0.159
2632          LG    0.28    0.10   11.20    0.03   22.00
2633          UC   0.171   0.088
2634          UA       0       5      16      30      65      77      84      90      94      97
2635          UA     100
              *

2636          KK   S711O
2637          KM   VOLUME RETAINED WITHIN SUB-BASIN S711
2638          DT  DIV711    10.5
2639          DI       0    3000
2640          DQ       0    3000
              *

2641          KK   C711O
2642          KM        Storage routing at crossing structure no. 71
2643          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2644          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2645          KM        Detour, Jan 4, 1985
2646          RS       1    STOR       0
2647          SQ       0      60     120     180     240     300     360     420     480     483
2648          SQ     600
```

```
2649          SE  1496.1 1499.98 1504.58 1512.31 1524.39 1525.07 1525.12 1525.15 1525.19 1525.19
2650          SE  1525.2
2651          SV     0.0     0.20     0.59     3.79     7.98    16.27    27.64    42.75    63.25
2652          SE  1496.1     1500     1504     1508     1512     1516     1520     1524     1528
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2653          KK  711712
2654          KM        Normal depth route from S711 to C712
2655          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2656          RS       3    FLOW      -1
2657          RC     .05    .035     .05    1586   .0441
2658          RX     100     135     190     215     250     285     335     395
2659          RY    1488    1484    1480    1476    1476    1480    1484    1488
              *

2660          KK    S712
2661          KM   Sub-Basin   S712
2662          KM
2663          KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2664          KM
2665          KM      The Clark Unit Hydrograph is used for this basin.
2666          KM          The Urban time-area relation is used for this basin.
2667          KM
2668          KM      Time of Concentration for this sub-basin is based on the following:
2669          KM          An rainfall areal reduction factor of 1.000
2670          KM
2671          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2672          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2673          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2674          KM
2675          KM          L=   0.312 miles, S=  271 feet/mile, Kb= .03
2676          KM
2677          BA   0.068
2678          LG    0.27    0.13   10.10    0.04   19.00
2679          UC   0.167   0.092
2680          UA       0       5      16      30      65      77      84      90      94      97
2681          UA     100
              *      *

2682          KK   S712O
2683          KM   VOLUME RETAINED WITHIN SUB-BASIN S712
2684          DT  DIV712     4.2
2685          DI       0    3000
2686          DQ       0    3000
              *

2687          KK   C712I
2688          KM        Combine routed hydrograph 711712 w/runoff from S712
2689          HC       2
              *

2690          KK   C712O
2691          KM        Storage routing at crossing structure no. 60
2692          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2693          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2694          KM        Detour, Jan 4, 1985
2695          RS       1    STOR       0
2696          SQ       0      90     180     270     360     450     540     630     658     810
2697          SQ     900
2698          SE    1432 1435.56 1437.81 1440.49 1444.18 1449.19 1450.09 1450.14 1450.16 1450.24
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2699          SE  1450.2
2700          SV     0.0     0.14     0.36     0.65     1.02     1.56     2.43     3.61     5.10
2701          SE    1432     1433     1434     1435     1436     1437     1438     1439     1440
              *

2702          KK  712714
2703          KM        Normal depth route from C712 to C714
2704          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2705          RS       5    FLOW      -1
2706          RC     .05    .035     .05    2032   .0172
2707          RX     100     325     355     370     415     435     450     515
2708          RY    1416    1412    1408    1404    1404    1408    1412    1408
              *
```

```
2709          KK    S713
2710          KM   Sub-Basin   S713
2711          KM
2712          KM      Tc adjusted to 10 min/0.167 hr with revised R calculation.
2713          KM
2714          KM      The Clark Unit Hydrograph is used for this basin.
2715          KM          The Urban time-area relation is used for this basin.
2716          KM
2717          KM      Time of Concentration for this sub-basin is based on the following:
2718          KM          An rainfall areal reduction factor of 1.000
2719          KM
2720          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2721          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2722          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2723          KM
2724          KM          L=   0.545 miles, S=  220 feet/mile, Kb= .03
2725          KM
2726          BA   0.107
2727          LG    0.20    0.18   10.10    0.03   12.00
2728          UC   0.167   0.111
2729          UA       0       5      16      30      65      77      84      90      94      97
2730          UA     100
              *

2731          KK   S713O
2732          KM   VOLUME RETAINED WITHIN SUB-BASIN S713
2733          DT  DIV713     2.9
2734          DI     . 0    3000
2735          DQ       0    3000
              *

2736          KK   C713O
2737          KM        Storage routing at crossing structure no. 59
2738          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2739          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2740          KM        Detour, Jan 4, 1985
2741          RS       1    STOR       0
2742          SQ       0      60     120     180     240     300     326     420     480     540
2743          SQ     600
2744          SE    1420 1423.17 1425.30 1428.15 1432.22 1437.97 1438.04 1438.12 1438.15 1438.18
2745          SE  1438.2
```



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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2746          SV     0.0     2.35     5.72    10.11    15.52    26.19
2747          SE    1420     1424     1428     1432     1436     1440
              *

2748          KK  713714
2749          KM        Normal depth route from S713 to C714
2750          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2751          RS       1    FLOW      -1
2752          RC     .05     .035      .05      831    .0421
2753          RX     100      260      270      280      305      315      335      490
2754          RY    1416     1416     1412     1408     1408     1412     1416     1420
              *

2755          KK    S714
2756          KM   Sub-Basin   S714
2757          KM
2758          KM      The Clark Unit Hydrograph is used for this basin.
2759          KM          The Urban time-area relation is used for this basin.
2760          KM
2761          KM      Time of Concentration for this sub-basin is based on the following:
2762          KM          An rainfall areal reduction factor of 1.000
2763          KM
2764          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2765          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2766          KM   .28 .28 .28 .28 .27 .27 .03 .03 .03 .03 .03 .03 .01 .01 .01 .01 .01 .01
2767          KM
2768          KM          L=   0.428 miles, S=  129 feet/mile, Kb= .04
2769          KM
2770          BA   0.060
2771          LG    0.35    0.29    8.40    0.06    0.00
2772          UC   0.196   0.153
2773          UA       0       5      16      30      65      77      84      90      94      97
2774          UA     100
              *
```

```
2775          KK    C714
2776          KM        Combine routed hydrographs 712714 and 713714 w/runoff from S714
2777          HC       3
              *

2778          KK    S715
2779          KM   Sub-Basin   S715
2780          KM
2781          KM      The Clark Unit Hydrograph is used for this basin.
2782          KM          The Urban time-area relation is used for this basin.
2783          KM
2784          KM      Time of Concentration for this sub-basin is based on the following:
2785          KM          An rainfall areal reduction factor of 1.000
2786          KM
2787          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2788          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2789          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2790          KM
2791          KM          L=   0.959 miles, S=   63 feet/mile, Kb= .05
2792          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2793          BA   0.220
2794          LG    0.31    0.17   11.20    0.02    4.00
2795          UC   0.404   0.310
2796          UA       0       5      16      30      65      77      84      90      94      97
2797          UA     100
              *

2798          KK   S715O
2799          KM   VOLUME RETAINED WITHIN SUB-BASIN S715
2800          DT  DIV715     4.1
2801          DI       0    3000
2802          DQ       0    3000
              *

2803          KK    S716
2804          KM   Sub-Basin   S716
2805          KM
2806          KM      The Clark Unit Hydrograph is used for this basin.
2807          KM          The Urban time-area relation is used for this basin.
2808          KM
2809          KM      Time of Concentration for this sub-basin is based on the following:
2810          KM          An rainfall areal reduction factor of 1.000
2811          KM
2812          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2813          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2814          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2815          KM
2816          KM          L=   2.353 miles, S=   87 feet/mile, Kb= .03
2817          KM
2818          BA   1.128
2819          LG    0.26    0.14   10.10    0.04   23.00
2820          UC   0.442   0.277
2821          UA       0       5      16      30      65      77      84      90      94      97
2822          UA     100
              *

2823          KK   S716O
2824          KM   VOLUME RETAINED WITHIN SUB-BASIN S716
2825          DT  DIV716    77.8
2826          DI       0    3000
2827          DQ       0    3000
              *

2828          KK   C716O
2829          KM        Storage routing at crossing structure no. 74
2830          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2831          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2832          KM        Detour, Jan 4, 1985
2833          RS       1    STOR       0
2834          SQ       0     230     460     690     920    1150    1380    1610    1625    2070
2835          SQ    2300
2836          SE  1504.9 1509.94 1516.13 1526.53 1544.42 1592.19 1729.99 2074.29 2108.01 4241.67
2837          SE  6746.9
2838          SV       0    0.40    5.42   17.50   37.71   68.23  111.87
2839          SE  1504.9    1508    1512    1516    1520    1524    1528
              *
```

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2840          KK  716717
2841          KM        Normal depth route from C716O to C717
2842          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2843          RS       5    FLOW      -1
2844          RC     .05    .035     .05    4232   .0177
2845          RX     100     115     150     165     195     285     370     425
2846          RY    1504    1500    1496    1492    1492    1496    1500    1504
              *

2847          KK    S717
2848          KM   Sub-Basin   S717
2849          KM
2850          KM      The Clark Unit Hydrograph is used for this basin.
2851          KM          The Natural time-area relation is used for this basin.
2852          KM
2853          KM      Time of Concentration for this sub-basin is based on the following:
2854          KM          An rainfall areal reduction factor of 1.000
2855          KM
2856          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2857          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2858          KM   .29 .29 .29 .29 .29 .29 .05 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2859          KM
2860          KM          L=   0.727 miles, S=  131 feet/mile, Kb= .05
2861          KM
2862          BA   0.286
2863          LG    0.26    0.15   11.20    0.02   10.00
2864          UC   0.279   0.142
2865          UA       0       3       5       8      12      20      43      75      90      96
2866          UA     100
              *

2867          KK   S717O
2868          KM   VOLUME RETAINED WITHIN SUB-BASIN S717
2869          DT  DIV717     8.1
2870          DI       0    3000
2871          DQ       0    3000
              *

2872          KK    C717
2873          KM        Combine routed hydrograph 716717 w/runoff from S717
2874          HC       2
              *

2875          KK  717718
2876          KM        Normal depth route from C717 to C718
2877          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
2878          RS      16    FLOW      -1
2879          RC     .05    .045     .05    7146   .0105
2880          RX     100     235     275     325     420     455     465     530
2881          RY    1364    1360    1356    1352    1352    1356    1360    1380
2882          RL                    0.03  1352.0
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2883          KK    S718
2884          KM   Sub-Basin   S718
2885          KM
2886          KM      The Clark Unit Hydrograph is used for this basin.
2887          KM          The Natural time-area relation is used for this basin.
2888          KM
2889          KM      Time of Concentration for this sub-basin is based on the following:
2890          KM          An rainfall areal reduction factor of 1.000
2891          KM
2892          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2893          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2894          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2895          KM
2896          KM          L=   2.103 miles, S=   45 feet/mile, Kb= .05
2897          KM
2898          BA   0.442
2899          LG    0.27    0.15   11.20    0.02    6.00
2900          UC   0.754   0.781
2901          UA       0       3       5       8      12      20      43      75      90      96
2902          UA     100
```

```
                 *
2903             KK   S718O
2904             KM   VOLUME RETAINED WITHIN SUB-BASIN S718
2905             DT  DIV718    13.2
2906             DI       0    3000
2907             DQ       0    3000
                 *

2908             KK    C718
2909             KM        Combine routed hydrograph 717718 w/runoff from S718
2910             HC       2
                 *

2911             KK    S719
2912             KM   Sub-Basin   S719
2913             KM
2914             KM      The Clark Unit Hydrograph is used for this basin.
2915             KM          The Urban time-area relation is used for this basin.
2916             KM
2917             KM      Time of Concentration for this sub-basin is based on the following:
2918             KM          An rainfall areal reduction factor of 1.000
2919             KM
2920             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2921             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2922             KM   .30 .30 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
2923             KM
2924             KM          L=   1.221 miles, S=   82 feet/mile, Kb= .04
2925             KM    .
2926             BA   0.154
2927             LG    0.31    0.07   12.40    0.01   12.00
2928             UC   0.375   0.424
2929             UA       0       5      16      30      65      77      84      90      94      97
2930             UA     100
                 *
1                                                HEC-1 INPUT                                                PAGE 67

LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2931             KK   S719O
2932             KM   VOLUME RETAINED WITHIN SUB-BASIN S719
2933             DT  DIV719     8.6
2934             DI       0    3000
2935             DQ       0    3000
                 *

2936             KK  EAST-1
2937             KM        Dummy combine of minor subbasins east of the Agua Fria River
2938             HC       6
                 *

2939             KK    S720
2940             KM   Sub-Basin   S720
2941             KM
2942             KM      The Clark Unit Hydrograph is used for this basin.
2943             KM          The Urban time-area relation is used for this basin.
2944             KM
2945             KM      Time of Concentration for this sub-basin is based on the following:
2946             KM          An rainfall areal reduction factor of 1.000
2947             KM
2948             KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2949             KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2950             KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
2951             KM
2952             KM          L=   1.516 miles, S=   86 feet/mile, Kb= .03
2953             KM
2954             BA   0.370
2955             LG    0.28    0.11   11.20    0.03   19.00
2956             UC   0.354   0.287
2957             UA       0       5      16      30      65      77      84      90      94      97
2958             UA     100
                 *

2959             KK   S720O
2960             KM   VOLUME RETAINED WITHIN SUB-BASIN S720
2961             DT  DIV720    23.2
2962             DI       0    3000
2963             DQ       0    3000
                 *
```

```
2964          KK    S721
2965          KM   Sub-Basin   S721
2966          KM
2967          KM      The Clark Unit Hydrograph is used for this basin.
2968          KM          The Urban time-area relation is used for this basin.
2969          KM
2970          KM      Time of Concentration for this sub-basin is based on the following:
2971          KM          An rainfall areal reduction factor of 1.000
2972          KM
2973          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
2974          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
2975          KM   .29 .29 .29 .28 .28 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
2976          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

2977          KM          L=   0.832 miles, S=  114 feet/mile, Kb= .03
2978          KM
2979          BA   0.335
2980          LG    0.21    0.15    7.30    0.11   50.00
2981          UC   0.242   0.123
2982          UA       0       5      16      30      65      77      84      90      94      97
2983          UA     100
              *

2984          KK   S7210
2985          KM   VOLUME RETAINED WITHIN SUB-BASIN S721
2986          DT  DIV721    30.1
2987          DI       0    3000
2988          DQ       0    3000
              *

2989          KK   C7210
2990          KM        Storage routing at crossing structure no. 75
2991          KM        Source: CAP Overchutes Agua Fria FDS, FCD 90-09 in addition to the
2992          KM        CAP Regulatory Storage Division - Waddell Canal AZ Highway 74
2993          KM        Detour, Jan 4, 1985
2994          RS       1    STOR       0
2995          SQ       0     120     240     360     480     600     720     840     866    1080
2996          SQ    1200
2997          SE    1490 1494.74 1499.14 1506.62 1517.09 1534.17 1572.06 1662.33 1693.69 2254.60
2998          SE  2968.5
2999          SV       0    1.83    7.58   17.18   30.63   47.92   69.05   94.03  122.85  155.51
3000          SV  192.02
3001          SE    1490    1493    1496    1499    1502    1505    1508    1511    1514    1517
3002          SE    1520
              *

3003          KK  721722
3004          KM        Normal depth route from C7210 to C722
3005          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
3006          RS      18    FLOW      -1
3007          RC     .05    .035     .05    8812   .0170
3008          RX     100     125     175     200     235     250     270     595
3009          RY    1420    1416    1412    1408    1408    1412    1420    1424
3010          RL                    0.03  1408.0
              *

3011          KK    S722
3012          KM   Sub-Basin   S722
3013          KM
3014          KM      The Clark Unit Hydrograph is used for this basin.
3015          KM          The Urban time-area relation is used for this basin.
3016          KM
3017          KM      Time of Concentration for this sub-basin is based on the following:
3018          KM          An rainfall areal reduction factor of 1.000
3019          KM
3020          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3021          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3022          KM   .29 .29 .29 .29 .29 .28 .04 .04 .04 .04 .04 .04 .02 .02 .02 .02 .02 .02
3023          KM
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3024          KM          L=   2.334 miles, S=   79 feet/mile, Kb= .03
3025          KM
3026          BA   0.955
3027          LG    0.26    0.16    9.70    0.05   23.00
3028          UC   0.454   0.312
```

```
3029          UA       0       5      16      30      65      77      84      90      94      97
3030          UA     100
              *

3031          KK   S7220
3032          KM   VOLUME RETAINED WITHIN SUB-BASIN S722
3033          DT  DIV722    63.0
3034          DI       0    3000
3035          DQ       0    3000
              *

3036          KK    C722
3037          KM        Combine routed hydrograph 721722 w/runoff from S722
3038          HC       2
              *

3039          KK    S723
3040          KM   Sub-Basin   S723
3041          KM
3042          KM      The Clark Unit Hydrograph is used for this basin.
3043          KM          The Urban time-area relation is used for this basin.
3044          KM
3045          KM      Time of Concentration for this sub-basin is based on the following:
3046          KM          An rainfall areal reduction factor of 1.000
3047          KM
3048          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3049          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3050          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
3051          KM
3052          KM          L=   0.562 miles, S=  178 feet/mile, Kb= .04
3053          KM
3054          BA   0.085
3055          LG    0.22    0.17   10.10    0.03   28.00
3056          UC   0.200   0.159
3057          UA       0       5      16      30      65      77      84      90      94      97
3058          UA     100
              *

3059          KK   S7230
3060          KM   VOLUME RETAINED WITHIN SUB-BASIN S723
3061          DT  DIV723     4.5
3062          DI       0    3000
3063          DQ       0    3000
              *
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

3064          KK    S724
3065          KM   Sub-Basin   S724
3066          KM
3067          KM      The Clark Unit Hydrograph is used for this basin.
3068          KM          The Urban time-area relation is used for this basin.
3069          KM
3070          KM      Time of Concentration for this sub-basin is based on the following:
3071          KM          An rainfall areal reduction factor of 1.000
3072          KM
3073          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3074          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3075          KM   .30 .30 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
3076          KM
3077          KM          L=   2.319 miles, S=   97 feet/mile, Kb= .03
3078          KM
3079          BA   1.156
3080          LG    0.18    0.11   11.20    0.02   45.00
3081          UC   0.421   0.255
3082          UA       0       5      16      30      65      77      84      90      94      97
3083          UA     100
              *

3084          KK   S7240
3085          KM   VOLUME RETAINED WITHIN SUB-BASIN S724
3086          DT  DIV724   100.4
3087          DI       0    3000
3088          DQ       0    3000
              *

3089          KK    S725
3090          KM   Sub-Basin   S725
3091          KM
```

```
3092          KM      The Clark Unit Hydrograph is used for this basin.
3093          KM          The Urban time-area relation is used for this basin.
3094          KM
3095          KM      Time of Concentration for this sub-basin is based on the following:
3096          KM          An rainfall areal reduction factor of 1.000
3097          KM
3098          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3099          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3100          KM   .29 .29 .29 .29 .29 .29 .04 .04 .04 .04 .04 .04 .03 .03 .03 .03 .03 .03
3101          KM
3102          KM          L=   3.038 miles, S=   71 feet/mile, Kb= .03
3103          KM
3104          BA   1.158
3105          LG    0.18     0.16     8.80     0.06    50.00
3106          UC   0.550    0.426
3107          UA       0        5       16       30       65       77       84       90       94       97
3108          UA     100
              *
1                                                HEC-1 INPUT                                                PAGE 71

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3109          KK   S725O
3110          KM   VOLUME RETAINED WITHIN SUB-BASIN S725
3111          DT  DIV725   106.2
3112          DI       0     3000
3113          DQ       0     3000
              *

3114          KK  EAST-2
3115          KM       Dummy combine of minor subbasins east of the Agua Fria River
3116          HC       5
              *

3117          KK    S726
3118          KM   Sub-Basin   S726
3119          KM
3120          KM      The Clark Unit Hydrograph is used for this basin.
3121          KM          The Urban time-area relation is used for this basin.
3122          KM
3123          KM      Time of Concentration for this sub-basin is based on the following:
3124          KM          An rainfall areal reduction factor of 1.000
3125          KM
3126          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3127          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3128          KM   .27 .27 .27 .26 .26 .26 .02 .02 .02 .02 .02 .02 .01 .01 .01 .01 .01 .01
3129          KM
3130          KM          L=   1.036 miles, S=  295 feet/mile, Kb= .04
3131          KM
3132          BA   0.334
3133          LG    0.27     0.28     5.70     0.21    29.00
3134          UC   0.242    0.147
3135          UA       0        5       16       30       65       77       84       90       94       97
3136          UA     100
              *

3137          KK   S726O
3138          KM   VOLUME RETAINED WITHIN SUB-BASIN S726
3139          DT  DIV726     21.2
3140          DI       0     3000
3141          DQ       0     3000
              *

3142          KK  726727
3143          KM        Normal depth route from C726 to C727
3144          KM        Source: Coe & Van Loo Agua Fria River FPD Study 9/96
3145          RS       9    FLOW      -1
3146          RC     .05    .035     .05    6228    .0185
3147          RX     100     120     145     170     225     240     250     265
3148          RY    1308    1304    1300    1296    1296    1300    1304    1308
              *
1                                                HEC-1 INPUT                                                PAGE 72

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


3149          KK    S727
3150          KM   Sub-Basin   S727
3151          KM
3152          KM      The Clark Unit Hydrograph is used for this basin.
```

```
3153          KM          The Urban time-area relation is used for this basin.
3154          KM
3155          KM      Time of Concentration for this sub-basin is based on the following:
3156          KM          An rainfall areal reduction factor of 1.000
3157          KM
3158          KM       EXCESS RAINFALL VALUES EXCEEDED IN 5-MINUTE INTERVALS
3159          KM     5  10  15  20  25  30  35  40  45  50  55  60  65  70  75  80  85  90
3160          KM   .29 .29 .29 .29 .29 .29 .05 .05 .05 .05 .05 .05 .03 .03 .03 .03 .03 .03
3161          KM
3162          KM          L=   1.815 miles, S=   85 feet/mile, Kb= .04
3163          KM
3164          BA   0.375
3165          LG    0.18    0.16    9.70    0.05   54.00
3166          UC   0.450   0.430
3167          UA       0       5      16      30      65      77      84      90      94      97
3168          UA     100
              *

3169          KK   S727O
3170          KM   VOLUME RETAINED WITHIN SUB-BASIN S727
3171          DT  DIV727    33.4
3172          DI       0    3000
3173          DQ       0    3000
              *

3174          KK    C727
3175          KM        Combine routed hydrograph 726727 w/runoff from S727
3176          HC       2
              *

3177          KK   TOTAL
3178          KM        Dummy combine of all operations
3179          HC       4
              *
3180          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   39        S100
                .
                .
   61           .-------->  DIV100
   59       S100O
                V
                V
   64      100102
                .
                .
   71           .        S101
                .           .
                .           .
   91       C102R............
                .
                .
   94           .        S102
                .           .
                .           .
  116           .           .-------->  DIV102
  114           .       S102O
                .           V
                .           V
  119           .      101102
                .           .
                .           .
  126           .           .        S103
                .           .           .
                .           .           .
  146           .       C102L............
                .           .
                .           .
  149        C102............
                V
                V
  152      102103
                .
                .
  159           .        S104
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                .           .
                .           .
181             .           .-------> DIV104
179             .       S104O
                .           .
                .           .
184         C103R............
                .
                .
187             .        S105
                .           .
                .           .
209             .           .-------> DIV105
207             .       S105O
                .           .
                .           .
212          C103............
                V
                V
215        103104
                .
                .
222             .        S106
                .           .
                .           .
242          C104............
                V
                V
245        104105
                .
                .
252             .        S107
                .           .
                .           .
272         C105L............
                .
                .
275             .        S200
                .           V
                .           V
295             .      200201
                .           .
                .           .
302             .           .        S201
                .           .           .
                .           .           .
322             .        C201............
                .           V
                .           V
325             .      201203
                .           .
                .           .
332             .           .        S202
                .           .           V
                .           .           V
352             .           .      202203
                .           .           .
                .           .           .
359             .           .           .        S203
                .           .           .           .
                .           .           .           .
381             .           .           .           .-------> DIV203
379             .           .           .      S203O
                .           .           .           .
                .           .           .           .
384             .       C203R......................
                .           .
                .           .
387             .           .        S204
                .           .           .
                .           .           .
409             .           .           .-------> DIV204
407             .           .       S204O
                .           .           .
                .           .           .
412             .        C203............
                .           V
                .           V
415             .      203204
                .           .
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422          .           .        S205
             .           .           .
             .           .           .
444          .           .           .-------> DIV205
442          .           .       S205O
             .           .           .
             .           .           .
447          .        C204............
             .           V
             .           V
450          .      204205
             .           .
             .           .
457          .           .        S206
             .           .           .
             .           .           .
479          .           .           .-------> DIV206
477          .           .       S206O
             .           .           .
             .           .           .
482          .       C205L...........
             .           .
             .           .
485          .           .        S207
             .           .           .
             .           .           .
507          .           .           .-------> DIV207
505          .           .       S207O
             .           .           .
             .           .           .
510          .        C205............
             .           V
             .           V
513          .      205206
             .           .
             .           .
520          .           .        S208
             .           .           .
             .           .           .
542          .           .           .-------> DIV208
540          .           .       S208O
             .           .           .
             .           .           .
545          .        C206............
             .           V
             .           V
548          .      206207
             .           .
             .           .
555          .           .        S209
             .           .           .
             .           .           .
575          .       C207R...........
             .           .
             .           .
578          .           .        S210
             .           .           .
             .           .           .
598          .        C207............
             .           V
             .           V
601          .      207105
             .           .
             .           .
608          .           .        S211
             .           .           .
             .           .           .
628          .       C105R...........
             .           .
             .           .
631       C105............
             .
             .
634          .        S300
             .           .
             .           .
656          .           .-------> DIV300
654          .       S300O
             .           .
             .           .
659          .           .        S301
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                .          .          .
                .          .          .
681             .          .          .-------> DIV301
679             .          .      S301O
                .          .          .
                .          .          .
684             .      C300............
                .         V
                .         V
687             .     300301
                .          .
                .          .
694             .          .       S302
                .          .          .
                .          .          .
716             .          .          .-------> DIV302
714             .          .      S302O
                .          .          .
                .          .          .
719             .      C301............
                .         V
                .         V
722             .     301302
                .          .
                .          .
729             .          .       S303
                .          .          .
                .          .          .
749             .      C302............
                .         V
                .         V
752             .     302303
                .          .
                .          .
759             .          .       S304
                .          .          .
                .          .          .
781             .          .          .-------> DIV304
779             .          .      S304O
                .          .          .
                .          .          .
784             .      C303............
                .          .
                .          .
787     WEST-1............
                .
                .
790             .      S400
                .         .
                .         .
812             .         .-------> DIV400
810             .     S400O
                .         V
                .         V
815             .     C400O
                .         V
                .         V
823             .     400401
                .          .
                .          .
830             .          .       S401
                .          .          .
                .          .          .
852             .          .          .-------> DIV401
850             .          .      S401O
                .          .          .
                .          .          .
855             .      C401............
                .         V
                .         V
858             .     401402
                .          .
                .          .
865             .          .       S402
                .          .          .
                .          .          .
887             .          .          .-------> DIV402
885             .          .      S402O
                .          .          .
                .          .          .
890             .      C402............
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                .          V
                .          V
 893            .     402403
                .          .
                .          .
 901            .          .        S403
                .          .          .
                .          .          .
 923            .          .          .-------> DIV403
 921            .          .      S403O
                .          .          .
                .          .          .
 926            .       C403............
                .          V
                .          V
 929            .     403404
                .          .
                .          .
 937            .          .        S404
                .          .          .
                .          .          .
 959            .          .          .-------> DIV404
 957            .          .      S404O
                .          .          .
                .          .          .
 962            .       C404............
                .          .
                .          .
 965      WEST-2............
                .
                .
 968            .       S500
                .          .
                .          .
 990            .          .-------> DIV500
 988            .      S500O
                .          V
                .          V
 993            .     500501
                .          .
                .          .
1000            .          .        S501
                .          .          .
                .          .          .
1022            .          .          .-------> DIV501
1020            .          .      S501O
                .          .          .
                .          .          .
1025            .       C501............
                .          V
                .          V
1028            .     501502
                .          .
                .          .
1036            .          .        S502
                .          .          .
                .          .          .
1058            .          .          .-------> DIV502
1056            .          .      S502O
                .          .          .
                .          .          .
1061            .      C502L............
                .          .
                .          .
1064            .          .        S503
                .          .          .
                .          .          .
1086            .          .          .-------> DIV503
1084            .          .      S503O
                .          .          .
                .          .          .
1089            .      C502I............
                .          V
                .          V
1092            .      C502O
                .          V
                .          V
1100            .     502505
                .          .
                .          .
1108            .          .        S504
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                .          .          .
                .          .          .
1130            .          .          .-------> DIV504
1128            .          .     S504O
                .          .          .
                .          .          .
1133            .     C505L............
                .          .
                .          .
1136            .          .      S505
                .          .          .
                .          .          .
1158            .          .          .-------> DIV505
1156            .          .     S505O
                .          .         V
                .          .         V
1161            .          .     C503O
                .          .         V
                .          .         V
1169            .          .    503505
                .          .          .
                .          .          .
1177            .          .          .       S506
                .          .          .          .
                .          .          .          .
1199            .          .          .          .-------> DIV506
1197            .          .          .      S506O
                .          .          .          V
                .          .          .          V
1202            .          .          .      C504O
                .          .          .          V
                .          .          .          V
1210            .          .          .     504505
                .          .          .          .
                .          .          .          .
1217            .          .          .          .       S507
                .          .          .          .          .
                .          .          .          .          .
1239            .          .          .          .          .-------> DIV507
1237            .          .          .          .      S507O
                .          .          .          .          .
                .          .          .          .          .
1242            .          .     C505R......................
                .          .          .
                .          .          .
1245            .       C505............
                .          V
                .          V
1248            .    505509
                .          .
                .          .
1256            .          .      S508
                .          .          .
                .          .          .
1278            .          .          .-------> DIV508
1276            .          .     S508O
                .          .          .
                .          .          .
1281            .     C509L............
                .          .
                .          .
1284            .          .      S509
                .          .          .
                .          .          .
1306            .          .          .-------> DIV509
1304            .          .     S509O
                .          .         V
                .          .         V
1309            .          .     C506O
                .          .         V
                .          .         V
1317            .          .    506508
                .          .          .
                .          .          .
1324            .          .          .       S510
                .          .          .          .
                .          .          .          .
1346            .          .          .          .-------> DIV510
1344            .          .          .      S510O
                .          .          .          .
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1349          .           .       C508R............
              .           .           .
              .           .           .
1352          .           .           .        S511
              .           .           .           .
              .           .           .           .
1374          .           .           .           .-------> DIV511
1372          .           .           .       S511O
              .           .           .           V
              .           .           .           V
1377          .           .           .       C507O
              .           .           .           V
              .           .           .           V
1385          .           .           .      507508
              .           .           .           .
              .           .           .           .
1393          .           .           .           .        S512
              .           .           .           .           .
              .           .           .           .           .
1415          .           .           .           .           .-------> DIV512
1413          .           .           .           .       S512O
              .           .           .           .           .
              .           .           .           .           .
1418          .           .           .       C508L............
              .           .           .           .
              .           .           .           .
1421          .           .        C508............
              .           .           V
              .           .           V
1424          .           .      508509
              .           .           .
              .           .           .
1432          .           .           .        S513
              .           .           .           .
              .           .           .           .
1454          .           .           .           .-------> DIV513
1452          .           .           .       S513O
              .           .           .           .
              .           .           .           .
1457          .           .       C509R............
              .           .           .
              .           .           .
1460          .        C509............
              .           V
              .           V
1463          .      509510
              .           .
              .           .
1471          .           .        S514
              .           .           .
              .           .           .
1493          .           .           .-------> DIV514
1491          .           .       S514O
              .           .           .
              .           .           .
1496          .        C510............
              .           V
              .           V
1499          .      510511
              .           .
              .           .
1507          .           .        S515
              .           .           .
              .           .           .
1529          .           .           .-------> DIV515
1527          .           .       S515O
              .           .           .
              .           .           .
1532          .        C511............
              .           V
              .           V
1535          .      511512
              .           .
              .           .
1543          .           .        S516
              .           .           .
              .           .           .
1565          .           .           .-------> DIV516
1563          .           .       S516O
              .           .           .
              .           .           .
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1568          .        C512............
              .           .
              .           .
1571     WEST-3............
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              .
1574          .        S600
              .           V
              .           V
1594          .      600601
              .           .
              .           .
1601          .           .        S601
              .           .           .
              .           .           .
1621          .        C601............
              .           V
              .           V
1624          .      601602
              .           .
              .           .
1631          .           .        S603
              .           .           .
              .           .           .
1651          .       C602L............
              .           .
              .           .
1654          .           .        S602
              .           .           .
              .           .           .
1674          .        C602............
              .           V
              .           V
1677          .      602603
              .           .
              .           .
1685          .           .        S606
              .           .           .
              .           .           .
1705          .       C603L............
              .           .
              .           .
1708          .           .        S605
              .           .           .
              .           .           .
1728          .           .           .        S604
              .           .           .           .
              .           .           .           .
1748          .        C603........................
              .           V
              .           V
1751          .      603604
              .           .
              .           .
1759          .           .        S609
              .           .           .
              .           .           .
1781          .           .           .-------> DIV609
1779          .           .      S6090
              .           .           .
              .           .           .
1784          .       C604R............
              .           .
              .           .
1787          .           .        S607
              .           .           .
              .           .           .
1809          .           .           .-------> DIV607
1807          .           .      S6070
              .           .           .
              .           .           .
1812          .        C604............
              .           V
              .           V
1815          .      604605
              .           .
              .           .
1822          .           .        S608
              .           .           .
              .           .           .
1844          .           .           .-------> DIV608
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1842          .           .       S608O
              .           .           .
              .           .           .
1847          .        C605............
              .           V
              .           V
1850          .      605606
              .           .
              .           .
1858          .           .        S610
              .           .           .
              .           .           .
1878          .       C606L...........
              .           .
              .           .
1881          .           .        S612
              .           .           .
              .           .           .
1901          .        C606............
              .           V
              .           V
1904          .      606608
              .           .
              .           .
1912          .           .        S611
              .           .           V
              .           .           V
1932          .           .      607608
              .           .           .
              .           .           .
1939          .           .           .        S613
              .           .           .           .
              .           .           .           .
1959          .        C608........................
              .           V
              .           V
1962          .      608609
              .           .
              .           .
1970          .           .        S614
              .           .           .
              .           .           .
1990          .        C609............
              .           V
              .           V
1993          .      609611
              .           .
              .           .
2001          .           .        S617
              .           .           .
              .           .           .
2021          .       C611R...........
              .           .
              .           .
2024          .           .        S615
              .           .           V
              .           .           V
2044          .           .      610611
              .           .           .
              .           .           .
2051          .           .           .        S616
              .           .           .           .
              .           .           .           .
2073          .           .           .           .-------> DIV616
2071          .           .           .       S616O
              .           .           .           .
              .           .           .           .
2076          .           .       C611L...........
              .           .           .
              .           .           .
2079          .        C611............
              .           V
              .           V
2082          .      611613
              .           .
              .           .
2090          .           .        S618
              .           .           .
              .           .           .
2110          .       C613R...........
              .           .
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2113                S619
                       V
                       V
2133              612613
2140                          S620
2160             C613L............
2163        C613............
                V
                V
2166      613614
2174                S621
2194        C614............
                V
                V
2197      614615
2205                S622
2225        C615............
2228   WEST-4............
2231        S700
2251                S701
2273                        -------> DIV701
2271             S7010
2276                          S702
2298                        -------> DIV702
2296                       S7020
2301                                  S703
2323                                        -------> DIV703
2321                                 S7030
2326                                            S704
                                                   V
                                                   V
2346                                          704705
2353                                                          S705
2373                                            C705............
                                                   V
                                                   V
2376                                           C7050
                                                   V
                                                   V
2389                                          7050AF
2396                                                        S705AF
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2418                                                                  .-------> DIV705
2416                                                          705AFO
2421                                                      C705AF............
2424          WEST-5.............................................
2427                  S706
2449                                .-------> DIV706
2447                  S706O
2452                                        S707
2474                                                .-------> DIV707
2472                                        S707O
2477                                                        S728
2499                                                                .-------> DIV728
2497                                                        S728O
2502      WEST.............................................
2505          S708
2527                  .-------> DIV708
2525          S708O
2530                  S709
2552                                .-------> DIV709
2550                  S709O
                      V
                      V
2555                  C709O
                      V
                      V
2569                  709710
2576                                        S710
2598                                                .-------> DIV710
2596                                        S710O
2601                  C710I............
                      V
                      V
2604                  C710O
2616                                        S711
2638                                                .-------> DIV711
2636                                        S711O
                                            V
                                            V
2641                                        C711O
                                            V
                                            V
2653                                        711712
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2660                                    S712
                                          .
                                          .
2684                                      .-------> DIV712
2682                                    S712O
                                          .
                                          .
2687                                C712I............
                                        V
                                        V
2690                                C712O
                                        V
                                        V
2702                                712714
                                        .
                                        .
2709                                    S713
                                          .
                                          .
2733                                      .-------> DIV713
2731                                    S713O
                                          V
                                          V
2736                                    C713O
                                          V
                                          V
2748                                  713714
                                          .
                                          .
2755                                      .        S714
                                          .          .
                                          .          .
2775                                C714......................
                                        .
                                        .
2778                                    S715
                                          .
                                          .
2800                                      .-------> DIV715
2798                                    S715O
                                          .
                                          .
2803                                      .        S716
                                          .          .
                                          .          .
2825                                      .          .-------> DIV716
2823                                      .       S716O
                                          .          V
                                          .          V
2828                                      .       C716O
                                          .          V
                                          .          V
2840                                      .      716717
                                          .          .
                                          .          .
2847                                      .          .        S717
                                          .          .          .
                                          .          .          .
2869                                      .          .          .-------> DIV717
2867                                      .          .       S717O
                                          .          .          .
                                          .          .          .
2872                                      .        C717............
                                          .          V
                                          .          V
2875                                      .      717718
                                          .          .
                                          .          .
2883                                      .          .        S718
                                          .          .          .
                                          .          .          .
2905                                      .          .          .-------> DIV718
2903                                      .          .       S718O
                                          .          .          .
                                          .          .          .
2908                                      .        C718............
                                          .          .
                                          .          .
2911                                      .          .        S719
                                          .          .          .
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2933          .          .          .          .          .          .          .-------> DIV719
2931          .          .          .          .          .          .      S7190
              .          .          .          .          .          .          .
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2936          .     EAST-1.......................................................
              .          .
              .          .
2939          .          .       S720
              .          .          .
              .          .          .
2961          .          .          .-------> DIV720
2959          .          .      S7200
              .          .          .
              .          .          .
2964          .          .          .       S721
              .          .          .          .
              .          .          .          .
2986          .          .          .          .-------> DIV721
2984          .          .          .      S7210
              .          .          .          V
              .          .          .          V
2989          .          .          .      C7210
              .          .          .          V
              .          .          .          V
3003          .          .          .     721722
              .          .          .          .
              .          .          .          .
3011          .          .          .          .       S722
              .          .          .          .          .
              .          .          .          .          .
3033          .          .          .          .          .-------> DIV722
3031          .          .          .          .      S7220
              .          .          .          .          .
              .          .          .          .          .
3036          .          .          .       C722...........
              .          .          .          .
              .          .          .          .
3039          .          .          .          .       S723
              .          .          .          .          .
              .          .          .          .          .
3061          .          .          .          .          .-------> DIV723
3059          .          .          .          .      S7230
              .          .          .          .          .
              .          .          .          .          .
3064          .          .          .          .          .       S724
              .          .          .          .          .          .
              .          .          .          .          .          .
3086          .          .          .          .          .          .-------> DIV724
3084          .          .          .          .          .      S7240
              .          .          .          .          .          .
              .          .          .          .          .          .
3089          .          .          .          .          .          .       S725
              .          .          .          .          .          .          .
              .          .          .          .          .          .          .
3111          .          .          .          .          .          .          .-------> DIV725
3109          .          .          .          .          .          .      S7250
              .          .          .          .          .          .          .
              .          .          .          .          .          .          .
3114          .          .     EAST-2.............................................
              .          .          .
              .          .          .
3117          .          .          .       S726
              .          .          .          .
              .          .          .          .
3139          .          .          .          .-------> DIV726
3137          .          .          .      S7260
              .          .          .          V
              .          .          .          V
3142          .          .          .     726727
              .          .          .          .
              .          .          .          .
3149          .          .          .          .       S727
              .          .          .          .          .
              .          .          .          .          .
3171          .          .          .          .          .-------> DIV727
3169          .          .          .          .      S7270
              .          .          .          .          .
              .          .          .          .          .
3174          .          .          .       C727...........
              .          .          .          .
              .          .          .          .
```

```
 3177       TOTAL.................................

 (***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*************************************                    *************************************
 *                                   *                    *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *                *   U.S. ARMY CORPS OF ENGINEERS    *
 *              JUN   1998           *                    *   HYDROLOGIC ENGINEERING CENTER   *
 *           VERSION 4.1             *                    *         609 SECOND STREET         *
 *                                   *                    *      DAVIS, CALIFORNIA 95616      *
 *  RUN DATE   09AUG01  TIME  14:42:12  *                 *          (916) 756-1104           *
 *                                   *                    *                                   *
 *************************************                    *************************************
```

N. Peoria Area Drainage Master Plan File:FR100-24.IH1
For Maricopa County FCD 99-45 Original:05-04-00 MCG
By Stantec Consulting, Inc. P82000146 Revised:05-02-01 MMZ

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future condition 100-year, 24-hour storm event. A companion model is also created for the future condition 100-year, 6-hour storm event. Both models 100-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 100-year, 24-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

```
 21 IO          OUTPUT CONTROL VARIABLES
                      IPRNT          5  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN          2  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1   0  STARTING DATE
                      ITIME       0000  STARTING TIME
                         NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      2   0  ENDING DATE
                     NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.03 HOURS
                      TOTAL TIME BASE   33.30 HOURS

          ENGLISH UNITS
               DRAINAGE AREA          SQUARE MILES
               PRECIPITATION DEPTH    INCHES
               LENGTH, ELEVATION      FEET
               FLOW                   CUBIC FEET PER SECOND
               STORAGE VOLUME         ACRE-FEET
               SURFACE AREA           ACRES
               TEMPERATURE            DEGREES FAHRENHEIT

 23 JD          INDEX STORM NO. 1
                       STRM       4.20  PRECIPITATION DEPTH
                       TRDA       0.01  TRANSPOSITION DRAINAGE AREA

 24 PI            PRECIPITATION PATTERN
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34 JD INDEX STORM NO. 2

STRM 4.18 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 3

STRM 4.07 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 4

STRM 3.95 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 5

STRM 3.80 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 6

STRM 3.59 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	522.	12.43	102.	30.	22.	0.57		
+	DIVERSION TO	DIV100	18.	11.03	9.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	522.	12.43	101.	27.	20.	0.57		
+	ROUTED TO	100102	497.	12.70	101.	27.	20.	0.57		
+	HYDROGRAPH AT	S101	717.	12.30	101.	28.	21.	0.63		
+	2 COMBINED AT	C102R	974.	12.37	199.	55.	40.	1.20		
+	HYDROGRAPH AT	S102	470.	12.20	84.	26.	19.	0.45		

+	DIVERSION TO	DIV102	371.	12.00	25.	7.	5.	0.45
+	HYDROGRAPH AT	S102O	470.	12.20	68.	18.	13.	0.45
+	ROUTED TO	101102	430.	12.43	67.	18.	13.	0.45
+	HYDROGRAPH AT	S103	348.	12.47	67.	19.	14.	0.40
+	2 COMBINED AT	C102L	774.	12.43	132.	37.	27.	0.84
+	2 COMBINED AT	C102	1706.	12.43	326.	91.	66.	2.05
+	ROUTED TO	102103	1636.	12.70	326.	91.	66.	2.05
+	HYDROGRAPH AT	S104	1040.	12.37	164.	48.	34.	0.90
+	DIVERSION TO	DIV104	605.	12.07	34.	10.	7.	0.90
+	HYDROGRAPH AT	S104O	1040.	12.37	142.	38.	27.	0.90
+	2 COMBINED AT	C103R	2256.	12.60	461.	127.	92.	2.95
+	HYDROGRAPH AT	S105	507.	12.27	108.	32.	23.	0.59
+	DIVERSION TO	DIV105	424.	12.10	28.	8.	6.	0.59
+	HYDROGRAPH AT	S105O	507.	12.27	88.	23.	17.	0.59
+	2 COMBINED AT	C103	2623.	12.60	543.	149.	107.	3.54
+	ROUTED TO	103104	2576.	12.73	541.	149.	107.	3.54
+	HYDROGRAPH AT	S106	602.	12.17	91.	25.	18.	0.57
+	2 COMBINED AT	C104	2779.	12.73	621.	172.	124.	4.11
+	ROUTED TO	104105	2735.	12.90	620.	172.	124.	4.11
+	HYDROGRAPH AT	S107	918.	12.33	133.	34.	25.	0.94
+	2 COMBINED AT	C105L	3028.	12.87	741.	203.	147.	5.05
+	HYDROGRAPH AT	S200	1067.	12.37	179.	56.	40.	0.96
+	ROUTED TO	200201	1048.	12.40	179.	56.	40.	0.96
+	HYDROGRAPH AT	S201	387.	12.30	65.	20.	15.	0.35
+	2 COMBINED AT	C201	1396.	12.37	243.	75.	55.	1.31
+	ROUTED TO	201203	1373.	12.47	243.	75.	55.	1.31
+	HYDROGRAPH AT	S202	159.	12.20	24.	7.	5.	0.13

+	ROUTED TO 202203	156.	12.27	24.	7.	5.	0.13
+	HYDROGRAPH AT S203	321.	12.23	72.	23.	16.	0.37
+	DIVERSION TO DIV203	309.	12.17	26.	8.	6.	0.37
+	HYDROGRAPH AT S203O	321.	12.23	54.	15.	11.	0.37
+	3 COMBINED AT C203R	1753.	12.43	315.	97.	70.	1.81
+	HYDROGRAPH AT S204	880.	12.47	171.	53.	38.	0.95
+	DIVERSION TO DIV204	10.	2.90	3.	1.	1.	0.95
+	HYDROGRAPH AT S204O	880.	12.47	171.	52.	38.	0.95
+	2 COMBINED AT C203	2592.	12.43	479.	147.	106.	2.76
+	ROUTED TO 203204	2581.	12.47	479.	147.	106.	2.76
+	HYDROGRAPH AT S205	497.	12.27	80.	25.	18.	0.41
+	DIVERSION TO DIV205	374.	12.03	24.	7.	5.	0.41
+	HYDROGRAPH AT S205O	497.	12.27	64.	17.	13.	0.41
+	2 COMBINED AT C204	2923.	12.43	537.	163.	118.	3.17
+	ROUTED TO 204205	2863.	12.57	537.	163.	118.	3.17
+	HYDROGRAPH AT S206	671.	12.30	159.	48.	35.	0.85
+	DIVERSION TO DIV206	671.	12.30	77.	21.	15.	0.85
+	HYDROGRAPH AT S206O	614.	12.50	98.	27.	19.	0.85
+	2 COMBINED AT C205L	3425.	12.53	623.	188.	136.	4.03
+	HYDROGRAPH AT S207	787.	12.53	181.	56.	41.	0.96
+	DIVERSION TO DIV207	210.	12.03	31.	10.	7.	0.96
+	HYDROGRAPH AT S207O	787.	12.53	170.	46.	33.	0.96
+	2 COMBINED AT C205	4167.	12.53	781.	231.	167.	4.98
+	ROUTED TO 205206	3807.	12.93	780.	231.	167.	4.98
+	HYDROGRAPH AT S208	849.	12.70	208.	63.	45.	1.10
+	DIVERSION TO DIV208	36.	11.20	19.	7.	5.	1.10
+	HYDROGRAPH AT S208O	849.	12.70	207.	56.	41.	1.10

+	2 COMBINED AT	C206	4439.	12.90	964.	282.	204.	6.09
+	ROUTED TO	206207	4378.	13.00	964.	282.	204.	6.09
+	HYDROGRAPH AT	S209	704.	12.37	105.	30.	21.	0.65
+	2 COMBINED AT	C207R	4520.	13.00	1055.	308.	223.	6.74
+	HYDROGRAPH AT	S210	561.	12.13	69.	18.	13.	0.48
+	2 COMBINED AT	C207	4546.	13.00	1114.	323.	234.	7.22
+	ROUTED TO	207105	4478.	13.07	1113.	323.	234.	7.22
+	HYDROGRAPH AT	S211	542.	12.17	74.	20.	14.	0.49
+	2 COMBINED AT	C105R	4515.	13.07	1175.	340.	246.	7.70
+	2 COMBINED AT	C105	6906.	13.07	1831.	520.	376.	12.75
+	HYDROGRAPH AT	S300	790.	12.10	115.	35.	25.	0.62
+	DIVERSION TO	DIV300	790.	12.10	59.	16.	12.	0.62
+	HYDROGRAPH AT	S300O	762.	12.17	68.	19.	14.	0.62
+	HYDROGRAPH AT	S301	1413.	12.10	202.	64.	46.	0.99
+	DIVERSION TO	DIV301	932.	11.83	63.	19.	14.	0.99
+	HYDROGRAPH AT	S301O	1413.	12.10	164.	45.	33.	0.99
+	2 COMBINED AT	C300	2047.	12.17	229.	63.	46.	1.61
+	ROUTED TO	300301	1798.	12.30	226.	63.	46.	1.61
+	HYDROGRAPH AT	S302	588.	12.27	84.	26.	18.	0.47
+	DIVERSION TO	DIV302	82.	11.77	13.	4.	3.	0.47
+	HYDROGRAPH AT	S302O	588.	12.27	80.	21.	15.	0.47
+	2 COMBINED AT	C301	2352.	12.27	302.	84.	60.	2.07
+	ROUTED TO	301302	2115.	12.60	298.	84.	60.	2.07
+	HYDROGRAPH AT	S303	733.	12.33	105.	29.	21.	0.71
+	2 COMBINED AT	C302	2587.	12.57	392.	111.	80.	2.78
+	ROUTED TO	302303	2517.	12.70	391.	111.	80.	2.78
+	HYDROGRAPH AT	S304	844.	12.17	124.	33.	24.	0.82

+	DIVERSION TO	DIV304	844.	12.17	65.	17.	12.	0.82
+	HYDROGRAPH AT	S304O	713.	12.33	63.	16.	12.	0.82
+	2 COMBINED AT	C303	2837.	12.67	446.	125.	90.	3.60
+	2 COMBINED AT	WEST-1	8137.	13.00	2197.	624.	452.	16.36
+	HYDROGRAPH AT	S400	1533.	12.23	217.	67.	48.	1.05
+	DIVERSION TO	DIV400	1474.	12.13	99.	28.	20.	1.05
+	HYDROGRAPH AT	S4000	1533.	12.23	141.	39.	28.	1.05
+	ROUTED TO	C4000	442.	12.70	140.	39.	28.	1.05
+	ROUTED TO	400401	439.	13.03	139.	39.	28.	1.05
+	HYDROGRAPH AT	S401	886.	12.10	106.	29.	21.	0.65
+	DIVERSION TO	DIV401	886.	12.10	70.	18.	13.	0.65
+	HYDROGRAPH AT	S401O	658.	12.27	41.	11.	8.	0.65
+	2 COMBINED AT	C401	588.	12.30	176.	49.	35.	1.69
+	ROUTED TO	401402	532.	13.03	175.	49.	35.	1.69
+	HYDROGRAPH AT	S402	1152.	12.07	150.	46.	33.	0.74
+	DIVERSION TO	DIV402	1152.	12.07	96.	26.	19.	0.74
+	HYDROGRAPH AT	S402O	941.	12.20	69.	19.	14.	0.74
+	2 COMBINED AT	C402	836.	12.20	236.	67.	48.	2.43
+	ROUTED TO	402403	581.	13.37	234.	67.	48.	2.43
+	HYDROGRAPH AT	S403	906.	12.07	135.	41.	29.	0.56
+	DIVERSION TO	DIV403	906.	12.07	92.	25.	18.	0.56
+	HYDROGRAPH AT	S403O	595.	12.30	55.	16.	11.	0.56
+	2 COMBINED AT	C403	752.	12.63	282.	81.	58.	2.99
+	ROUTED TO	403404	708.	12.80	281.	81.	58.	2.99
+	HYDROGRAPH AT	S404	394.	12.17	45.	12.	9.	0.26
+	DIVERSION TO	DIV404	181.	11.83	5.	1.	1.	0.26
+	HYDROGRAPH AT	S404O	394.	12.17	41.	10.	8.	0.26

+	2 COMBINED AT	C404	761.	12.80	314.	91.	65.	3.26
+	2 COMBINED AT	WEST-2	8463.	13.00	2424.	692.	501.	19.61
+	HYDROGRAPH AT	S500	1007.	12.23	208.	65.	47.	1.05
+	DIVERSION TO	DIV500	965.	12.17	81.	23.	17.	1.05
+	HYDROGRAPH AT	S500O	1007.	12.23	152.	42.	30.	1.05
+	ROUTED TO	500501	892.	12.50	150.	42.	30.	1.05
+	HYDROGRAPH AT	S501	761.	12.13	109.	33.	24.	0.61
+	DIVERSION TO	DIV501	709.	12.03	45.	13.	9.	0.61
+	HYDROGRAPH AT	S501O	761.	12.13	74.	20.	14.	0.61
+	2 COMBINED AT	C501	1236.	12.47	219.	61.	44.	1.67
+	ROUTED TO	501502	1177.	12.57	214.	59.	43.	1.67
+	HYDROGRAPH AT	S502	500.	12.23	68.	20.	14.	0.40
+	DIVERSION TO	DIV502	440.	12.10	24.	7.	5.	0.40
+	HYDROGRAPH AT	S502O	500.	12.23	50.	13.	10.	0.40
+	2 COMBINED AT	C502L	1395.	12.57	260.	72.	52.	2.07
+	HYDROGRAPH AT	S503	1178.	12.17	187.	57.	41.	0.99
+	DIVERSION TO	DIV503	642.	11.87	42.	13.	9.	0.99
+	HYDROGRAPH AT	S503O	1178.	12.17	164.	44.	32.	0.99
+	2 COMBINED AT	C502I	2089.	12.27	415.	114.	82.	3.07
+	ROUTED TO	C502O	1799.	12.63	415.	114.	82.	3.07
+	ROUTED TO	502505	1762.	12.83	400.	108.	78.	3.07
+	HYDROGRAPH AT	S504	343.	12.17	62.	19.	14.	0.33
+	DIVERSION TO	DIV504	343.	12.17	49.	13.	9.	0.33
+	HYDROGRAPH AT	S504O	144.	12.73	20.	6.	4.	0.33
+	2 COMBINED AT	C505L	1874.	12.83	416.	113.	81.	3.39
+	HYDROGRAPH AT	S505	210.	12.10	23.	7.	5.	0.14
+	DIVERSION TO	DIV505	23.	11.67	3.	1.	1.	0.14

+	HYDROGRAPH AT	S505O	210.	12.10	22.	6.	4.	0.14
+	ROUTED TO	C503O	89.	12.37	22.	6.	4.	0.14
+	ROUTED TO	503505	88.	12.83	21.	5.	4.	0.14
+	HYDROGRAPH AT	S506	225.	12.17	30.	9.	6.	0.15
+	DIVERSION TO	DIV506	199.	12.00	11.	3.	2.	0.15
+	HYDROGRAPH AT	S506O	225.	12.17	21.	6.	4.	0.15
+	ROUTED TO	C504O	82.	12.53	21.	6.	4.	0.15
+	ROUTED TO	504505	80.	13.03	21.	6.	4.	0.15
+	HYDROGRAPH AT	S507	967.	12.10	114.	31.	22.	0.67
+	DIVERSION TO	DIV507	967.	12.10	89.	23.	17.	0.67
+	HYDROGRAPH AT	S507O	444.	12.37	30.	8.	6.	0.67
+	3 COMBINED AT	C505R	487.	12.40	72.	19.	14.	0.96
+	2 COMBINED AT	C505	2106.	12.83	479.	130.	93.	4.35
+	ROUTED TO	505509	2027.	13.13	456.	118.	85.	4.35
+	HYDROGRAPH AT	S508	446.	12.07	54.	16.	11.	0.29
+	DIVERSION TO	DIV508	446.	12.07	39.	10.	8.	0.29
+	HYDROGRAPH AT	S508O	264.	12.27	18.	5.	4.	0.29
+	2 COMBINED AT	C509L	2038.	13.13	469.	123.	88.	4.65
+	HYDROGRAPH AT	S509	281.	12.03	33.	10.	7.	0.17
+	DIVERSION TO	DIV509	182.	11.73	9.	3.	2.	0.17
+	HYDROGRAPH AT	S509O	281.	12.03	28.	7.	5.	0.17
+	ROUTED TO	C506O	88.	12.30	28.	7.	5.	0.17
+	ROUTED TO	506508	87.	12.50	27.	7.	5.	0.17
+	HYDROGRAPH AT	S510	197.	12.07	31.	10.	7.	0.13
+	DIVERSION TO	DIV510	197.	12.07	20.	6.	4.	0.13
+	HYDROGRAPH AT	S510O	137.	12.27	14.	4.	3.	0.13
+	2 COMBINED AT	C508R	219.	12.30	42.	12.	8.	0.30

+	HYDROGRAPH AT	S511	588.	12.07	75.	22.	16.	0.38
+	DIVERSION TO	DIV511	545.	11.97	32.	9.	6.	0.38
+	HYDROGRAPH AT	S511O	588.	12.07	50.	14.	10.	0.38
+	ROUTED TO	C507O	91.	12.70	50.	14.	10.	0.38
+	ROUTED TO	507508	90.	13.00	49.	14.	10.	0.38
+	HYDROGRAPH AT	S512	332.	12.10	56.	17.	12.	0.21
+	DIVERSION TO	DIV512	332.	12.10	36.	10.	7.	0.21
+	HYDROGRAPH AT	S512O	240.	12.30	26.	7.	5.	0.21
+	2 COMBINED AT	C508L	240.	12.30	75.	21.	16.	0.60
+	2 COMBINED AT	C508	458.	12.30	116.	33.	24.	0.90
+	ROUTED TO	508509	380.	12.97	112.	33.	24.	0.90
+	HYDROGRAPH AT	S513	966.	12.13	138.	39.	28.	0.78
+	DIVERSION TO	DIV513	966.	12.13	110.	29.	21.	0.78
+	HYDROGRAPH AT	S513O	401.	12.57	37.	11.	8.	0.78
+	2 COMBINED AT	C509R	523.	12.93	144.	42.	31.	1.67
+	2 COMBINED AT	C509	2421.	13.07	586.	158.	114.	6.32
+	ROUTED TO	509510	2408.	13.17	584.	157.	114.	6.32
+	HYDROGRAPH AT	S514	971.	12.10	150.	44.	32.	0.65
+	DIVERSION TO	DIV514	971.	12.10	97.	26.	19.	0.65
+	HYDROGRAPH AT	S514O	662.	12.33	65.	18.	13.	0.65
+	2 COMBINED AT	C510	2491.	13.13	633.	171.	124.	6.97
+	ROUTED TO	510511	2408.	13.53	627.	171.	124.	6.97
+	HYDROGRAPH AT	S515	1868.	12.07	271.	79.	57.	1.10
+	DIVERSION TO	DIV515	1868.	12.07	160.	43.	31.	1.10
+	HYDROGRAPH AT	S515O	1554.	12.20	132.	36.	26.	1.10
+	2 COMBINED AT	C511	2461.	13.53	723.	199.	145.	8.07
+	ROUTED TO	511512	2394.	13.87	711.	197.	144.	8.07

+	HYDROGRAPH AT S516	725.	12.13	120.	38.	28.	0.54
+	DIVERSION TO DIV516	725.	12.13	71.	20.	14.	0.54
+	HYDROGRAPH AT S516O	602.	12.27	65.	18.	13.	0.54
+	2 COMBINED AT C512	2412.	13.87	754.	212.	154.	8.61
+	2 COMBINED AT WEST-3	8755.	13.00	2978.	852.	619.	28.22
+	HYDROGRAPH AT S600	1804.	12.47	313.	92.	67.	2.02
+	ROUTED TO 600601	1757.	12.50	313.	92.	67.	2.02
+	HYDROGRAPH AT S601	1116.	12.33	195.	62.	45.	0.90
+	2 COMBINED AT C601	2675.	12.43	501.	152.	110.	2.92
+	ROUTED TO 601602	2638.	12.53	501.	152.	110.	2.92
+	HYDROGRAPH AT S603	972.	12.20	141.	44.	32.	0.67
+	2 COMBINED AT C602L	3089.	12.47	636.	195.	140.	3.58
+	HYDROGRAPH AT S602	1738.	12.50	349.	109.	78.	1.88
+	2 COMBINED AT C602	4738.	12.47	968.	298.	215.	5.47
+	ROUTED TO 602603	4573.	12.70	924.	254.	183.	5.47
+	HYDROGRAPH AT S606	651.	12.37	126.	39.	28.	0.66
+	2 COMBINED AT C603L	4958.	12.67	1038.	290.	209.	6.13
+	HYDROGRAPH AT S605	1008.	12.47	204.	63.	46.	1.09
+	HYDROGRAPH AT S604	1851.	12.73	488.	152.	110.	2.66
+	3 COMBINED AT C603	7300.	12.67	1662.	485.	350.	9.87
+	ROUTED TO 603604	7107.	12.80	1613.	438.	316.	9.87
+	HYDROGRAPH AT S609	429.	12.43	96.	29.	21.	0.56
+	DIVERSION TO DIV609	165.	12.03	16.	5.	4.	0.56
+	HYDROGRAPH AT S609O	429.	12.43	90.	24.	17.	0.56
+	2 COMBINED AT C604R	7364.	12.80	1687.	459.	331.	10.43
+	HYDROGRAPH AT S607	720.	12.47	161.	50.	36.	0.82
+	DIVERSION TO DIV607	14.	7.27	10.	3.	2.	0.82

+	HYDROGRAPH AT	S607O	720.	12.47	161.	47.	34.	0.82
+	2 COMBINED AT	C604	7810.	12.80	1829.	500.	360.	11.25
+	ROUTED TO	604605	7768.	12.83	1829.	500.	360.	11.25
+	HYDROGRAPH AT	S608	683.	12.23	105.	32.	23.	0.51
+	DIVERSION TO	DIV608	30.	11.20	13.	5.	3.	0.51
+	HYDROGRAPH AT	S608O	683.	12.23	103.	28.	20.	0.51
+	2 COMBINED AT	C605	7917.	12.83	1917.	524.	378.	11.76
+	ROUTED TO	605606	7802.	12.93	1908.	518.	373.	11.76
+	HYDROGRAPH AT	S610	678.	12.17	126.	39.	28.	0.60
+	2 COMBINED AT	C606L	7965.	12.93	2017.	553.	399.	12.36
+	HYDROGRAPH AT	S612	832.	12.23	171.	52.	37.	0.81
+	2 COMBINED AT	C606	8257.	12.93	2166.	598.	431.	13.17
+	ROUTED TO	606608	8245.	12.93	2163.	596.	429.	13.17
+	HYDROGRAPH AT	S611	699.	12.27	107.	33.	24.	0.57
+	ROUTED TO	607608	662.	12.47	107.	33.	24.	0.57
+	HYDROGRAPH AT	S613	1643.	12.57	348.	108.	78.	1.80
+	3 COMBINED AT	C608	9506.	12.90	2559.	720.	519.	15.53
+	ROUTED TO	608609	9404.	13.00	2547.	711.	512.	15.53
+	HYDROGRAPH AT	S614	900.	12.57	205.	64.	46.	1.08
+	2 COMBINED AT	C609	9888.	13.00	2722.	766.	552.	16.61
+	ROUTED TO	609611	9731.	13.17	2692.	739.	532.	16.61
+	HYDROGRAPH AT	S617	858.	12.13	118.	35.	25.	0.68
+	2 COMBINED AT	C611R	9766.	13.17	2790.	768.	554.	17.29
+	HYDROGRAPH AT	S615	1027.	12.60	252.	82.	59.	1.05
+	ROUTED TO	610611	1001.	12.77	252.	82.	59.	1.05
+	HYDROGRAPH AT	S616	530.	12.33	88.	25.	18.	0.50
+	DIVERSION TO	DIV616	389.	12.10	22.	6.	5.	0.50

+	HYDROGRAPH AT	S616O	530.	12.33	72.	19.	14.	0.50
+	2 COMBINED AT	C611L	1264.	12.70	320.	100.	72.	1.56
+	2 COMBINED AT	C611	10486.	13.13	3064.	855.	617.	18.85
+	ROUTED TO	611613	10439.	13.17	3054.	845.	609.	18.85
+	HYDROGRAPH AT	S618	820.	12.50	167.	49.	35.	0.96
+	2 COMBINED AT	C613R	10719.	13.17	3192.	886.	639.	19.81
+	HYDROGRAPH AT	S619	1040.	12.40	180.	56.	40.	0.83
+	ROUTED TO	612613	1007.	12.57	180.	56.	40.	0.83
+	HYDROGRAPH AT	S620	414.	12.43	94.	29.	21.	0.44
+	2 COMBINED AT	C613L	1389.	12.53	272.	84.	61.	1.27
+	2 COMBINED AT	C613	11221.	13.13	3423.	958.	691.	21.08
+	ROUTED TO	613614	11172.	13.23	3411.	947.	683.	21.08
+	HYDROGRAPH AT	S621	1141.	12.27	128.	33.	24.	0.92
+	2 COMBINED AT	C614	11179.	13.20	3515.	974.	702.	22.00
+	ROUTED TO	614615	11114.	13.33	3503.	963.	694.	22.00
+	HYDROGRAPH AT	S622	625.	12.63	124.	32.	23.	0.90
+	2 COMBINED AT	C615	11320.	13.30	3602.	989.	713.	22.90
+	2 COMBINED AT	WEST-4	17796.	13.17	6161.	1723.	1248.	51.12
+	HYDROGRAPH AT	S700	778.	12.10	96.	26.	19.	0.61
+	HYDROGRAPH AT	S701	558.	12.27	127.	36.	26.	0.72
+	DIVERSION TO	DIV701	4.	2.17	1.	0.	0.	0.72
+	HYDROGRAPH AT	S701O	558.	12.27	127.	36.	26.	0.72
+	HYDROGRAPH AT	S702	331.	12.10	48.	14.	10.	0.26
+	DIVERSION TO	DIV702	331.	12.10	31.	8.	6.	0.26
+	HYDROGRAPH AT	S702O	217.	12.33	20.	6.	4.	0.26
+	HYDROGRAPH AT	S703	278.	12.23	35.	9.	6.	0.26
+	DIVERSION TO	DIV703	240.	12.10	10.	3.	2.	0.26

+	HYDROGRAPH AT S703O	278.	12.23	25.	6.	4.	0.26
+	HYDROGRAPH AT S704	554.	12.10	65.	18.	13.	0.41
+	ROUTED TO 704705	512.	12.30	65.	18.	13.	0.41
+	HYDROGRAPH AT S705	1141.	12.10	162.	49.	35.	0.75
+	2 COMBINED AT C705	1480.	12.13	226.	67.	48.	1.16
+	ROUTED TO C705O	699.	12.60	226.	67.	48.	1.16
+	ROUTED TO 705OAF	696.	12.77	226.	66.	48.	1.16
+	HYDROGRAPH AT S705AF	237.	12.30	44.	11.	8.	0.18
+	DIVERSION TO DIV705	207.	12.13	11.	3.	2.	0.18
+	HYDROGRAPH AT 705AFO	237.	12.30	34.	9.	6.	0.18
+	2 COMBINED AT C705AF	841.	12.50	258.	75.	54.	1.34
+	5 COMBINED AT WEST-5	2253.	12.33	510.	144.	104.	3.19
+	HYDROGRAPH AT S706	1103.	12.07	152.	47.	34.	0.71
+	DIVERSION TO DIV706	1103.	12.07	93.	25.	18.	0.71
+	HYDROGRAPH AT S706O	914.	12.17	75.	21.	15.	0.71
+	HYDROGRAPH AT S707	981.	12.07	153.	49.	35.	0.64
+	DIVERSION TO DIV707	981.	12.07	94.	26.	19.	0.64
+	HYDROGRAPH AT S707O	771.	12.23	79.	23.	16.	0.64
+	HYDROGRAPH AT S728	324.	12.13	62.	20.	14.	0.28
+	DIVERSION TO DIV728	324.	12.13	31.	9.	6.	0.28
+	HYDROGRAPH AT S728O	294.	12.27	39.	11.	8.	0.28
+	5 COMBINED AT WEST	18713.	13.13	6644.	1865.	1351.	55.94
+	HYDROGRAPH AT S708	1222.	12.07	163.	43.	31.	0.71
+	DIVERSION TO DIV708	1222.	12.07	84.	21.	15.	0.71
+	HYDROGRAPH AT S708O	1141.	12.13	83.	21.	15.	0.71
+	HYDROGRAPH AT S709	715.	12.10	121.	34.	24.	0.44
+	DIVERSION TO DIV709	643.	11.97	42.	11.	8.	0.44

+	HYDROGRAPH AT S709O	715.	12.10	86.	23.	16.	0.44
+	ROUTED TO C709O	330.	12.47	86.	23.	16.	0.44
+	ROUTED TO 709710	330.	12.57	85.	23.	16.	0.44
+	HYDROGRAPH AT S710	214.	12.00	28.	8.	5.	0.11
+	DIVERSION TO DIV710	185.	11.80	9.	2.	2.	0.11
+	HYDROGRAPH AT S710O	214.	12.00	20.	5.	4.	0.11
+	2 COMBINED AT C710I	371.	12.50	105.	28.	20.	0.55
+	ROUTED TO C710O	324.	12.87	105.	28.	20.	0.55
+	HYDROGRAPH AT S711	318.	12.00	44.	13.	9.	0.16
+	DIVERSION TO DIV711	310.	11.87	20.	5.	4.	0.16
+	HYDROGRAPH AT S711O	318.	12.00	27.	7.	5.	0.16
+	ROUTED TO C711O	143.	12.17	27.	7.	5.	0.16
+	ROUTED TO 711712	142.	12.27	27.	7.	5.	0.16
+	HYDROGRAPH AT S712	135.	12.00	18.	5.	4.	0.07
+	DIVERSION TO DIV712	131.	11.87	8.	2.	2.	0.07
+	HYDROGRAPH AT S712O	135.	12.00	11.	3.	2.	0.07
+	2 COMBINED AT C712I	246.	12.03	37.	10.	7.	0.23
+	ROUTED TO C712O	177.	12.27	37.	10.	7.	0.23
+	ROUTED TO 712714	177.	12.33	37.	10.	7.	0.23
+	HYDROGRAPH AT S713	210.	12.00	28.	8.	5.	0.11
+	DIVERSION TO DIV713	130.	11.67	5.	1.	1.	0.11
+	HYDROGRAPH AT S713O	210.	12.00	24.	6.	4.	0.11
+	ROUTED TO C713O	133.	12.13	23.	6.	4.	0.11
+	ROUTED TO 713714	133.	12.17	23.	6.	4.	0.11
+	HYDROGRAPH AT S714	107.	12.03	12.	3.	2.	0.06
+	3 COMBINED AT C714	358.	12.20	72.	19.	14.	0.39
+	HYDROGRAPH AT S715	330.	12.10	58.	16.	11.	0.22

+	DIVERSION TO	DIV715	133.	11.73	8.	2.	1.	0.22
+	HYDROGRAPH AT	S715O	330.	12.10	52.	14.	10.	0.22
+	HYDROGRAPH AT	S716	1733.	12.13	291.	83.	60.	1.13
+	DIVERSION TO	DIV716	1733.	12.13	148.	39.	28.	1.13
+	HYDROGRAPH AT	S716O	1534.	12.23	163.	43.	31.	1.13
+	ROUTED TO	C716O	493.	12.77	162.	43.	31.	1.13
+	ROUTED TO	716717	492.	12.93	162.	43.	31.	1.13
+	HYDROGRAPH AT	S717	535.	12.07	78.	22.	16.	0.29
+	DIVERSION TO	DIV717	301.	11.77	15.	4.	3.	0.29
+	HYDROGRAPH AT	S717O	535.	12.07	67.	18.	13.	0.29
+	2 COMBINED AT	C717	580.	12.63	224.	60.	44.	1.41
+	ROUTED TO	717718	559.	13.23	222.	60.	43.	1.41
+	HYDROGRAPH AT	S718	408.	12.50	119.	33.	24.	0.44
+	DIVERSION TO	DIV718	337.	12.30	26.	7.	5.	0.44
+	HYDROGRAPH AT	S718O	408.	12.50	99.	26.	19.	0.44
+	2 COMBINED AT	C718	878.	12.53	317.	85.	61.	1.86
+	HYDROGRAPH AT	S719	209.	12.13	46.	14.	10.	0.15
+	DIVERSION TO	DIV719	197.	12.03	17.	4.	3.	0.15
+	HYDROGRAPH AT	S719O	209.	12.13	34.	9.	7.	0.15
+	6 COMBINED AT	EAST-1	2159.	12.40	632.	170.	122.	3.88
+	HYDROGRAPH AT	S720	581.	12.10	100.	28.	20.	0.37
+	DIVERSION TO	DIV720	577.	12.07	44.	12.	8.	0.37
+	HYDROGRAPH AT	S720O	570.	12.13	62.	17.	12.	0.37
+	HYDROGRAPH AT	S721	638.	12.00	85.	27.	19.	0.34
+	DIVERSION TO	DIV721	638.	12.00	55.	15.	11.	0.34
+	HYDROGRAPH AT	S721O	568.	12.10	41.	12.	8.	0.34
+	ROUTED TO	C721O	138.	12.43	40.	12.	8.	0.34

+	ROUTED TO 721722	135.	13.03	40.	12.	8.	0.34
+	HYDROGRAPH AT S722	1392.	12.13	235.	66.	48.	0.95
+	DIVERSION TO DIV722	1392.	12.13	120.	32.	23.	0.95
+	HYDROGRAPH AT S722O	1200.	12.27	130.	35.	25.	0.95
+	2 COMBINED AT C722	1195.	12.27	168.	46.	33.	1.29
+	HYDROGRAPH AT S723	160.	12.03	23.	7.	5.	0.09
+	DIVERSION TO DIV723	139.	11.83	8.	2.	2.	0.09
+	HYDROGRAPH AT S723O	160.	12.03	17.	4.	3.	0.09
+	HYDROGRAPH AT S724	1877.	12.10	339.	106.	77.	1.16
+	DIVERSION TO DIV724	1877.	12.10	185.	51.	36.	1.16
+	HYDROGRAPH AT S724O	1692.	12.20	197.	56.	40.	1.16
+	HYDROGRAPH AT S725	1467.	12.20	310.	97.	70.	1.16
+	DIVERSION TO DIV725	1467.	12.20	194.	54.	39.	1.16
+	HYDROGRAPH AT S725O	1016.	12.53	151.	43.	31.	1.16
+	5 COMBINED AT EAST-2	3148.	12.27	558.	157.	113.	4.06
+	HYDROGRAPH AT S726	569.	12.03	66.	20.	14.	0.33
+	DIVERSION TO DIV726	566.	12.00	39.	11.	8.	0.33
+	HYDROGRAPH AT S726O	557.	12.07	32.	9.	6.	0.33
+	ROUTED TO 726727	346.	12.37	32.	9.	6.	0.33
+	HYDROGRAPH AT S727	489.	12.17	103.	33.	24.	0.38
+	DIVERSION TO DIV727	489.	12.17	60.	17.	12.	0.38
+	HYDROGRAPH AT S727O	379.	12.40	56.	16.	11.	0.38
+	2 COMBINED AT C727	707.	12.40	88.	25.	18.	0.71
+	4 COMBINED AT TOTAL	20567.	13.13	7456.	2093.	1515.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 50-Year, 6-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN   1998              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  11:16:39  *
*                                      *
****************************************
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****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR50-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 50-year, 6-hour storm event. A companion model is also created for the existing condition 50-year, 24-hour storm event. Both models (50-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 50-year, 6-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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22 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

24 JD          INDEX STORM NO. 1
                      STRM       3.00  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

25 PI            PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 2
                STRM        2.98  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

29 JD        INDEX STORM NO. 3
                STRM        2.94  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

30 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

33 JD        INDEX STORM NO. 4
                STRM        2.77  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

34 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

37 JD        INDEX STORM NO. 5
                STRM        2.43  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

38 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	612.	4.47	106.	27.	19.	0.57		
+	DIVERSION TO	DIV100	199.	4.13	13.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	612.	4.47	94.	24.	17.	0.57		
+	ROUTED TO	100102	580.	4.73	94.	24.	17.	0.57		
+	HYDROGRAPH AT	S101	828.	4.37	106.	27.	19.	0.63		
+	2 COMBINED AT	C102R	956.	4.63	187.	47.	34.	1.20		
+	HYDROGRAPH AT	S102	565.	4.23	88.	22.	16.	0.45		
+	DIVERSION TO	DIV102	543.	4.17	29.	7.	5.	0.45		
+	HYDROGRAPH AT	S102O	565.	4.23	59.	15.	11.	0.45		
+	ROUTED TO	101102	465.	4.57	59.	15.	11.	0.45		
+	HYDROGRAPH AT	S103	413.	4.50	71.	18.	13.	0.40		
+	2 COMBINED AT	C102L	776.	4.60	123.	31.	22.	0.84		
+	2 COMBINED AT	C102	1530.	4.63	290.	73.	53.	2.05		
+	ROUTED TO	102103	1462.	4.90	290.	73.	53.	2.05		
+	HYDROGRAPH AT	S104	1104.	4.43	166.	42.	30.	0.90		
+	DIVERSION TO	DIV104	795.	4.27	41.	10.	7.	0.90		
+	HYDROGRAPH AT	S104O	1104.	4.43	126.	32.	23.	0.90		
+	2 COMBINED AT	C103R	1912.	4.83	391.	98.	71.	2.95		

+	HYDROGRAPH AT	S105	570.	4.33	113.	28.	21.	0.59
+	DIVERSION TO	DIV105	562.	4.27	32.	8.	6.	0.59
+	HYDROGRAPH AT	S105O	566.	4.37	81.	20.	15.	0.59
+	2 COMBINED AT	C103	2164.	4.83	449.	113.	81.	3.54
+	ROUTED TO	103104	2130.	4.97	449.	113.	81.	3.54
+	HYDROGRAPH AT	S106	687.	4.23	97.	24.	17.	0.57
+	2 COMBINED AT	C104	2244.	4.93	517.	131.	94.	4.11
+	ROUTED TO	104105	2207.	5.13	516.	131.	94.	4.11
+	HYDROGRAPH AT	S107	912.	4.43	137.	34.	25.	0.94
+	2 COMBINED AT	C105L	2380.	5.10	611.	155.	111.	5.05
+	HYDROGRAPH AT	S200	1110.	4.43	175.	44.	32.	0.96
+	ROUTED TO	200201	1096.	4.50	175.	44.	32.	0.96
+	HYDROGRAPH AT	S201	490.	4.33	67.	17.	12.	0.35
+	2 COMBINED AT	C201	1354.	4.47	233.	59.	42.	1.31
+	ROUTED TO	201203	1330.	4.57	233.	59.	42.	1.31
+	HYDROGRAPH AT	S202	230.	4.20	24.	6.	4.	0.13
+	ROUTED TO	202203	217.	4.27	24.	6.	4.	0.13
+	HYDROGRAPH AT	S203	161.	4.87	69.	19.	13.	0.37
+	DIVERSION TO	DIV203	161.	4.87	31.	8.	6.	0.37
+	HYDROGRAPH AT	S203O	147.	5.33	43.	11.	8.	0.37
+	3 COMBINED AT	C203R	1327.	4.57	277.	72.	52.	1.81
+	HYDROGRAPH AT	S204	894.	4.53	167.	42.	30.	0.95
+	DIVERSION TO	DIV204	18.	1.87	3.	1.	1.	0.95
+	HYDROGRAPH AT	S204O	894.	4.53	166.	41.	30.	0.95
+	2 COMBINED AT	C203	1879.	4.57	418.	107.	77.	2.76
+	ROUTED TO	203204	1871.	4.60	418.	107.	77.	2.76
+	HYDROGRAPH AT	S205	648.	4.30	84.	21.	15.	0.41

+	DIVERSION TO	DIV205	577.	4.20	29.	7.	5.	0.41
+	HYDROGRAPH AT	S205O	648.	4.30	55.	14.	10.	0.41
+	2 COMBINED AT	C204	2139.	4.57	457.	117.	84.	3.17
+	ROUTED TO	204205	2110.	4.70	456.	117.	84.	3.17
+	HYDROGRAPH AT	S206	701.	4.40	160.	41.	29.	0.85
+	DIVERSION TO	DIV206	701.	4.40	85.	21.	15.	0.85
+	HYDROGRAPH AT	S206O	519.	4.83	77.	19.	14.	0.85
+	2 COMBINED AT	C205L	2305.	4.83	502.	129.	93.	4.03
+	HYDROGRAPH AT	S207	804.	4.63	177.	45.	32.	0.96
+	DIVERSION TO	DIV207	606.	4.43	40.	10.	7.	0.96
+	HYDROGRAPH AT	S207O	804.	4.63	139.	35.	25.	0.96
+	2 COMBINED AT	C205	2753.	4.83	605.	155.	111.	4.98
+	ROUTED TO	205206	2554.	5.20	603.	155.	111.	4.98
+	HYDROGRAPH AT	S208	643.	5.17	203.	53.	38.	1.10
+	DIVERSION TO	DIV208	314.	4.67	26.	7.	5.	1.10
+	HYDROGRAPH AT	S208O	643.	5.17	184.	46.	33.	1.10
+	2 COMBINED AT	C206	2955.	5.20	743.	190.	137.	6.09
+	ROUTED TO	206207	2924.	5.27	743.	190.	137.	6.09
+	HYDROGRAPH AT	S209	810.	4.43	111.	28.	20.	0.65
+	2 COMBINED AT	C207R	2988.	5.27	814.	209.	151.	6.74
+	HYDROGRAPH AT	S210	681.	4.17	76.	19.	14.	0.48
+	2 COMBINED AT	C207	2977.	5.27	860.	221.	159.	7.22
+	ROUTED TO	207105	2946.	5.37	858.	221.	159.	7.22
+	HYDROGRAPH AT	S211	648.	4.20	80.	20.	15.	0.49
+	2 COMBINED AT	C105R	2944.	5.37	906.	234.	168.	7.70
+	2 COMBINED AT	C105	4468.	5.33	1372.	352.	254.	12.75
+	HYDROGRAPH AT	S300	988.	4.13	119.	30.	22.	0.62

+	DIVERSION TO	DIV300	988.	4.13	66.	16.	12.	0.62
+	HYDROGRAPH AT	S300O	762.	4.27	54.	13.	10.	0.62
+	HYDROGRAPH AT	S301	1570.	4.13	200.	50.	36.	0.99
+	DIVERSION TO	DIV301	1358.	4.03	76.	19.	14.	0.99
+	HYDROGRAPH AT	S301O	1570.	4.13	125.	31.	22.	0.99
+	2 COMBINED AT	C300	1569.	4.37	164.	41.	30.	1.61
+	ROUTED TO	300301	1392.	4.47	164.	41.	30.	1.61
+	HYDROGRAPH AT	S302	768.	4.30	88.	22.	16.	0.47
+	DIVERSION TO	DIV302	335.	4.07	17.	4.	3.	0.47
+	HYDROGRAPH AT	S302O	768.	4.30	72.	18.	13.	0.47
+	2 COMBINED AT	C301	1764.	4.47	222.	55.	40.	2.07
+	ROUTED TO	301302	1668.	4.73	222.	55.	40.	2.07
+	HYDROGRAPH AT	S303	809.	4.43	108.	27.	20.	0.71
+	2 COMBINED AT	C302	1956.	4.73	304.	76.	55.	2.78
+	ROUTED TO	302303	1911.	4.87	304.	76.	55.	2.78
+	HYDROGRAPH AT	S304	856.	4.23	129.	32.	23.	0.82
+	DIVERSION TO	DIV304	856.	4.23	67.	17.	12.	0.82
+	HYDROGRAPH AT	S304O	601.	4.57	62.	16.	11.	0.82
+	DIVERSION TO	DIV400	601.	4.57	62.	16.	11.	0.82
+	HYDROGRAPH AT	S400O	0.	0.00	0.	0.	0.	0.82
+	2 COMBINED AT	C303	1911.	4.87	304.	77.	55.	3.60
+	2 COMBINED AT	WEST-1	5021.	5.27	1541.	395.	285.	16.36
+	HYDROGRAPH AT	S400	1689.	4.27	219.	55.	40.	1.05
+	ROUTED TO	C400O	528.	4.77	217.	55.	40.	1.05
+	ROUTED TO	400401	526.	5.03	217.	55.	40.	1.05
+	HYDROGRAPH AT	S401	1085.	4.13	112.	28.	20.	0.65
+	DIVERSION TO	DIV401	1085.	4.13	73.	18.	13.	0.65

	HYDROGRAPH AT						
+		S401O	668.	4.33	39.	10.	7.	0.65
	2 COMBINED AT						
+		C401	832.	4.50	241.	61.	44.	1.69
	ROUTED TO						
+		401402	727.	4.87	241.	61.	44.	1.69
	HYDROGRAPH AT						
+		S402	1427.	4.10	154.	39.	28.	0.74
	DIVERSION TO						
+		DIV402	1427.	4.10	104.	26.	19.	0.74
	HYDROGRAPH AT						
+		S402O	864.	4.27	50.	13.	9.	0.74
	2 COMBINED AT						
+		C402	861.	4.87	274.	69.	50.	2.43
	ROUTED TO						
+		402403	794.	5.23	273.	69.	50.	2.43
	HYDROGRAPH AT						
+		S403	1234.	4.10	137.	34.	25.	0.56
	DIVERSION TO						
+		DIV403	1234.	4.10	100.	25.	18.	0.56
	HYDROGRAPH AT						
+		S403O	684.	4.33	38.	9.	7.	0.56
	2 COMBINED AT						
+		C403	826.	5.23	299.	76.	54.	2.99
	ROUTED TO						
+		403404	811.	5.37	299.	76.	54.	2.99
	HYDROGRAPH AT						
+		S404	565.	4.20	48.	12.	9.	0.26
	DIVERSION TO						
+		DIV404	187.	3.93	6.	1.	1.	0.26
	HYDROGRAPH AT						
+		S404O	565.	4.20	42.	11.	8.	0.26
	2 COMBINED AT						
+		C404	809.	5.37	333.	84.	61.	3.26
	2 COMBINED AT						
+		WEST-2	5253.	5.30	1712.	439.	317.	19.61
	HYDROGRAPH AT						
+		S500	1001.	4.30	203.	51.	37.	1.05
	DIVERSION TO						
+		DIV500	1001.	4.30	94.	23.	17.	1.05
	HYDROGRAPH AT						
+		S500O	894.	4.53	112.	28.	20.	1.05
	ROUTED TO						
+		500501	759.	4.77	112.	28.	20.	1.05
	HYDROGRAPH AT						
+		S501	916.	4.17	112.	28.	20.	0.61
	DIVERSION TO						
+		DIV501	916.	4.17	51.	13.	9.	0.61
	HYDROGRAPH AT						
+		S501O	798.	4.23	62.	16.	11.	0.61
	2 COMBINED AT						
+		C501	925.	4.77	159.	40.	29.	1.67
	ROUTED TO						
+		501502	853.	4.87	156.	39.	28.	1.67

+	HYDROGRAPH AT	S502	663.	4.30	72.	18.	13.	0.40
+	DIVERSION TO	DIV502	627.	4.23	27.	7.	5.	0.40
+	HYDROGRAPH AT	S502O	663.	4.30	45.	11.	8.	0.40
+	2 COMBINED AT	C502L	953.	4.87	188.	47.	34.	2.07
+	HYDROGRAPH AT	S503	1190.	4.23	188.	47.	34.	0.99
+	DIVERSION TO	DIV503	982.	4.10	51.	13.	9.	0.99
+	HYDROGRAPH AT	S503O	1190.	4.23	138.	34.	25.	0.99
+	2 COMBINED AT	C502I	1514.	4.47	299.	75.	54.	3.07
+	ROUTED TO	C502O	1383.	4.60	299.	75.	54.	3.07
+	ROUTED TO	502505	1293.	4.93	290.	73.	52.	3.07
+	HYDROGRAPH AT	S504	420.	4.20	65.	16.	12.	0.33
+	DIVERSION TO	DIV504	420.	4.20	53.	13.	9.	0.33
+	HYDROGRAPH AT	S504O	142.	4.83	13.	3.	2.	0.33
+	2 COMBINED AT	C505L	1293.	4.93	296.	74.	53.	3.39
+	HYDROGRAPH AT	S505	336.	4.13	25.	6.	4.	0.14
+	DIVERSION TO	DIV505	84.	3.87	4.	1.	1.	0.14
+	HYDROGRAPH AT	S505O	336.	4.13	21.	5.	4.	0.14
+	ROUTED TO	C503O	93.	4.37	21.	5.	4.	0.14
+	ROUTED TO	503505	91.	4.87	21.	5.	4.	0.14
+	HYDROGRAPH AT	S506	333.	4.17	31.	8.	6.	0.15
+	DIVERSION TO	DIV506	290.	4.07	12.	3.	2.	0.15
+	HYDROGRAPH AT	S506O	333.	4.17	19.	5.	3.	0.15
+	ROUTED TO	C504O	86.	4.53	19.	5.	3.	0.15
+	ROUTED TO	504505	84.	5.03	19.	5.	3.	0.15
+	HYDROGRAPH AT	S507	1216.	4.13	120.	30.	22.	0.67
+	DIVERSION TO	DIV507	1216.	4.13	92.	23.	17.	0.67
+	HYDROGRAPH AT	S507O	579.	4.37	28.	7.	5.	0.67

+	3 COMBINED AT	C505R	436.	4.37	62.	15.	11.	0.96
+	2 COMBINED AT	C505	1404.	4.90	319.	80.	58.	4.35
+	ROUTED TO	505509	1324.	5.37	304.	76.	55.	4.35
+	HYDROGRAPH AT	S508	667.	4.07	57.	14.	10.	0.29
+	DIVERSION TO	DIV508	667.	4.07	42.	10.	8.	0.29
+	HYDROGRAPH AT	S508O	353.	4.27	15.	4.	3.	0.29
+	2 COMBINED AT	C509L	1306.	5.37	306.	76.	55.	4.65
+	HYDROGRAPH AT	S509	448.	4.03	35.	9.	6.	0.17
+	DIVERSION TO	DIV509	243.	3.90	10.	3.	2.	0.17
+	HYDROGRAPH AT	S509O	448.	4.03	24.	6.	4.	0.17
+	ROUTED TO	C506O	89.	4.33	24.	6.	4.	0.17
+	ROUTED TO	506508	89.	4.53	24.	6.	4.	0.17
+	HYDROGRAPH AT	S510	284.	4.10	32.	8.	6.	0.13
+	DIVERSION TO	DIV510	284.	4.10	22.	6.	4.	0.13
+	HYDROGRAPH AT	S510O	176.	4.30	10.	2.	2.	0.13
+	2 COMBINED AT	C508R	255.	4.30	34.	9.	6.	0.30
+	HYDROGRAPH AT	S511	856.	4.07	79.	20.	14.	0.38
+	DIVERSION TO	DIV511	816.	4.03	35.	9.	6.	0.38
+	HYDROGRAPH AT	S511O	848.	4.10	44.	11.	8.	0.38
+	ROUTED TO	C507O	92.	4.63	44.	11.	8.	0.38
+	ROUTED TO	507508	91.	4.93	43.	12.	8.	0.38
+	HYDROGRAPH AT	S512	458.	4.10	56.	14.	10.	0.21
+	DIVERSION TO	DIV512	458.	4.10	40.	10.	7.	0.21
+	HYDROGRAPH AT	S512O	274.	4.37	17.	4.	3.	0.21
+	2 COMBINED AT	C508L	249.	4.37	59.	15.	11.	0.60
+	2 COMBINED AT	C508	402.	4.50	89.	23.	17.	0.90
+	ROUTED TO	508509	322.	5.10	86.	24.	17.	0.90

+	HYDROGRAPH AT	S513	1090.	4.17	142.	36.	26.	0.78
+	DIVERSION TO	DIV513	1090.	4.17	115.	29.	21.	0.78
+	HYDROGRAPH AT	S513O	360.	4.60	27.	7.	5.	0.78
+	2 COMBINED AT	C509R	446.	5.07	101.	27.	20.	1.67
+	2 COMBINED AT	C509	1501.	5.37	358.	92.	66.	6.32
+	ROUTED TO	509510	1479.	5.47	357.	92.	66.	6.32
+	HYDROGRAPH AT	S514	1226.	4.13	153.	38.	28.	0.65
+	DIVERSION TO	DIV514	1226.	4.13	104.	26.	19.	0.65
+	HYDROGRAPH AT	S514O	697.	4.37	49.	12.	9.	0.65
+	2 COMBINED AT	C510	1490.	5.47	383.	98.	71.	6.97
+	ROUTED TO	510511	1475.	5.77	382.	99.	71.	6.97
+	HYDROGRAPH AT	S515	2060.	4.13	263.	66.	48.	1.10
+	DIVERSION TO	DIV515	2060.	4.13	171.	43.	31.	1.10
+	HYDROGRAPH AT	S515O	1339.	4.37	93.	23.	17.	1.10
+	2 COMBINED AT	C511	1465.	5.77	444.	114.	82.	8.07
+	ROUTED TO	511512	1305.	6.23	436.	113.	82.	8.07
+	HYDROGRAPH AT	S516	934.	4.13	124.	31.	23.	0.54
+	DIVERSION TO	DIV516	934.	4.13	79.	20.	14.	0.54
+	HYDROGRAPH AT	S516O	644.	4.37	46.	11.	8.	0.54
+	2 COMBINED AT	C512	1299.	6.23	456.	118.	85.	8.61
+	2 COMBINED AT	WEST-3	5200.	5.30	1911.	495.	357.	28.22
+	HYDROGRAPH AT	S600	1415.	4.63	282.	71.	51.	2.02
+	ROUTED TO	600601	1402.	4.70	282.	71.	51.	2.02
+	HYDROGRAPH AT	S601	1215.	4.40	196.	49.	36.	0.90
+	2 COMBINED AT	C601	2056.	4.63	453.	114.	82.	2.92
+	ROUTED TO	601602	2034.	4.73	453.	114.	82.	2.92
+	HYDROGRAPH AT	S603	1229.	4.27	145.	36.	26.	0.67

+	2 COMBINED AT	C602L	2378.	4.63	573.	145.	105.	3.58
+	HYDROGRAPH AT	S602	1505.	4.63	329.	83.	60.	1.88
+	2 COMBINED AT	C602	3455.	4.63	847.	215.	155.	5.47
+	ROUTED TO	602603	3355.	4.87	802.	201.	145.	5.47
+	HYDROGRAPH AT	S606	735.	4.43	127.	32.	23.	0.66
+	2 COMBINED AT	C603L	3629.	4.83	897.	225.	162.	6.13
+	HYDROGRAPH AT	S605	1000.	4.53	198.	50.	36.	1.09
+	HYDROGRAPH AT	S604	1526.	4.97	444.	114.	82.	2.66
+	3 COMBINED AT	C603	5096.	4.83	1395.	355.	256.	9.87
+	ROUTED TO	603604	4998.	5.00	1346.	339.	244.	9.87
+	HYDROGRAPH AT	S609	489.	4.50	98.	25.	18.	0.56
+	DIVERSION TO	DIV609	364.	4.33	21.	5.	4.	0.56
+	HYDROGRAPH AT	S609O	489.	4.50	78.	20.	14.	0.56
+	2 COMBINED AT	C604R	5149.	5.00	1389.	350.	252.	10.43
+	HYDROGRAPH AT	S607	772.	4.53	162.	41.	30.	0.82
+	DIVERSION TO	DIV607	62.	3.77	11.	3.	2.	0.82
+	HYDROGRAPH AT	S607O	772.	4.53	154.	38.	28.	0.82
+	2 COMBINED AT	C604	5469.	4.97	1500.	377.	272.	11.25
+	ROUTED TO	604605	5457.	5.03	1500.	377.	272.	11.25
+	HYDROGRAPH AT	S608	896.	4.27	109.	27.	20.	0.51
+	DIVERSION TO	DIV608	303.	4.00	18.	5.	3.	0.51
+	HYDROGRAPH AT	S608O	896.	4.27	91.	23.	16.	0.51
+	2 COMBINED AT	C605	5561.	5.00	1562.	393.	283.	11.76
+	ROUTED TO	605606	5511.	5.13	1553.	391.	282.	11.76
+	HYDROGRAPH AT	S610	780.	4.23	129.	33.	23.	0.60
+	2 COMBINED AT	C606L	5632.	5.10	1644.	415.	299.	12.36
+	HYDROGRAPH AT	S612	889.	4.27	174.	44.	32.	0.81

+	2 COMBINED AT C606	5862.	5.10	1773.	448.	323.	13.17
+	ROUTED TO 606608	5858.	5.10	1770.	447.	322.	13.17
+	HYDROGRAPH AT S611	873.	4.33	109.	27.	20.	0.57
+	ROUTED TO 607608	796.	4.53	109.	27.	20.	0.57
+	HYDROGRAPH AT S613	1499.	4.70	336.	85.	61.	1.80
+	3 COMBINED AT C608	6783.	5.03	2088.	530.	382.	15.53
+	ROUTED TO 608609	6732.	5.17	2075.	526.	379.	15.53
+	HYDROGRAPH AT S614	900.	4.67	200.	51.	37.	1.08
+	2 COMBINED AT C609	7057.	5.13	2207.	561.	404.	16.61
+	ROUTED TO 609611	6969.	5.33	2177.	551.	397.	16.61
+	HYDROGRAPH AT S617	976.	4.20	123.	31.	22.	0.68
+	2 COMBINED AT C611R	6964.	5.33	2246.	570.	411.	17.29
+	HYDROGRAPH AT S615	1095.	4.67	250.	63.	46.	1.05
+	ROUTED TO 610611	1068.	4.83	250.	63.	46.	1.05
+	HYDROGRAPH AT S616	648.	4.37	94.	24.	17.	0.50
+	DIVERSION TO DIV616	554.	4.27	25.	6.	5.	0.50
+	HYDROGRAPH AT S616O	648.	4.37	69.	17.	12.	0.50
+	2 COMBINED AT C611L	1299.	4.77	307.	78.	56.	1.56
+	2 COMBINED AT C611	7489.	5.30	2455.	625.	451.	18.85
+	ROUTED TO 611613	7450.	5.33	2445.	621.	448.	18.85
+	HYDROGRAPH AT S618	838.	4.60	168.	42.	31.	0.96
+	2 COMBINED AT C613R	7617.	5.33	2541.	647.	466.	19.81
+	HYDROGRAPH AT S619	1163.	4.47	182.	46.	33.	0.83
+	ROUTED TO 612613	1121.	4.63	181.	46.	33.	0.83
+	HYDROGRAPH AT S620	502.	4.47	97.	24.	18.	0.44
+	2 COMBINED AT C613L	1435.	4.63	270.	68.	49.	1.27
+	2 COMBINED AT C613	7985.	5.30	2723.	695.	501.	21.08

+	ROUTED TO	613614	7934.	5.37	2711.	691.	498.	21.08
+	HYDROGRAPH AT	S621	1197.	4.37	132.	33.	24.	0.92
+	2 COMBINED AT	C614	7925.	5.37	2775.	707.	510.	22.00
+	ROUTED TO	614615	7823.	5.50	2755.	701.	506.	22.00
+	HYDROGRAPH AT	S622	614.	4.73	127.	32.	23.	0.90
+	2 COMBINED AT	C615	7910.	5.47	2808.	715.	515.	22.90
+	2 COMBINED AT	WEST-4	10186.	5.47	3904.	1010.	728.	51.12
+	HYDROGRAPH AT	S700	985.	4.13	102.	26.	18.	0.61
+	HYDROGRAPH AT	S701	590.	4.37	130.	33.	24.	0.72
+	DIVERSION TO	DIV701	6.	1.43	1.	0.	0.	0.72
+	HYDROGRAPH AT	S701O	590.	4.37	130.	33.	24.	0.72
+	HYDROGRAPH AT	S702	463.	4.10	51.	13.	9.	0.26
+	DIVERSION TO	DIV702	463.	4.10	33.	8.	6.	0.26
+	HYDROGRAPH AT	S702O	291.	4.33	17.	4.	3.	0.26
+	HYDROGRAPH AT	S703	365.	4.27	39.	10.	7.	0.26
+	DIVERSION TO	DIV703	318.	4.20	10.	3.	2.	0.26
+	HYDROGRAPH AT	S703O	365.	4.27	28.	7.	5.	0.26
+	HYDROGRAPH AT	S704	787.	4.10	71.	18.	13.	0.41
+	ROUTED TO	704705	687.	4.37	71.	18.	13.	0.41
+	HYDROGRAPH AT	S705	1402.	4.10	167.	42.	30.	0.75
+	2 COMBINED AT	C705	1549.	4.20	229.	58.	41.	1.16
+	ROUTED TO	C705O	723.	4.63	229.	58.	41.	1.16
+	ROUTED TO	705OAF	721.	4.83	229.	58.	41.	1.16
+	HYDROGRAPH AT	S705AF	295.	4.30	40.	10.	7.	0.18
+	DIVERSION TO	DIV705	248.	4.20	11.	3.	2.	0.18
+	HYDROGRAPH AT	705AFO	295.	4.30	29.	7.	5.	0.18
+	2 COMBINED AT	C705AF	871.	4.57	255.	64.	46.	1.34

+	5 COMBINED AT WEST-5	1995.	4.50	474.	119.	86.	3.19
+	HYDROGRAPH AT S706	1419.	4.10	156.	39.	28.	0.71
+	DIVERSION TO DIV706	1419.	4.10	102.	25.	18.	0.71
+	HYDROGRAPH AT S706O	913.	4.23	55.	14.	10.	0.71
+	HYDROGRAPH AT S707	1310.	4.10	158.	40.	29.	0.64
+	DIVERSION TO DIV707	1310.	4.10	106.	26.	19.	0.64
+	HYDROGRAPH AT S707O	764.	4.30	53.	13.	9.	0.64
+	HYDROGRAPH AT S728	416.	4.17	65.	16.	12.	0.28
+	DIVERSION TO DIV728	416.	4.17	35.	9.	6.	0.28
+	HYDROGRAPH AT S728O	340.	4.37	30.	7.	5.	0.28
+	5 COMBINED AT WEST	10446.	5.43	4121.	1069.	770.	55.94
+	HYDROGRAPH AT S708	1575.	4.10	154.	39.	28.	0.71
+	DIVERSION TO DIV708	1575.	4.10	86.	21.	15.	0.71
+	HYDROGRAPH AT S708O	1191.	4.17	69.	17.	12.	0.71
+	HYDROGRAPH AT S709	984.	4.10	108.	27.	20.	0.44
+	DIVERSION TO DIV709	949.	4.07	44.	11.	8.	0.44
+	HYDROGRAPH AT S709O	975.	4.13	65.	16.	12.	0.44
+	ROUTED TO C709O	355.	4.50	65.	16.	12.	0.44
+	ROUTED TO 709710	353.	4.60	65.	16.	12.	0.44
+	HYDROGRAPH AT S710	337.	4.03	26.	7.	5.	0.11
+	DIVERSION TO DIV710	253.	3.90	9.	2.	2.	0.11
+	HYDROGRAPH AT S710O	337.	4.03	17.	4.	3.	0.11
+	2 COMBINED AT C710I	367.	4.50	82.	20.	15.	0.55
+	ROUTED TO C710O	321.	4.87	82.	20.	15.	0.55
+	HYDROGRAPH AT S711	516.	4.00	40.	10.	7.	0.16
+	DIVERSION TO DIV711	471.	3.93	21.	5.	4.	0.16
+	HYDROGRAPH AT S711O	516.	4.00	19.	5.	3.	0.16

+	ROUTED TO C7110	150.	4.20	19.	5.	3.	0.16
+	ROUTED TO 711712	149.	4.30	19.	5.	3.	0.16
+	HYDROGRAPH AT S712	230.	4.00	17.	4.	3.	0.07
+	DIVERSION TO DIV712	213.	3.90	8.	2.	2.	0.07
+	HYDROGRAPH AT S7120	230.	4.00	8.	2.	1.	0.07
+	2 COMBINED AT C712I	266.	4.03	27.	7.	5.	0.23
+	ROUTED TO C7120	175.	4.30	27.	7.	5.	0.23
+	ROUTED TO 712714	174.	4.37	27.	7.	5.	0.23
+	HYDROGRAPH AT S713	338.	4.00	26.	6.	5.	0.11
+	DIVERSION TO DIV713	118.	3.77	6.	1.	1.	0.11
+	HYDROGRAPH AT S7130	338.	4.00	20.	5.	4.	0.11
+	ROUTED TO C7130	158.	4.17	20.	5.	4.	0.11
+	ROUTED TO 713714	158.	4.17	20.	5.	4.	0.11
+	HYDROGRAPH AT S714	166.	4.03	12.	3.	2.	0.06
+	3 COMBINED AT C714	392.	4.20	59.	15.	11.	0.39
+	HYDROGRAPH AT S715	436.	4.13	52.	13.	9.	0.22
+	DIVERSION TO DIV715	210.	3.90	8.	2.	1.	0.22
+	HYDROGRAPH AT S7150	436.	4.13	44.	11.	8.	0.22
+	HYDROGRAPH AT S716	1844.	4.17	272.	68.	49.	1.13
+	DIVERSION TO DIV716	1844.	4.17	157.	39.	28.	1.13
+	HYDROGRAPH AT S7160	1419.	4.40	116.	29.	21.	1.13
+	ROUTED TO C7160	487.	4.83	116.	29.	21.	1.13
+	ROUTED TO 716717	486.	5.00	116.	29.	21.	1.13
+	HYDROGRAPH AT S717	822.	4.10	70.	18.	13.	0.29
+	DIVERSION TO DIV717	335.	3.87	16.	4.	3.	0.29
+	HYDROGRAPH AT S7170	822.	4.10	54.	14.	10.	0.29
+	2 COMBINED AT C717	610.	4.10	168.	42.	30.	1.41

+	ROUTED TO 717718	502.	5.43	168.	42.	30.	1.41
+	HYDROGRAPH AT S718	490.	4.53	107.	27.	19.	0.44
+	DIVERSION TO DIV718	460.	4.43	27.	7.	5.	0.44
+	HYDROGRAPH AT S718O	490.	4.53	80.	20.	14.	0.44
+	2 COMBINED AT C718	832.	4.60	245.	61.	44.	1.86
+	HYDROGRAPH AT S719	284.	4.13	41.	10.	7.	0.15
+	DIVERSION TO DIV719	284.	4.13	17.	4.	3.	0.15
+	HYDROGRAPH AT S719O	259.	4.23	24.	6.	4.	0.15
+	6 COMBINED AT EAST-1	2011.	4.57	488.	122.	88.	3.88
+	HYDROGRAPH AT S720	805.	4.10	92.	23.	17.	0.37
+	DIVERSION TO DIV720	805.	4.10	47.	12.	8.	0.37
+	HYDROGRAPH AT S720O	709.	4.20	45.	11.	8.	0.37
+	HYDROGRAPH AT S721	1003.	4.03	87.	22.	16.	0.34
+	DIVERSION TO DIV721	1003.	4.03	61.	15.	11.	0.34
+	HYDROGRAPH AT S721O	715.	4.13	27.	7.	5.	0.34
+	ROUTED TO C721O	146.	4.40	27.	7.	5.	0.34
+	ROUTED TO 721722	128.	5.03	26.	7.	5.	0.34
+	HYDROGRAPH AT S722	1518.	4.17	224.	56.	41.	0.95
+	DIVERSION TO DIV722	1518.	4.17	127.	32.	23.	0.95
+	HYDROGRAPH AT S722O	1129.	4.43	98.	24.	18.	0.95
+	2 COMBINED AT C722	1108.	4.43	121.	30.	22.	1.29
+	HYDROGRAPH AT S723	246.	4.03	22.	5.	4.	0.09
+	DIVERSION TO DIV723	203.	3.93	9.	2.	2.	0.09
+	HYDROGRAPH AT S723O	246.	4.03	13.	3.	2.	0.09
+	HYDROGRAPH AT S724	2035.	4.17	321.	81.	58.	1.16
+	DIVERSION TO DIV724	2035.	4.17	202.	51.	36.	1.16
+	HYDROGRAPH AT S724O	1389.	4.43	120.	30.	22.	1.16

+	HYDROGRAPH AT	S725	1518.	4.23	304.	77.	55.	1.16
+	DIVERSION TO	DIV725	1518.	4.23	214.	54.	39.	1.16
+	HYDROGRAPH AT	S725O	826.	4.80	92.	23.	17.	1.16
+	5 COMBINED AT	EAST-2	2291.	4.43	358.	89.	64.	4.06
+	HYDROGRAPH AT	S726	888.	4.03	69.	17.	13.	0.33
+	DIVERSION TO	DIV726	888.	4.03	43.	11.	8.	0.33
+	HYDROGRAPH AT	S726O	786.	4.10	27.	7.	5.	0.33
+	ROUTED TO	726727	350.	4.40	27.	7.	5.	0.33
+	HYDROGRAPH AT	S727	628.	4.17	102.	26.	18.	0.38
+	DIVERSION TO	DIV727	628.	4.17	67.	17.	12.	0.38
+	HYDROGRAPH AT	S727O	410.	4.50	35.	9.	6.	0.38
+	2 COMBINED AT	C727	566.	4.50	60.	15.	11.	0.71
+	4 COMBINED AT	TOTAL	11052.	5.40	4421.	1145.	825.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 50-Year, 24-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*************************************                    *************************************
*                                   *                    *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS    *
*              JUN   1998           *                    *   HYDROLOGIC ENGINEERING CENTER   *
*            VERSION 4.1            *                    *         609 SECOND STREET         *
*                                   *                    *      DAVIS, CALIFORNIA 95616      *
* RUN DATE   10AUG01  TIME  11:15:28 *                    *          (916) 756-1104           *
*                                   *                    *                                   *
*************************************                    *************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR50-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 50-year, 24-hour storm event. A companion model is also created for the existing condition 50-year, 6-hour storm event. Both models (50-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 50-year, 24-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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22 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

24 JD          INDEX STORM NO. 1
                      STRM       3.76  PRECIPITATION DEPTH
                      TRDA       0.01  TRANSPOSITION DRAINAGE AREA

25 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 2

STRM 3.74 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 3

STRM 3.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 4

STRM 3.53 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 5

STRM 3.40 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

39 JD INDEX STORM NO. 6

STRM 3.22 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	425.	12.47	88.	26.	19.	0.57		
+	DIVERSION TO	DIV100	22.	11.53	9.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	425.	12.47	87.	23.	17.	0.57		
+	ROUTED TO	100102	406.	12.73	86.	23.	17.	0.57		

+	HYDROGRAPH AT	S101	581.	12.33	87.	24.	18.	0.63
+	2 COMBINED AT	C102R	800.	12.40	170.	47.	34.	1.20
+	HYDROGRAPH AT	S102	383.	12.20	73.	22.	16.	0.45
+	DIVERSION TO	DIV102	333.	12.07	25.	7.	5.	0.45
+	HYDROGRAPH AT	S102O	383.	12.20	56.	15.	11.	0.45
+	ROUTED TO	101102	336.	12.53	55.	15.	11.	0.45
+	HYDROGRAPH AT	S103	280.	12.50	57.	16.	12.	0.40
+	2 COMBINED AT	C102L	615.	12.53	110.	31.	23.	0.84
+	2 COMBINED AT	C102	1365.	12.50	276.	78.	56.	2.05
+	ROUTED TO	102103	1309.	12.77	276.	78.	56.	2.05
+	HYDROGRAPH AT	S104	853.	12.40	140.	41.	30.	0.90
+	DIVERSION TO	DIV104	607.	12.17	35.	10.	7.	0.90
+	HYDROGRAPH AT	S104O	853.	12.40	116.	31.	22.	0.90
+	2 COMBINED AT	C103R	1785.	12.70	387.	107.	77.	2.95
+	HYDROGRAPH AT	S105	408.	12.30	93.	27.	20.	0.59
+	DIVERSION TO	DIV105	383.	12.20	29.	8.	6.	0.59
+	HYDROGRAPH AT	S105O	408.	12.30	71.	19.	14.	0.59
+	2 COMBINED AT	C103	2067.	12.67	453.	125.	90.	3.54
+	ROUTED TO	103104	2039.	12.83	452.	125.	90.	3.54
+	HYDROGRAPH AT	S106	487.	12.20	77.	21.	15.	0.57
+	2 COMBINED AT	C104	2194.	12.80	520.	145.	105.	4.11
+	ROUTED TO	104105	2153.	13.03	518.	145.	105.	4.11
+	HYDROGRAPH AT	S107	737.	12.37	112.	29.	21.	0.94
+	2 COMBINED AT	C105L	2374.	12.97	621.	171.	124.	5.05
+	HYDROGRAPH AT	S200	873.	12.40	154.	48.	35.	0.96
+	ROUTED TO	200201	852.	12.43	154.	48.	35.	0.96
+	HYDROGRAPH AT	S201	316.	12.33	56.	18.	13.	0.35

+	2 COMBINED AT	C201	1133.	12.40	210.	66.	47.	1.31
+	ROUTED TO	201203	1114.	12.50	210.	66.	47.	1.31
+	HYDROGRAPH AT	S202	133.	12.20	21.	6.	5.	0.13
+	ROUTED TO	202203	129.	12.27	21.	6.	5.	0.13
+	HYDROGRAPH AT	S203	259.	12.27	63.	20.	14.	0.37
+	DIVERSION TO	DIV203	259.	12.27	27.	8.	6.	0.37
+	HYDROGRAPH AT	S203O	249.	12.37	43.	12.	9.	0.37
+	3 COMBINED AT	C203R	1420.	12.47	268.	83.	60.	1.81
+	HYDROGRAPH AT	S204	710.	12.50	148.	46.	33.	0.95
+	DIVERSION TO	DIV204	9.	3.17	3.	1.	1.	0.95
+	HYDROGRAPH AT	S204O	710.	12.50	148.	45.	33.	0.95
+	2 COMBINED AT	C203	2099.	12.50	410.	127.	92.	2.76
+	ROUTED TO	203204	2087.	12.53	410.	127.	92.	2.76
+	HYDROGRAPH AT	S205	417.	12.27	69.	21.	16.	0.41
+	DIVERSION TO	DIV205	351.	12.13	25.	7.	5.	0.41
+	HYDROGRAPH AT	S205O	417.	12.27	52.	14.	10.	0.41
+	2 COMBINED AT	C204	2360.	12.50	458.	140.	101.	3.17
+	ROUTED TO	204205	2297.	12.63	458.	140.	101.	3.17
+	HYDROGRAPH AT	S206	544.	12.33	138.	42.	30.	0.85
+	DIVERSION TO	DIV206	544.	12.33	77.	21.	15.	0.85
+	HYDROGRAPH AT	S206O	443.	12.70	75.	21.	15.	0.85
+	2 COMBINED AT	C205L	2589.	12.73	522.	159.	115.	4.03
+	HYDROGRAPH AT	S207	639.	12.60	157.	49.	35.	0.96
+	DIVERSION TO	DIV207	297.	12.20	32.	10.	7.	0.96
+	HYDROGRAPH AT	S207O	639.	12.60	143.	39.	28.	0.96
+	2 COMBINED AT	C205	3150.	12.73	654.	196.	142.	4.98
+	ROUTED TO	205206	2870.	13.07	654.	196.	142.	4.98

+	HYDROGRAPH AT	S208	688.	12.77	180.	54.	39.	1.10
+	DIVERSION TO	DIV208	50.	11.70	19.	7.	5.	1.10
+	HYDROGRAPH AT	S208O	688.	12.77	178.	48.	35.	1.10
+	2 COMBINED AT	C206	3340.	13.07	811.	239.	173.	6.09
+	ROUTED TO	206207	3304.	13.13	811.	239.	173.	6.09
+	HYDROGRAPH AT	S209	573.	12.40	91.	26.	19.	0.65
+	2 COMBINED AT	C207R	3399.	13.13	886.	261.	189.	6.74
+	HYDROGRAPH AT	S210	457.	12.17	58.	15.	11.	0.48
+	2 COMBINED AT	C207	3409.	13.13	935.	274.	198.	7.22
+	ROUTED TO	207105	3350.	13.23	933.	274.	198.	7.22
+	HYDROGRAPH AT	S211	438.	12.20	62.	17.	12.	0.49
+	2 COMBINED AT	C105R	3369.	13.23	985.	288.	208.	7.70
+	2 COMBINED AT	C105	5188.	13.17	1528.	438.	317.	12.75
+	HYDROGRAPH AT	S300	664.	12.13	100.	31.	22.	0.62
+	DIVERSION TO	DIV300	664.	12.13	60.	16.	12.	0.62
+	HYDROGRAPH AT	S300O	545.	12.27	51.	14.	10.	0.62
+	HYDROGRAPH AT	S301	1196.	12.10	177.	56.	41.	0.99
+	DIVERSION TO	DIV301	920.	11.90	64.	19.	14.	0.99
+	HYDROGRAPH AT	S301O	1196.	12.10	135.	37.	27.	0.99
+	2 COMBINED AT	C300	1411.	12.27	183.	51.	37.	1.61
+	ROUTED TO	300301	1237.	12.37	180.	51.	37.	1.61
+	HYDROGRAPH AT	S302	489.	12.30	73.	22.	16.	0.47
+	DIVERSION TO	DIV302	137.	11.87	13.	4.	3.	0.47
+	HYDROGRAPH AT	S302O	489.	12.30	67.	18.	13.	0.47
+	2 COMBINED AT	C301	1671.	12.37	244.	68.	49.	2.07
+	ROUTED TO	301302	1564.	12.63	241.	68.	49.	2.07
+	HYDROGRAPH AT	S303	589.	12.40	89.	25.	18.	0.71

+	2 COMBINED AT	C302	1968.	12.57	320.	92.	66.	2.78
+	ROUTED TO	302303	1917.	12.73	319.	92.	66.	2.78
+	HYDROGRAPH AT	S304	682.	12.20	105.	28.	20.	0.82
+	DIVERSION TO	DIV304	682.	12.20	65.	17.	12.	0.82
+	HYDROGRAPH AT	S304O	458.	12.50	43.	11.	8.	0.82
+	2 COMBINED AT	C303	2182.	12.70	356.	101.	73.	3.60
+	2 COMBINED AT	WEST-1	6070.	13.13	1812.	521.	377.	16.36
+	HYDROGRAPH AT	S400	1315.	12.23	189.	58.	42.	1.05
+	DIVERSION TO	DIV400	1304.	12.20	100.	28.	20.	1.05
+	HYDROGRAPH AT	S400O	1301.	12.27	109.	30.	22.	1.05
+	ROUTED TO	C400O	400.	12.70	108.	30.	22.	1.05
+	ROUTED TO	400401	396.	13.03	107.	30.	22.	1.05
+	HYDROGRAPH AT	S401	742.	12.10	90.	25.	18.	0.65
+	DIVERSION TO	DIV401	742.	12.10	70.	18.	13.	0.65
+	HYDROGRAPH AT	S401O	351.	12.40	24.	7.	5.	0.65
+	2 COMBINED AT	C401	453.	12.87	128.	36.	26.	1.69
+	ROUTED TO	401402	436.	13.27	127.	36.	26.	1.69
+	HYDROGRAPH AT	S402	985.	12.07	130.	40.	29.	0.74
+	DIVERSION TO	DIV402	985.	12.07	97.	26.	19.	0.74
+	HYDROGRAPH AT	S402O	540.	12.33	47.	14.	10.	0.74
+	2 COMBINED AT	C402	498.	12.33	167.	49.	35.	2.43
+	ROUTED TO	402403	451.	13.67	165.	48.	35.	2.43
+	HYDROGRAPH AT	S403	788.	12.10	118.	35.	26.	0.56
+	DIVERSION TO	DIV403	788.	12.10	93.	25.	18.	0.56
+	HYDROGRAPH AT	S403O	326.	12.50	36.	11.	8.	0.56
+	2 COMBINED AT	C403	480.	13.67	196.	58.	42.	2.99
+	ROUTED TO	403404	469.	13.87	194.	58.	42.	2.99

+	HYDROGRAPH AT S404	335.	12.20	38.	10.	7.	0.26
+	DIVERSION TO DIV404	174.	11.87	5.	1.	1.	0.26
+	HYDROGRAPH AT S404O	335.	12.20	34.	9.	6.	0.26
+	2 COMBINED AT C404	470.	13.87	221.	66.	48.	3.26
+	2 COMBINED AT WEST-2	6166.	13.13	1957.	567.	410.	19.61
+	HYDROGRAPH AT S500	823.	12.27	181.	57.	41.	1.05
+	DIVERSION TO DIV500	823.	12.27	82.	23.	17.	1.05
+	HYDROGRAPH AT S500O	787.	12.33	121.	34.	24.	1.05
+	ROUTED TO 500501	658.	12.63	119.	34.	24.	1.05
+	HYDROGRAPH AT S501	633.	12.13	94.	28.	20.	0.61
+	DIVERSION TO DIV501	629.	12.13	46.	13.	9.	0.61
+	HYDROGRAPH AT S501O	612.	12.17	58.	16.	11.	0.61
+	2 COMBINED AT C501	865.	12.63	173.	49.	35.	1.67
+	ROUTED TO 501502	811.	12.73	167.	47.	34.	1.67
+	HYDROGRAPH AT S502	418.	12.27	59.	17.	12.	0.40
+	DIVERSION TO DIV502	390.	12.17	24.	7.	5.	0.40
+	HYDROGRAPH AT S502O	418.	12.27	39.	11.	8.	0.40
+	2 COMBINED AT C502L	937.	12.73	204.	57.	41.	2.07
+	HYDROGRAPH AT S503	968.	12.20	163.	50.	36.	0.99
+	DIVERSION TO DIV503	625.	11.93	43.	13.	9.	0.99
+	HYDROGRAPH AT S503O	968.	12.20	137.	37.	27.	0.99
+	2 COMBINED AT C502I	1531.	12.33	333.	92.	66.	3.07
+	ROUTED TO C502O	1378.	12.47	333.	92.	66.	3.07
+	ROUTED TO 502505	1304.	12.87	319.	86.	62.	3.07
+	HYDROGRAPH AT S504	285.	12.17	54.	17.	12.	0.33
+	DIVERSION TO DIV504	285.	12.17	49.	13.	9.	0.33
+	HYDROGRAPH AT S504O	56.	13.27	11.	4.	3.	0.33

+	2 COMBINED AT	C505L	1303.	12.87	328.	89.	64.	3.39
+	HYDROGRAPH AT	S505	177.	12.13	20.	6.	4.	0.14
+	DIVERSION TO	DIV505	47.	11.73	3.	1.	1.	0.14
+	HYDROGRAPH AT	S505O	177.	12.13	19.	5.	4.	0.14
+	ROUTED TO	C503O	86.	12.33	19.	5.	4.	0.14
+	ROUTED TO	503505	84.	12.83	18.	5.	3.	0.14
+	HYDROGRAPH AT	S506	194.	12.17	26.	8.	5.	0.15
+	DIVERSION TO	DIV506	183.	12.07	11.	3.	2.	0.15
+	HYDROGRAPH AT	S506O	194.	12.17	17.	5.	3.	0.15
+	ROUTED TO	C504O	75.	12.50	17.	5.	3.	0.15
+	ROUTED TO	504505	73.	13.23	17.	5.	3.	0.15
+	HYDROGRAPH AT	S507	822.	12.10	97.	27.	19.	0.67
+	DIVERSION TO	DIV507	822.	12.10	89.	23.	17.	0.67
+	HYDROGRAPH AT	S507O	140.	12.67	12.	4.	3.	0.67
+	3 COMBINED AT	C505R	256.	12.70	47.	13.	9.	0.96
+	2 COMBINED AT	C505	1498.	12.83	366.	100.	72.	4.35
+	ROUTED TO	505509	1441.	13.23	343.	89.	64.	4.35
+	HYDROGRAPH AT	S508	379.	12.07	46.	13.	10.	0.29
+	DIVERSION TO	DIV508	379.	12.07	40.	10.	8.	0.29
+	HYDROGRAPH AT	S508O	100.	12.50	10.	3.	2.	0.29
+	2 COMBINED AT	C509L	1449.	13.23	350.	91.	66.	4.65
+	HYDROGRAPH AT	S509	241.	12.03	29.	9.	6.	0.17
+	DIVERSION TO	DIV509	168.	11.77	9.	3.	2.	0.17
+	HYDROGRAPH AT	S509O	241.	12.03	23.	6.	4.	0.17
+	ROUTED TO	C506O	85.	12.30	23.	6.	4.	0.17
+	ROUTED TO	506508	85.	12.50	23.	6.	4.	0.17
+	HYDROGRAPH AT	S510	172.	12.10	27.	8.	6.	0.13

+	DIVERSION TO	DIV510	172.	12.10	20.	6.	4.	0.13
+	HYDROGRAPH AT	S510O	88.	12.43	10.	3.	2.	0.13
+	2 COMBINED AT	C508R	173.	12.43	33.	9.	7.	0.30
+	HYDROGRAPH AT	S511	501.	12.07	65.	19.	14.	0.38
+	DIVERSION TO	DIV511	494.	12.03	32.	9.	6.	0.38
+	HYDROGRAPH AT	S511O	497.	12.10	39.	11.	8.	0.38
+	ROUTED TO	C507O	86.	12.70	39.	11.	8.	0.38
+	ROUTED TO	507508	85.	13.07	38.	11.	8.	0.38
+	HYDROGRAPH AT	S512	289.	12.10	49.	15.	11.	0.21
+	DIVERSION TO	DIV512	289.	12.10	36.	10.	7.	0.21
+	HYDROGRAPH AT	S512O	143.	12.50	18.	5.	4.	0.21
+	2 COMBINED AT	C508L	188.	12.53	56.	16.	12.	0.60
+	2 COMBINED AT	C508	349.	12.50	88.	25.	18.	0.90
+	ROUTED TO	508509	287.	13.17	84.	25.	18.	0.90
+	HYDROGRAPH AT	S513	813.	12.13	117.	34.	24.	0.78
+	DIVERSION TO	DIV513	813.	12.13	110.	29.	21.	0.78
+	HYDROGRAPH AT	S513O	98.	13.10	15.	5.	4.	0.78
+	2 COMBINED AT	C509R	338.	13.17	96.	29.	21.	1.67
+	2 COMBINED AT	C509	1651.	13.23	421.	114.	82.	6.32
+	ROUTED TO	509510	1640.	13.33	420.	114.	82.	6.32
+	HYDROGRAPH AT	S514	837.	12.10	130.	39.	28.	0.65
+	DIVERSION TO	DIV514	837.	12.10	98.	26.	19.	0.65
+	HYDROGRAPH AT	S514O	414.	12.50	43.	12.	9.	0.65
+	2 COMBINED AT	C510	1681.	13.30	447.	122.	89.	6.97
+	ROUTED TO	510511	1638.	13.63	442.	122.	89.	6.97
+	HYDROGRAPH AT	S515	1634.	12.10	234.	68.	49.	1.10
+	DIVERSION TO	DIV515	1634.	12.10	161.	43.	31.	1.10

+	HYDROGRAPH AT	S515O	1019.	12.30	91.	25.	18.	1.10
+	2 COMBINED AT	C511	1669.	13.60	499.	140.	102.	8.07
+	ROUTED TO	511512	1563.	14.00	490.	139.	101.	8.07
+	HYDROGRAPH AT	S516	619.	12.13	105.	34.	24.	0.54
+	DIVERSION TO	DIV516	619.	12.13	72.	20.	14.	0.54
+	HYDROGRAPH AT	S516O	406.	12.40	47.	14.	10.	0.54
+	2 COMBINED AT	C512	1568.	14.03	519.	149.	109.	8.61
+	2 COMBINED AT	WEST-3	6260.	13.13	2308.	671.	488.	28.22
+	HYDROGRAPH AT	S600	1426.	12.50	266.	79.	57.	2.02
+	ROUTED TO	600601	1408.	12.57	266.	79.	57.	2.02
+	HYDROGRAPH AT	S601	935.	12.37	170.	54.	39.	0.90
+	2 COMBINED AT	C601	2150.	12.50	430.	132.	95.	2.92
+	ROUTED TO	601602	2124.	12.60	430.	132.	95.	2.92
+	HYDROGRAPH AT	S603	355.	13.10	121.	39.	28.	0.67
+	2 COMBINED AT	C602L	2289.	12.63	545.	169.	122.	3.58
+	HYDROGRAPH AT	S602	1411.	12.53	302.	95.	68.	1.88
+	2 COMBINED AT	C602	3603.	12.57	833.	259.	187.	5.47
+	ROUTED TO	602603	3469.	12.80	789.	216.	155.	5.47
+	HYDROGRAPH AT	S606	530.	12.40	109.	34.	25.	0.66
+	2 COMBINED AT	C603L	3754.	12.77	886.	246.	178.	6.13
+	HYDROGRAPH AT	S605	820.	12.50	176.	55.	40.	1.09
+	HYDROGRAPH AT	S604	1493.	12.80	422.	132.	96.	2.66
+	3 COMBINED AT	C603	5609.	12.77	1419.	415.	299.	9.87
+	ROUTED TO	603604	5471.	12.93	1371.	369.	266.	9.87
+	HYDROGRAPH AT	S609	342.	12.50	83.	25.	18.	0.56
+	DIVERSION TO	DIV609	194.	12.17	17.	5.	4.	0.56
+	HYDROGRAPH AT	S609O	342.	12.50	74.	20.	15.	0.56

+	2 COMBINED AT	C604R	5667.	12.90	1431.	386.	278.	10.43
+	HYDROGRAPH AT	S607	588.	12.50	141.	44.	31.	0.82
+	DIVERSION TO	DIV607	13.	7.87	10.	3.	2.	0.82
+	HYDROGRAPH AT	S607O	588.	12.50	141.	41.	30.	0.82
+	2 COMBINED AT	C604	6021.	12.90	1554.	421.	304.	11.25
+	ROUTED TO	604605	5986.	12.93	1554.	421.	304.	11.25
+	HYDROGRAPH AT	S608	579.	12.27	91.	28.	20.	0.51
+	DIVERSION TO	DIV608	39.	11.57	13.	5.	3.	0.51
+	HYDROGRAPH AT	S608O	579.	12.27	88.	24.	17.	0.51
+	2 COMBINED AT	C605	6094.	12.93	1628.	442.	318.	11.76
+	ROUTED TO	605606	6019.	13.07	1620.	436.	314.	11.76
+	HYDROGRAPH AT	S610	563.	12.20	110.	34.	25.	0.60
+	2 COMBINED AT	C606L	6147.	13.03	1714.	467.	336.	12.36
+	HYDROGRAPH AT	S612	691.	12.23	149.	45.	33.	0.81
+	2 COMBINED AT	C606	6375.	13.03	1843.	507.	365.	13.17
+	ROUTED TO	606608	6365.	13.07	1840.	504.	363.	13.17
+	HYDROGRAPH AT	S611	578.	12.30	93.	29.	21.	0.57
+	ROUTED TO	607608	545.	12.50	93.	29.	21.	0.57
+	HYDROGRAPH AT	S613	1354.	12.63	303.	95.	68.	1.80
+	3 COMBINED AT	C608	7340.	13.00	2182.	612.	441.	15.53
+	ROUTED TO	608609	7262.	13.13	2170.	603.	435.	15.53
+	HYDROGRAPH AT	S614	733.	12.63	178.	56.	40.	1.08
+	2 COMBINED AT	C609	7635.	13.10	2321.	651.	469.	16.61
+	ROUTED TO	609611	7523.	13.30	2292.	624.	450.	16.61
+	HYDROGRAPH AT	S617	707.	12.17	103.	30.	22.	0.68
+	2 COMBINED AT	C611R	7550.	13.30	2374.	650.	468.	17.29
+	HYDROGRAPH AT	S615	860.	12.63	221.	72.	52.	1.05

+	ROUTED TO 610611	838.	12.83	221.	72.	52.	1.05
+	HYDROGRAPH AT S616	433.	12.37	76.	22.	16.	0.50
+	DIVERSION TO DIV616	366.	12.20	22.	6.	5.	0.50
+	HYDROGRAPH AT S616O	433.	12.37	59.	16.	11.	0.50
+	2 COMBINED AT C611L	1054.	12.77	276.	87.	63.	1.56
+	2 COMBINED AT C611	8112.	13.27	2610.	725.	523.	18.85
+	ROUTED TO 611613	8067.	13.30	2600.	715.	516.	18.85
+	HYDROGRAPH AT S618	665.	12.57	144.	42.	30.	0.96
+	2 COMBINED AT C613R	8284.	13.30	2718.	751.	541.	19.81
+	HYDROGRAPH AT S619	871.	12.47	157.	49.	35.	0.83
+	ROUTED TO 612613	836.	12.60	157.	49.	35.	0.83
+	HYDROGRAPH AT S620	342.	12.50	81.	25.	18.	0.44
+	2 COMBINED AT C613L	1152.	12.60	237.	73.	53.	1.27
+	2 COMBINED AT C613	8647.	13.30	2917.	814.	587.	21.08
+	ROUTED TO 613614	8589.	13.37	2906.	803.	579.	21.08
+	HYDROGRAPH AT S621	928.	12.30	109.	28.	20.	0.92
+	2 COMBINED AT C614	8592.	13.37	2992.	825.	595.	22.00
+	ROUTED TO 614615	8519.	13.47	2980.	815.	587.	22.00
+	HYDROGRAPH AT S622	492.	12.70	105.	27.	20.	0.90
+	2 COMBINED AT C615	8674.	13.47	3063.	836.	603.	22.90
+	2 COMBINED AT WEST-4	13161.	13.33	5021.	1408.	1020.	51.12
+	HYDROGRAPH AT S700	648.	12.10	81.	22.	16.	0.61
+	HYDROGRAPH AT S701	447.	12.30	108.	31.	22.	0.72
+	DIVERSION TO DIV701	3.	2.40	1.	0.	0.	0.72
+	HYDROGRAPH AT S701O	447.	12.30	108.	31.	22.	0.72
+	HYDROGRAPH AT S702	280.	12.10	41.	12.	9.	0.26
+	DIVERSION TO DIV702	280.	12.10	31.	8.	6.	0.26

+	HYDROGRAPH AT S702O	126.	12.50	13.	4.	3.	0.26
+	HYDROGRAPH AT S703	229.	12.27	29.	7.	5.	0.26
+	DIVERSION TO DIV703	212.	12.17	10.	3.	2.	0.26
+	HYDROGRAPH AT S703O	229.	12.27	19.	5.	3.	0.26
+	HYDROGRAPH AT S704	466.	12.10	56.	16.	11.	0.41
+	ROUTED TO 704705	426.	12.33	56.	16.	11.	0.41
+	HYDROGRAPH AT S705	984.	12.10	141.	43.	31.	0.75
+	2 COMBINED AT C705	1254.	12.13	197.	58.	42.	1.16
+	ROUTED TO C705O	647.	12.57	197.	58.	42.	1.16
+	ROUTED TO 705OAF	644.	12.73	197.	58.	42.	1.16
+	HYDROGRAPH AT S705AF	203.	12.30	37.	9.	7.	0.18
+	DIVERSION TO DIV705	189.	12.20	11.	3.	2.	0.18
+	HYDROGRAPH AT 705AFO	203.	12.30	27.	7.	5.	0.18
+	2 COMBINED AT C705AF	775.	12.53	222.	64.	47.	1.34
+	5 COMBINED AT WEST-5	1793.	12.30	430.	122.	88.	3.19
+	HYDROGRAPH AT S706	945.	12.07	132.	41.	29.	0.71
+	DIVERSION TO DIV706	945.	12.07	93.	25.	18.	0.71
+	HYDROGRAPH AT S706O	590.	12.30	53.	15.	11.	0.71
+	HYDROGRAPH AT S707	854.	12.10	135.	43.	31.	0.64
+	DIVERSION TO DIV707	854.	12.10	95.	26.	19.	0.64
+	HYDROGRAPH AT S707O	536.	12.33	57.	17.	12.	0.64
+	HYDROGRAPH AT S728	278.	12.17	54.	17.	13.	0.28
+	DIVERSION TO DIV728	278.	12.17	31.	9.	6.	0.28
+	HYDROGRAPH AT S728O	223.	12.37	30.	9.	6.	0.28
+	5 COMBINED AT WEST	13857.	13.30	5402.	1522.	1103.	55.94
+	HYDROGRAPH AT S708	1068.	12.07	138.	36.	26.	0.71
+	DIVERSION TO DIV708	1068.	12.07	84.	21.	15.	0.71

+ HYDROGRAPH AT	S708O	781.	12.20	58.	15.	11.	0.71
+ HYDROGRAPH AT	S709	624.	12.10	105.	29.	21.	0.44
+ DIVERSION TO	DIV709	603.	12.03	42.	11.	8.	0.44
+ HYDROGRAPH AT	S709O	624.	12.10	68.	18.	13.	0.44
+ ROUTED TO	C709O	286.	12.50	68.	18.	13.	0.44
+ ROUTED TO	709710	285.	12.60	68.	18.	13.	0.44
+ HYDROGRAPH AT	S710	190.	12.00	24.	6.	5.	0.11
+ DIVERSION TO	DIV710	174.	11.87	9.	2.	2.	0.11
+ HYDROGRAPH AT	S710O	190.	12.00	16.	4.	3.	0.11
+ 2 COMBINED AT	C710I	319.	12.53	83.	22.	16.	0.55
+ ROUTED TO	C710O	279.	12.87	83.	22.	16.	0.55
+ HYDROGRAPH AT	S711	282.	12.00	38.	11.	8.	0.16
+ DIVERSION TO	DIV711	280.	11.93	20.	5.	4.	0.16
+ HYDROGRAPH AT	S711O	282.	12.00	21.	6.	4.	0.16
+ ROUTED TO	C711O	130.	12.17	21.	6.	4.	0.16
+ ROUTED TO	711712	127.	12.30	21.	6.	4.	0.16
+ HYDROGRAPH AT	S712	120.	12.00	15.	4.	3.	0.07
+ DIVERSION TO	DIV712	120.	11.87	8.	2.	2.	0.07
+ HYDROGRAPH AT	S712O	120.	12.00	8.	2.	2.	0.07
+ 2 COMBINED AT	C712I	183.	12.03	28.	8.	6.	0.23
+ ROUTED TO	C712O	145.	12.37	28.	8.	6.	0.23
+ ROUTED TO	712714	145.	12.43	28.	8.	6.	0.23
+ HYDROGRAPH AT	S713	187.	12.00	24.	6.	5.	0.11
+ DIVERSION TO	DIV713	136.	11.70	5.	1.	1.	0.11
+ HYDROGRAPH AT	S713O	187.	12.00	19.	5.	4.	0.11
+ ROUTED TO	C713O	117.	12.13	19.	5.	4.	0.11
+ ROUTED TO	713714	117.	12.17	19.	5.	4.	0.11

+	HYDROGRAPH AT	S714	94.	12.03	10.	2.	2.	0.06
+	3 COMBINED AT	C714	280.	12.27	57.	15.	11.	0.39
+	HYDROGRAPH AT	S715	287.	12.13	50.	13.	10.	0.22
+	DIVERSION TO	DIV715	152.	11.80	8.	2.	1.	0.22
+	HYDROGRAPH AT	S715O	287.	12.13	44.	11.	8.	0.22
+	HYDROGRAPH AT	S716	1514.	12.13	251.	71.	51.	1.13
+	DIVERSION TO	DIV716	1514.	12.13	149.	39.	28.	1.13
+	HYDROGRAPH AT	S716O	1113.	12.33	119.	32.	23.	1.13
+	ROUTED TO	C716O	433.	12.80	119.	32.	23.	1.13
+	ROUTED TO	716717	430.	12.93	118.	32.	23.	1.13
+	HYDROGRAPH AT	S717	473.	12.10	68.	19.	13.	0.29
+	DIVERSION TO	DIV717	327.	11.83	16.	4.	3.	0.29
+	HYDROGRAPH AT	S717O	473.	12.10	56.	15.	10.	0.29
+	2 COMBINED AT	C717	482.	12.80	170.	46.	33.	1.41
+	ROUTED TO	717718	462.	13.43	168.	46.	33.	1.41
+	HYDROGRAPH AT	S718	346.	12.53	103.	28.	20.	0.44
+	DIVERSION TO	DIV718	328.	12.43	26.	7.	5.	0.44
+	HYDROGRAPH AT	S718O	346.	12.53	82.	21.	15.	0.44
+	2 COMBINED AT	C718	714.	12.57	246.	66.	48.	1.86
+	HYDROGRAPH AT	S719	183.	12.13	40.	12.	9.	0.15
+	DIVERSION TO	DIV719	183.	12.13	17.	4.	3.	0.15
+	HYDROGRAPH AT	S719O	176.	12.20	27.	8.	5.	0.15
+	6 COMBINED AT	EAST-1	1742.	12.53	490.	132.	95.	3.88
+	HYDROGRAPH AT	S720	506.	12.10	87.	24.	18.	0.37
+	DIVERSION TO	DIV720	506.	12.10	45.	12.	8.	0.37
+	HYDROGRAPH AT	S720O	431.	12.23	48.	13.	9.	0.37
+	HYDROGRAPH AT	S721	564.	12.03	75.	24.	17.	0.34

+	DIVERSION TO	DIV721	564.	12.03	55.	15.	11.	0.34
+	HYDROGRAPH AT	S721O	324.	12.20	28.	8.	6.	0.34
+	ROUTED TO	C721O	99.	12.57	28.	8.	6.	0.34
+	ROUTED TO	721722	93.	13.17	28.	8.	6.	0.34
+	HYDROGRAPH AT	S722	1210.	12.13	202.	57.	41.	0.95
+	DIVERSION TO	DIV722	1210.	12.13	120.	32.	23.	0.95
+	HYDROGRAPH AT	S722O	894.	12.37	95.	25.	18.	0.95
+	2 COMBINED AT	C722	864.	12.37	120.	33.	24.	1.29
+	HYDROGRAPH AT	S723	141.	12.03	20.	6.	4.	0.09
+	DIVERSION TO	DIV723	131.	11.90	8.	2.	2.	0.09
+	HYDROGRAPH AT	S723O	141.	12.03	13.	4.	3.	0.09
+	HYDROGRAPH AT	S724	1643.	12.13	300.	93.	67.	1.16
+	DIVERSION TO	DIV724	1643.	12.13	186.	51.	36.	1.16
+	HYDROGRAPH AT	S724O	1180.	12.33	150.	43.	31.	1.16
+	HYDROGRAPH AT	S725	1256.	12.20	271.	85.	61.	1.16
+	DIVERSION TO	DIV725	1256.	12.20	195.	54.	39.	1.16
+	HYDROGRAPH AT	S725O	663.	12.77	107.	31.	23.	1.16
+	5 COMBINED AT	EAST-2	2169.	12.37	407.	117.	84.	4.06
+	HYDROGRAPH AT	S726	493.	12.03	57.	17.	12.	0.33
+	DIVERSION TO	DIV726	493.	12.03	40.	11.	8.	0.33
+	HYDROGRAPH AT	S726O	396.	12.13	22.	6.	5.	0.33
+	ROUTED TO	726727	146.	12.57	22.	6.	5.	0.33
+	HYDROGRAPH AT	S727	424.	12.17	91.	29.	21.	0.38
+	DIVERSION TO	DIV727	424.	12.17	61.	17.	12.	0.38
+	HYDROGRAPH AT	S727O	270.	12.57	41.	12.	9.	0.38
+	2 COMBINED AT	C727	415.	12.57	63.	18.	13.	0.71
+	4 COMBINED AT	TOTAL	15133.	13.23	5957.	1682.	1218.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 25-Year, 6-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN  1998                *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   10AUG01  TIME  11:14:12   *
*                                       *
*****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: Fr25-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 25-year, 6-hour storm event. A companion model is also created for the existing condition 25-year, 24-hour storm event. Both models (25-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 25-year, 6-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

```
22 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

24 JD          INDEX STORM NO. 1
                     STRM       2.64  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

25 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD        INDEX STORM NO. 2
                STRM        2.62  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

29 JD        INDEX STORM NO. 3
                STRM        2.59  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

30 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

33 JD        INDEX STORM NO. 4
                STRM        2.43  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

34 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

37 JD        INDEX STORM NO. 5
                STRM        2.14  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

38 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	462.	4.53	88.	22.	16.	0.57		
+	DIVERSION TO	DIV100	196.	4.23	13.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	462.	4.53	76.	19.	14.	0.57		
+	ROUTED TO	100102	439.	4.83	76.	19.	14.	0.57		
+	HYDROGRAPH AT	S101	621.	4.43	86.	22.	16.	0.63		
+	2 COMBINED AT	C102R	715.	4.70	149.	38.	27.	1.20		
+	HYDROGRAPH AT	S102	432.	4.27	73.	18.	13.	0.45		
+	DIVERSION TO	DIV102	432.	4.27	29.	7.	5.	0.45		
+	HYDROGRAPH AT	S102O	419.	4.33	45.	11.	8.	0.45		
+	ROUTED TO	101102	328.	4.73	45.	11.	8.	0.45		
+	HYDROGRAPH AT	S103	307.	4.60	58.	15.	10.	0.40		
+	2 COMBINED AT	C102L	541.	4.73	97.	24.	18.	0.84		
+	2 COMBINED AT	C102	1093.	4.77	228.	58.	42.	2.05		
+	ROUTED TO	102103	1043.	5.03	228.	58.	42.	2.05		
+	HYDROGRAPH AT	S104	859.	4.50	138.	35.	25.	0.90		
+	DIVERSION TO	DIV104	717.	4.37	41.	10.	7.	0.90		
+	HYDROGRAPH AT	S104O	859.	4.50	98.	24.	18.	0.90		
	2 COMBINED AT									

+	C103R	1336.	4.97	302.	76.	55.	2.95
HYDROGRAPH AT +	S105	428.	4.37	93.	24.	17.	0.59
DIVERSION TO +	DIV105	428.	4.37	32.	8.	6.	0.59
HYDROGRAPH AT +	S105O	407.	4.53	62.	16.	11.	0.59
2 COMBINED AT +	C103	1511.	4.97	342.	86.	62.	3.54
ROUTED TO +	103104	1495.	5.10	342.	86.	62.	3.54
HYDROGRAPH AT +	S106	513.	4.27	79.	20.	14.	0.57
2 COMBINED AT +	C104	1569.	5.07	395.	100.	72.	4.11
ROUTED TO +	104105	1536.	5.33	394.	100.	72.	4.11
HYDROGRAPH AT +	S107	670.	4.50	109.	27.	20.	0.94
2 COMBINED AT +	C105L	1627.	5.30	464.	118.	85.	5.05
HYDROGRAPH AT +	S200	851.	4.50	146.	37.	26.	0.96
ROUTED TO +	200201	839.	4.57	145.	37.	26.	0.96
HYDROGRAPH AT +	S201	378.	4.40	56.	14.	10.	0.35
2 COMBINED AT +	C201	1033.	4.53	193.	49.	35.	1.31
ROUTED TO +	201203	1012.	4.63	193.	49.	35.	1.31
HYDROGRAPH AT +	S202	181.	4.23	21.	5.	4.	0.13
ROUTED TO +	202203	172.	4.30	21.	5.	4.	0.13
HYDROGRAPH AT +	S203	287.	4.33	62.	16.	11.	0.37
DIVERSION TO +	DIV203	287.	4.33	31.	8.	6.	0.37
HYDROGRAPH AT +	S203O	245.	4.60	32.	8.	6.	0.37
3 COMBINED AT +	C203R	1145.	4.73	231.	58.	42.	1.81
HYDROGRAPH AT +	S204	673.	4.63	138.	35.	25.	0.95
DIVERSION TO +	DIV204	16.	2.10	3.	1.	1.	0.95
HYDROGRAPH AT +	S204O	673.	4.63	137.	34.	25.	0.95
2 COMBINED AT +	C203	1558.	4.73	342.	86.	62.	2.76
ROUTED TO +	203204	1539.	4.80	342.	86.	62.	2.76
HYDROGRAPH AT							

+		S205	513.	4.33	70.	18.	13.	0.41
	DIVERSION TO							
+		DIV205	512.	4.30	29.	7.	5.	0.41
	HYDROGRAPH AT							
+		S205O	498.	4.37	42.	10.	8.	0.41
	2 COMBINED AT							
+		C204	1676.	4.80	369.	93.	67.	3.17
	ROUTED TO							
+		204205	1634.	4.90	369.	93.	67.	3.17
	HYDROGRAPH AT							
+		S206	526.	4.47	132.	34.	24.	0.85
	DIVERSION TO							
+		DIV206	526.	4.47	85.	21.	15.	0.85
	HYDROGRAPH AT							
+		S206O	277.	5.23	49.	12.	9.	0.85
	2 COMBINED AT							
+		C205L	1634.	4.90	404.	102.	74.	4.03
	HYDROGRAPH AT							
+		S207	609.	4.73	147.	37.	27.	0.96
	DIVERSION TO							
+		DIV207	539.	4.57	40.	10.	7.	0.96
	HYDROGRAPH AT							
+		S207O	609.	4.73	110.	27.	20.	0.96
	2 COMBINED AT							
+		C205	1923.	4.90	466.	118.	85.	4.98
	ROUTED TO							
+		205206	1817.	5.33	463.	118.	85.	4.98
	HYDROGRAPH AT							
+		S208	647.	4.90	171.	44.	31.	1.10
	DIVERSION TO							
+		DIV208	327.	4.50	26.	7.	5.	1.10
	HYDROGRAPH AT							
+		S208O	647.	4.90	149.	37.	27.	1.10
	2 COMBINED AT							
+		C206	2146.	5.33	573.	145.	105.	6.09
	ROUTED TO							
+		206207	2127.	5.40	572.	145.	105.	6.09
	HYDROGRAPH AT							
+		S209	607.	4.50	90.	23.	16.	0.65
	2 COMBINED AT							
+		C207R	2174.	5.40	628.	160.	115.	6.74
	HYDROGRAPH AT							
+		S210	512.	4.20	61.	15.	11.	0.48
	2 COMBINED AT							
+		C207	2167.	5.40	661.	169.	121.	7.22
	ROUTED TO							
+		207105	2136.	5.50	659.	168.	121.	7.22
	HYDROGRAPH AT							
+		S211	479.	4.23	65.	16.	12.	0.49
	2 COMBINED AT							
+		C105R	2135.	5.50	694.	178.	128.	7.70
	2 COMBINED AT							
+		C105	3169.	5.47	1028.	264.	190.	12.75
	HYDROGRAPH AT							

+		S300	773.	4.17	99.	25.	18.	0.62
	DIVERSION TO							
+		DIV300	773.	4.17	66.	16.	12.	0.62
	HYDROGRAPH AT							
+		S300O	480.	4.40	34.	8.	6.	0.62
	HYDROGRAPH AT							
+		S301	1253.	4.17	169.	42.	31.	0.99
	DIVERSION TO							
+		DIV301	1208.	4.10	76.	19.	14.	0.99
	HYDROGRAPH AT							
+		S301O	1161.	4.23	93.	23.	17.	0.99
	2 COMBINED AT							
+		C300	1027.	4.23	114.	28.	21.	1.61
	ROUTED TO							
+		300301	863.	4.50	114.	28.	21.	1.61
	HYDROGRAPH AT							
+		S302	597.	4.33	73.	18.	13.	0.47
	DIVERSION TO							
+		DIV302	365.	4.17	17.	4.	3.	0.47
	HYDROGRAPH AT							
+		S302O	597.	4.33	57.	14.	10.	0.47
	2 COMBINED AT							
+		C301	1147.	4.50	158.	39.	28.	2.07
	ROUTED TO							
+		301302	1075.	4.77	158.	39.	28.	2.07
	HYDROGRAPH AT							
+		S303	592.	4.50	87.	22.	16.	0.71
	2 COMBINED AT							
+		C302	1311.	4.73	221.	56.	40.	2.78
	ROUTED TO							
+		302303	1225.	4.97	221.	56.	40.	2.78
	HYDROGRAPH AT							
+		S304	634.	4.27	104.	26.	19.	0.82
	DIVERSION TO							
+		DIV304	634.	4.27	67.	17.	12.	0.82
	HYDROGRAPH AT							
+		S304O	337.	4.63	37.	9.	7.	0.82
	2 COMBINED AT							
+		C303	1315.	4.97	229.	58.	42.	3.60
	2 COMBINED AT							
+		WEST-1	3459.	5.40	1126.	289.	208.	16.36
	HYDROGRAPH AT							
+		S400	1371.	4.30	185.	46.	33.	1.05
	DIVERSION TO							
+		DIV400	1371.	4.30	112.	28.	20.	1.05
	HYDROGRAPH AT							
+		S400O	928.	4.53	74.	18.	13.	1.05
	ROUTED TO							
+		C400O	358.	4.87	74.	18.	13.	1.05
	ROUTED TO							
+		400401	354.	5.20	74.	18.	13.	1.05
	HYDROGRAPH AT							
+		S401	843.	4.17	91.	23.	16.	0.65
	DIVERSION TO							

+		DIV401	843.	4.17	73.	18.	13.	0.65
	HYDROGRAPH AT							
+		S401O	344.	4.50	18.	5.	3.	0.65
	2 COMBINED AT							
+		C401	380.	5.10	79.	20.	14.	1.69
	ROUTED TO							
+		401402	349.	5.73	79.	20.	14.	1.69
	HYDROGRAPH AT							
+		S402	1164.	4.13	130.	33.	23.	0.74
	DIVERSION TO							
+		DIV402	1164.	4.13	104.	26.	19.	0.74
	HYDROGRAPH AT							
+		S402O	420.	4.43	26.	6.	5.	0.74
	2 COMBINED AT							
+		C402	361.	5.77	88.	22.	16.	2.43
	ROUTED TO							
+		402403	353.	6.13	88.	22.	16.	2.43
	HYDROGRAPH AT							
+		S403	1031.	4.10	117.	29.	21.	0.56
	DIVERSION TO							
+		DIV403	1031.	4.10	100.	25.	18.	0.56
	HYDROGRAPH AT							
+		S403O	300.	4.53	18.	5.	3.	0.56
	2 COMBINED AT							
+		C403	354.	6.13	96.	24.	17.	2.99
	ROUTED TO							
+		403404	343.	6.33	96.	24.	17.	2.99
	HYDROGRAPH AT							
+		S404	453.	4.20	40.	10.	7.	0.26
	DIVERSION TO							
+		DIV404	202.	4.00	6.	1.	1.	0.26
	HYDROGRAPH AT							
+		S404O	453.	4.20	34.	8.	6.	0.26
	2 COMBINED AT							
+		C404	333.	6.33	121.	30.	22.	3.26
	2 COMBINED AT							
+		WEST-2	3454.	5.40	1182.	303.	218.	19.61
	HYDROGRAPH AT							
+		S500	765.	4.37	170.	43.	31.	1.05
	DIVERSION TO							
+		DIV500	765.	4.37	94.	23.	17.	1.05
	HYDROGRAPH AT							
+		S500O	576.	4.77	78.	20.	14.	1.05
	ROUTED TO							
+		500501	466.	5.03	78.	20.	14.	1.05
	HYDROGRAPH AT							
+		S501	703.	4.20	93.	23.	17.	0.61
	DIVERSION TO							
+		DIV501	703.	4.20	51.	13.	9.	0.61
	HYDROGRAPH AT							
+		S501O	526.	4.37	43.	11.	8.	0.61
	2 COMBINED AT							
+		C501	540.	5.03	107.	27.	19.	1.67
	ROUTED TO							

+		501502	502.	5.20	105.	26.	19.	1.67
+	HYDROGRAPH AT	S502	513.	4.33	59.	15.	11.	0.40
+	DIVERSION TO	DIV502	513.	4.33	27.	7.	5.	0.40
+	HYDROGRAPH AT	S502O	474.	4.40	33.	8.	6.	0.40
+	2 COMBINED AT	C502L	544.	5.20	125.	31.	22.	2.07
+	HYDROGRAPH AT	S503	919.	4.27	156.	39.	28.	0.99
+	DIVERSION TO	DIV503	873.	4.20	51.	13.	9.	0.99
+	HYDROGRAPH AT	S503O	919.	4.27	106.	26.	19.	0.99
+	2 COMBINED AT	C502I	920.	4.67	207.	52.	37.	3.07
+	ROUTED TO	C502O	914.	4.70	207.	52.	37.	3.07
+	ROUTED TO	502505	828.	5.03	198.	49.	36.	3.07
+	HYDROGRAPH AT	S504	324.	4.23	55.	14.	10.	0.33
+	DIVERSION TO	DIV504	324.	4.23	53.	13.	9.	0.33
+	HYDROGRAPH AT	S504O	25.	5.83	2.	1.	0.	0.33
+	2 COMBINED AT	C505L	828.	5.03	198.	49.	36.	3.39
+	HYDROGRAPH AT	S505	272.	4.13	20.	5.	4.	0.14
+	DIVERSION TO	DIV505	97.	3.93	4.	1.	1.	0.14
+	HYDROGRAPH AT	S505O	272.	4.13	17.	4.	3.	0.14
+	ROUTED TO	C503O	88.	4.37	17.	4.	3.	0.14
+	ROUTED TO	503505	86.	4.90	16.	4.	3.	0.14
+	HYDROGRAPH AT	S506	274.	4.17	26.	7.	5.	0.15
+	DIVERSION TO	DIV506	266.	4.13	12.	3.	2.	0.15
+	HYDROGRAPH AT	S506O	267.	4.20	14.	4.	3.	0.15
+	ROUTED TO	C504O	77.	4.53	14.	4.	3.	0.15
+	ROUTED TO	504505	74.	5.27	14.	4.	3.	0.15
+	HYDROGRAPH AT	S507	963.	4.13	99.	25.	18.	0.67
+	DIVERSION TO	DIV507	963.	4.13	91.	23.	16.	0.67
	HYDROGRAPH AT							

+	S507O	163.	4.67	8.	2.	1.	0.67
3 COMBINED AT +	C505R	207.	4.67	34.	8.	6.	0.96
2 COMBINED AT +	C505	857.	5.03	204.	51.	37.	4.35
ROUTED TO +	505509	714.	5.47	189.	47.	34.	4.35
HYDROGRAPH AT +	S508	537.	4.07	47.	12.	9.	0.29
DIVERSION TO +	DIV508	537.	4.07	42.	10.	8.	0.29
HYDROGRAPH AT +	S508O	127.	4.47	6.	1.	1.	0.29
2 COMBINED AT +	C509L	714.	5.47	189.	47.	34.	4.65
HYDROGRAPH AT +	S509	372.	4.03	29.	7.	5.	0.17
DIVERSION TO +	DIV509	282.	3.93	10.	3.	2.	0.17
HYDROGRAPH AT +	S509O	372.	4.03	19.	5.	3.	0.17
ROUTED TO +	C506O	86.	4.33	19.	5.	3.	0.17
ROUTED TO +	506508	85.	4.53	19.	5.	3.	0.17
HYDROGRAPH AT +	S510	237.	4.10	28.	7.	5.	0.13
DIVERSION TO +	DIV510	237.	4.10	22.	6.	4.	0.13
HYDROGRAPH AT +	S510O	92.	4.47	5.	1.	1.	0.13
2 COMBINED AT +	C508R	177.	4.47	24.	6.	4.	0.30
HYDROGRAPH AT +	S511	699.	4.10	66.	17.	12.	0.38
DIVERSION TO +	DIV511	699.	4.10	35.	9.	6.	0.38
HYDROGRAPH AT +	S511O	613.	4.17	31.	8.	6.	0.38
ROUTED TO +	C507O	85.	4.67	31.	8.	6.	0.38
ROUTED TO +	507508	84.	5.07	30.	8.	6.	0.38
HYDROGRAPH AT +	S512	383.	4.13	49.	12.	9.	0.21
DIVERSION TO +	DIV512	383.	4.13	40.	10.	7.	0.21
HYDROGRAPH AT +	S512O	133.	4.57	9.	2.	2.	0.21
2 COMBINED AT +	C508L	158.	4.57	39.	10.	8.	0.60
2 COMBINED AT +	C508	275.	4.77	59.	16.	11.	0.90
ROUTED TO							

+		508509	225.	5.37	57.	16.	12.	0.90
	HYDROGRAPH AT							
+		S513	848.	4.20	117.	29.	21.	0.78
	DIVERSION TO							
+		DIV513	848.	4.20	112.	28.	20.	0.78
	HYDROGRAPH AT							
+		S513O	67.	5.23	5.	1.	1.	0.78
	2 COMBINED AT							
+		C509R	248.	5.40	57.	16.	12.	1.67
	2 COMBINED AT							
+		C509	751.	5.57	209.	55.	39.	6.32
	ROUTED TO							
+		509510	742.	5.73	209.	55.	39.	6.32
	HYDROGRAPH AT							
+		S514	1014.	4.13	130.	33.	24.	0.65
	DIVERSION TO							
+		DIV514	1014.	4.13	104.	26.	19.	0.65
	HYDROGRAPH AT							
+		S514O	346.	4.57	26.	7.	5.	0.65
	2 COMBINED AT							
+		C510	743.	5.73	216.	56.	41.	6.97
	ROUTED TO							
+		510511	724.	6.07	215.	57.	41.	6.97
	HYDROGRAPH AT							
+		S515	1734.	4.13	225.	56.	41.	1.10
	DIVERSION TO							
+		DIV515	1734.	4.13	171.	43.	31.	1.10
	HYDROGRAPH AT							
+		S515O	662.	4.57	55.	14.	10.	1.10
	2 COMBINED AT							
+		C511	714.	6.10	240.	63.	46.	8.07
	ROUTED TO							
+		511512	680.	6.63	237.	63.	46.	8.07
	HYDROGRAPH AT							
+		S516	758.	4.17	106.	27.	19.	0.54
	DIVERSION TO							
+		DIV516	758.	4.17	79.	20.	14.	0.54
	HYDROGRAPH AT							
+		S516O	341.	4.57	27.	7.	5.	0.54
	2 COMBINED AT							
+		C512	671.	6.63	242.	65.	47.	8.61
	2 COMBINED AT							
+		WEST-3	3434.	5.47	1318.	342.	247.	28.22
	HYDROGRAPH AT							
+		S600	1003.	4.73	223.	56.	41.	2.02
	ROUTED TO							
+		600601	998.	4.83	223.	56.	41.	2.02
	HYDROGRAPH AT							
+		S601	965.	4.43	166.	42.	30.	0.90
	2 COMBINED AT							
+		C601	1493.	4.70	364.	92.	67.	2.92
	ROUTED TO							
+		601602	1478.	4.80	364.	92.	67.	2.92
	HYDROGRAPH AT							

+		S603	994.	4.30	122.	31.	22.	0.67
	2 COMBINED AT							
+		C602L	1716.	4.73	463.	118.	85.	3.58
	HYDROGRAPH AT							
+		S602	1136.	4.73	271.	69.	50.	1.88
	2 COMBINED AT							
+		C602	2500.	4.73	684.	174.	126.	5.47
	ROUTED TO							
+		602603	2418.	4.97	639.	160.	116.	5.47
	HYDROGRAPH AT							
+		S606	563.	4.47	106.	27.	19.	0.66
	2 COMBINED AT							
+		C603L	2620.	4.93	716.	180.	130.	6.13
	HYDROGRAPH AT							
+		S605	759.	4.63	164.	42.	30.	1.09
	HYDROGRAPH AT							
+		S604	1137.	5.10	362.	94.	68.	2.66
	3 COMBINED AT							
+		C603	3665.	4.93	1111.	284.	205.	9.87
	ROUTED TO							
+		603604	3590.	5.10	1062.	268.	193.	9.87
	HYDROGRAPH AT							
+		S609	368.	4.57	81.	21.	15.	0.56
	DIVERSION TO							
+		DIV609	334.	4.47	21.	5.	4.	0.56
	HYDROGRAPH AT							
+		S609O	368.	4.60	62.	15.	11.	0.56
	2 COMBINED AT							
+		C604R	3696.	5.10	1091.	275.	198.	10.43
	HYDROGRAPH AT							
+		S607	592.	4.60	135.	34.	25.	0.82
	DIVERSION TO							
+		DIV607	82.	3.93	11.	3.	2.	0.82
	HYDROGRAPH AT							
+		S607O	592.	4.60	127.	32.	23.	0.82
	2 COMBINED AT							
+		C604	3935.	5.07	1178.	297.	214.	11.25
	ROUTED TO							
+		604605	3923.	5.10	1178.	297.	214.	11.25
	HYDROGRAPH AT							
+		S608	716.	4.30	92.	23.	17.	0.51
	DIVERSION TO							
+		DIV608	320.	4.07	18.	5.	3.	0.51
	HYDROGRAPH AT							
+		S608O	716.	4.30	74.	19.	13.	0.51
	2 COMBINED AT							
+		C605	3999.	5.10	1226.	309.	223.	11.76
	ROUTED TO							
+		605606	3964.	5.23	1218.	307.	221.	11.76
	HYDROGRAPH AT							
+		S610	611.	4.27	109.	27.	20.	0.60
	2 COMBINED AT							
+		C606L	4058.	5.20	1292.	326.	235.	12.36
	HYDROGRAPH AT							

+		S612	706.	4.33	147.	37.	27.	0.81
	2 COMBINED AT							
+		C606	4231.	5.17	1397.	354.	255.	13.17
	ROUTED TO							
+		606608	4227.	5.20	1394.	353.	254.	13.17
	HYDROGRAPH AT							
+		S611	679.	4.37	92.	23.	17.	0.57
	ROUTED TO							
+		607608	624.	4.60	92.	23.	17.	0.57
	HYDROGRAPH AT							
+		S613	1151.	4.80	279.	71.	51.	1.80
	3 COMBINED AT							
+		C608	4919.	5.13	1647.	419.	302.	15.53
	ROUTED TO							
+		608609	4868.	5.30	1636.	416.	300.	15.53
	HYDROGRAPH AT							
+		S614	684.	4.77	166.	42.	31.	1.08
	2 COMBINED AT							
+		C609	5107.	5.27	1741.	444.	320.	16.61
	ROUTED TO							
+		609611	5024.	5.50	1711.	434.	313.	16.61
	HYDROGRAPH AT							
+		S617	746.	4.20	101.	25.	18.	0.68
	2 COMBINED AT							
+		C611R	5022.	5.50	1765.	449.	323.	17.29
	HYDROGRAPH AT							
+		S615	878.	4.73	213.	54.	39.	1.05
	ROUTED TO							
+		610611	860.	4.93	213.	54.	39.	1.05
	HYDROGRAPH AT							
+		S616	492.	4.43	77.	19.	14.	0.50
	DIVERSION TO							
+		DIV616	472.	4.37	25.	6.	5.	0.50
	HYDROGRAPH AT							
+		S616O.	490.	4.43	52.	13.	9.	0.50
	2 COMBINED AT							
+		C611L	1033.	4.87	255.	65.	47.	1.56
	2 COMBINED AT							
+		C611	5409.	5.47	1935.	494.	356.	18.85
	ROUTED TO							
+		611613	5392.	5.50	1925.	490.	353.	18.85
	HYDROGRAPH AT							
+		S618	626.	4.67	137.	35.	25.	0.96
	2 COMBINED AT							
+		C613R	5509.	5.47	2000.	510.	368.	19.81
	HYDROGRAPH AT							
+		S619	928.	4.53	154.	39.	28.	0.83
	ROUTED TO							
+		612613	891.	4.70	153.	39.	28.	0.83
	HYDROGRAPH AT							
+		S620	395.	4.53	81.	21.	15.	0.44
	2 COMBINED AT							
+		C613L	1141.	4.70	228.	58.	41.	1.27
	2 COMBINED AT							

+		C613	5772.	5.43	2150.	551.	397.	21.08
+	ROUTED TO	613614	5735.	5.53	2138.	546.	394.	21.08
+	HYDROGRAPH AT	S621	890.	4.40	105.	26.	19.	0.92
+	2 COMBINED AT	C614	5729.	5.53	2184.	558.	402.	22.00
+	ROUTED TO	614615	5668.	5.63	2165.	552.	398.	22.00
+	HYDROGRAPH AT	S622	429.	4.87	100.	25.	18.	0.90
+	2 COMBINED AT	C615	5720.	5.63	2200.	561.	405.	22.90
+	2 COMBINED AT	WEST-4	6795.	5.63	2777.	720.	519.	51.12
+	HYDROGRAPH AT	S700	760.	4.13	83.	21.	15.	0.61
+	HYDROGRAPH AT	S701	440.	4.43	107.	27.	20.	0.72
+	DIVERSION TO	DIV701	6.	1.60	1.	0.	0.	0.72
+	HYDROGRAPH AT	S701O	440.	4.43	107.	27.	19.	0.72
+	HYDROGRAPH AT	S702	372.	4.13	42.	11.	8.	0.26
+	DIVERSION TO	DIV702	372.	4.13	33.	8.	6.	0.26
+	HYDROGRAPH AT	S702O	139.	4.53	9.	2.	2.	0.26
+	HYDROGRAPH AT	S703	271.	4.33	31.	8.	6.	0.26
+	DIVERSION TO	DIV703	271.	4.30	10.	3.	2.	0.26
+	HYDROGRAPH AT	S703O	262.	4.37	21.	5.	4.	0.26
+	HYDROGRAPH AT	S704	617.	4.13	57.	14.	10.	0.41
+	ROUTED TO	704705	533.	4.37	57.	14.	10.	0.41
+	HYDROGRAPH AT	S705	1153.	4.13	142.	36.	26.	0.75
+	2 COMBINED AT	C705	1244.	4.23	191.	48.	35.	1.16
+	ROUTED TO	C705O	654.	4.63	191.	48.	35.	1.16
+	ROUTED TO	705OAF	651.	4.80	190.	48.	35.	1.16
+	HYDROGRAPH AT	S705AF	240.	4.33	33.	8.	6.	0.18
+	DIVERSION TO	DIV705	233.	4.30	11.	3.	2.	0.18
+	HYDROGRAPH AT	705AFO	239.	4.37	22.	6.	4.	0.18
	2 COMBINED AT							

+	C705AF	779.	4.63	210.	53.	38.	1.34
5 COMBINED AT +	WEST-5	1514.	4.47	375.	95.	68.	3.19
HYDROGRAPH AT +	S706	1161.	4.10	132.	33.	24.	0.71
DIVERSION TO +	DIV706	1161.	4.10	102.	25.	18.	0.71
HYDROGRAPH AT +	S706O	460.	4.40	31.	8.	6.	0.71
HYDROGRAPH AT +	S707	1088.	4.10	135.	34.	25.	0.64
DIVERSION TO +	DIV707	1088.	4.10	106.	26.	19.	0.64
HYDROGRAPH AT +	S707O	448.	4.43	30.	8.	5.	0.64
HYDROGRAPH AT +	S728	335.	4.20	55.	14.	10.	0.28
DIVERSION TO +	DIV728	335.	4.20	35.	9.	6.	0.28
HYDROGRAPH AT +	S728O	215.	4.53	20.	5.	4.	0.28
5 COMBINED AT +	WEST	6923.	5.60	2928.	762.	549.	55.94
HYDROGRAPH AT +	S708	1326.	4.10	130.	32.	23.	0.71
DIVERSION TO +	DIV708	1326.	4.10	86.	21.	15.	0.71
HYDROGRAPH AT +	S708O	853.	4.23	44.	11.	8.	0.71
HYDROGRAPH AT +	S709	818.	4.13	92.	23.	17.	0.44
DIVERSION TO +	DIV709	818.	4.13	44.	11.	8.	0.44
HYDROGRAPH AT +	S709O	751.	4.20	49.	12.	9.	0.44
ROUTED TO +	C709O	298.	4.53	49.	12.	9.	0.44
ROUTED TO +	709710	296.	4.63	49.	12.	9.	0.44
HYDROGRAPH AT +	S710	290.	4.03	22.	6.	4.	0.11
DIVERSION TO +	DIV710	245.	3.93	9.	2.	2.	0.11
HYDROGRAPH AT +	S710O	290.	4.03	13.	3.	2.	0.11
2 COMBINED AT +	C710I	304.	4.57	61.	15.	11.	0.55
ROUTED TO +	C710O	269.	4.87	61.	15.	11.	0.55
HYDROGRAPH AT +	S711	446.	4.00	34.	9.	6.	0.16
DIVERSION TO +	DIV711	446.	4.00	21.	5.	4.	0.16
HYDROGRAPH AT							

+		S711O	394.	4.07	13.	3.	2.	0.16
	ROUTED TO							
+		C711O	134.	4.20	13.	3.	2.	0.16
	ROUTED TO							
+		711712	133.	4.30	13.	3.	2.	0.16
	HYDROGRAPH AT							
+		S712	201.	4.00	14.	4.	3.	0.07
	DIVERSION TO							
+		DIV712	193.	3.93	8.	2.	2.	0.07
	HYDROGRAPH AT							
+		S712O	201.	4.00	6.	1.	1.	0.07
	2 COMBINED AT							
+		C712I	200.	4.00	19.	5.	3.	0.23
	ROUTED TO							
+		C712O	148.	4.33	19.	5.	3.	0.23
	ROUTED TO							
+		712714	147.	4.40	19.	5.	3.	0.23
	HYDROGRAPH AT							
+		S713	290.	4.03	22.	6.	4.	0.11
	DIVERSION TO							
+		DIV713	127.	3.83	6.	1.	1.	0.11
	HYDROGRAPH AT							
+		S713O	290.	4.03	16.	4.	3.	0.11
	ROUTED TO							
+		C713O	135.	4.17	16.	4.	3.	0.11
	ROUTED TO							
+		713714	134.	4.17	16.	4.	3.	0.11
	HYDROGRAPH AT							
+		S714	140.	4.03	10.	2.	2.	0.06
	3 COMBINED AT							
+		C714	299.	4.30	45.	11.	8.	0.39
	HYDROGRAPH AT							
+		S715	357.	4.13	44.	11.	8.	0.22
	DIVERSION TO							
+		DIV715	228.	3.97	8.	2.	1.	0.22
	HYDROGRAPH AT							
+		S715O	357.	4.13	35.	9.	6.	0.22
	HYDROGRAPH AT							
+		S716	1528.	4.17	232.	58.	42.	1.13
	DIVERSION TO							
+		DIV716	1528.	4.17	157.	39.	28.	1.13
	HYDROGRAPH AT							
+		S716O	885.	4.57	76.	19.	14.	1.13
	ROUTED TO							
+		C716O	398.	4.90	76.	19.	14.	1.13
	ROUTED TO							
+		716717	395.	5.03	76.	19.	14.	1.13
	HYDROGRAPH AT							
+		S717	701.	4.13	60.	15.	11.	0.29
	DIVERSION TO							
+		DIV717	386.	3.93	16.	4.	3.	0.29
	HYDROGRAPH AT							
+		S717O	701.	4.13	44.	11.	8.	0.29
	2 COMBINED AT							

+		C717	522.	4.13	117.	29.	21.	1.41
	ROUTED TO							
+		717718	389.	5.60	117.	29.	21.	1.41
	HYDROGRAPH AT							
+		S718	396.	4.60	90.	23.	16.	0.44
	DIVERSION TO							
+		DIV718	396.	4.57	27.	7.	5.	0.44
	HYDROGRAPH AT							
+		S718O	393.	4.63	64.	16.	12.	0.44
	2 COMBINED AT							
+		C718	689.	4.67	178.	45.	32.	1.86
	HYDROGRAPH AT							
+		S719	234.	4.13	35.	9.	6.	0.15
	DIVERSION TO							
+		DIV719	234.	4.13	17.	4.	3.	0.15
	HYDROGRAPH AT							
+		S719O	194.	4.33	18.	4.	3.	0.15
	6 COMBINED AT							
+		EAST-1	1522.	4.67	351.	88.	63.	3.88
	HYDROGRAPH AT							
+		S720	666.	4.13	78.	20.	14.	0.37
	DIVERSION TO							
+		DIV720	666.	4.13	47.	12.	8.	0.37
	HYDROGRAPH AT							
+		S720O	499.	4.30	32.	8.	6.	0.37
	HYDROGRAPH AT							
+		S721	856.	4.03	75.	19.	14.	0.34
	DIVERSION TO							
+		DIV721	856.	4.03	61.	15.	11.	0.34
	HYDROGRAPH AT							
+		S721O	365.	4.23	15.	4.	3.	0.34
	ROUTED TO							
+		C721O	93.	4.47	15.	4.	3.	0.34
	ROUTED TO							
+		721722	83.	5.10	15.	4.	3.	0.34
	HYDROGRAPH AT							
+		S722	1251.	4.20	191.	48.	35.	0.95
	DIVERSION TO							
+		DIV722	1251.	4.20	127.	32.	23.	0.95
	HYDROGRAPH AT							
+		S722O	700.	4.60	64.	16.	12.	0.95
	2 COMBINED AT							
+		C722	709.	4.60	76.	19.	14.	1.29
	HYDROGRAPH AT							
+		S723	211.	4.03	19.	5.	3.	0.09
	DIVERSION TO							
+		DIV723	188.	3.97	9.	2.	2.	0.09
	HYDROGRAPH AT							
+		S723O	211.	4.03	10.	2.	2.	0.09
	HYDROGRAPH AT							
+		S724	1734.	4.17	278.	70.	50.	1.16
	DIVERSION TO							
+		DIV724	1734.	4.17	202.	51.	36.	1.16
	HYDROGRAPH AT							

+	S724O	855.	4.60	77.	19.	14.	1.16
HYDROGRAPH AT +	S725	1264.	4.27	262.	66.	48.	1.16
DIVERSION TO +	DIV725	1264.	4.27	214.	54.	39.	1.16
HYDROGRAPH AT +	S725O	427.	5.13	51.	13.	9.	1.16
5 COMBINED AT +	EAST-2	1542.	4.60	215.	54.	39.	4.06
HYDROGRAPH AT +	S726	746.	4.03	58.	15.	11.	0.33
DIVERSION TO +	DIV726	746.	4.03	43.	11.	8.	0.33
HYDROGRAPH AT +	S726O	398.	4.20	16.	4.	3.	0.33
ROUTED TO +	726727	151.	4.57	16.	4.	3.	0.33
HYDROGRAPH AT +	S727	521.	4.20	88.	22.	16.	0.38
DIVERSION TO +	DIV727	521.	4.20	67.	17.	12.	0.38
HYDROGRAPH AT +	S727O	230.	4.73	22.	5.	4.	0.38
2 COMBINED AT +	C727	296.	4.73	35.	9.	6.	0.71
4 COMBINED AT +	TOTAL	7154.	5.60	3043.	791.	570.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 25-Year, 24-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************                    ****************************************
*                                      *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *    U.S. ARMY CORPS OF ENGINEERS      *
*              JUN   1998              *                    *    HYDROLOGIC ENGINEERING CENTER     *
*            VERSION 4.1               *                    *          609 SECOND STREET           *
*                                      *                    *       DAVIS, CALIFORNIA 95616        *
*  RUN DATE   10AUG01  TIME  11:11:18  *                    *           (916) 756-1104             *
*                                      *                    *                                      *
****************************************                    ****************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR25-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 25-year, 24-hour storm event. A companion model is also created for the existing condition 25-year, 6-hour storm event. Both models (25-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 25-year, 24-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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22 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME        0918  ENDING TIME
                     ICENT          19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

24 JD          INDEX STORM NO. 1
                      STRM        3.31  PRECIPITATION DEPTH
                      TRDA        0.01  TRANSPOSITION DRAINAGE AREA

25 PI            PRECIPITATION PATTERN
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                    0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 2

STRM 3.29 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 3

STRM 3.21 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 4

STRM 3.11 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 5

STRM 3.00 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

39 JD INDEX STORM NO. 6

STRM 2.83 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	329.	12.53	74.	22.	16.	0.57		
+	DIVERSION TO	DIV100	46.	11.90	9.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	329.	12.53	72.	19.	14.	0.57		
+	ROUTED TO	100102	315.	12.80	71.	19.	14.	0.57		
+	HYDROGRAPH AT	S101	449.	12.40	72.	20.	15.	0.63		
+	2 COMBINED AT	C102R	620.	12.50	140.	39.	28.	1.20		
+	HYDROGRAPH AT	S102	299.	12.23	62.	19.	14.	0.45		
+	DIVERSION TO	DIV102	295.	12.20	25.	7.	5.	0.45		
+	HYDROGRAPH AT	S102O	297.	12.27	43.	12.	9.	0.45		

+	ROUTED TO	101102	236.	12.70	42.	12.	9.	0.45
+	HYDROGRAPH AT	S103	216.	12.57	47.	14.	10.	0.40
+	2 COMBINED AT	C102L	440.	12.67	88.	25.	18.	0.84
+	2 COMBINED AT	C102	1006.	12.63	225.	64.	46.	2.05
+	ROUTED TO	102103	967.	12.90	225.	64.	46.	2.05
+	HYDROGRAPH AT	S104	674.	12.47	118.	35.	25.	0.90
+	DIVERSION TO	DIV104	540.	12.27	36.	10.	7.	0.90
+	HYDROGRAPH AT	S104O	674.	12.47	92.	25.	18.	0.90
+	2 COMBINED AT	C103R	1305.	12.83	312.	87.	63.	2.95
+	HYDROGRAPH AT	S105	317.	12.33	78.	23.	17.	0.59
+	DIVERSION TO	DIV105	317.	12.33	29.	8.	6.	0.59
+	HYDROGRAPH AT	S105O	313.	12.40	56.	15.	11.	0.59
+	2 COMBINED AT	C103	1515.	12.80	363.	101.	73.	3.54
+	ROUTED TO	103104	1506.	12.93	362.	101.	73.	3.54
+	HYDROGRAPH AT	S106	374.	12.23	64.	18.	13.	0.57
+	2 COMBINED AT	C104	1627.	12.87	417.	117.	85.	4.11
+	ROUTED TO	104105	1599.	13.17	416.	117.	85.	4.11
+	HYDROGRAPH AT	S107	560.	12.43	92.	24.	17.	0.94
+	2 COMBINED AT	C105L	1760.	13.13	499.	139.	101.	5.05
+	HYDROGRAPH AT	S200	675.	12.47	129.	41.	30.	0.96
+	ROUTED TO	200201	659.	12.50	129.	41.	30.	0.96
+	HYDROGRAPH AT	S201	245.	12.37	47.	15.	11.	0.35
+	2 COMBINED AT	C201	874.	12.47	175.	55.	40.	1.31
+	ROUTED TO	201203	856.	12.57	175.	55.	40.	1.31
+	HYDROGRAPH AT	S202	106.	12.23	17.	5.	4.	0.13
+	ROUTED TO	202203	103.	12.30	17.	5.	4.	0.13
+	HYDROGRAPH AT	S203	201.	12.30	53.	17.	12.	0.37

	DIVERSION TO						
+		DIV203	201.	12.30	27.	8.	6.	0.37
	HYDROGRAPH AT						
+		S203O	175.	12.57	32.	9.	7.	0.37
	3 COMBINED AT						
+		C203R	1080.	12.60	220.	69.	50.	1.81
	HYDROGRAPH AT						
+		S204	543.	12.57	123.	39.	28.	0.95
	DIVERSION TO						
+		DIV204	8.	3.40	3.	1.	1.	0.95
	HYDROGRAPH AT						
+		S204O	543.	12.57	123.	38.	27.	0.95
	2 COMBINED AT						
+		C203	1597.	12.60	338.	106.	76.	2.76
	ROUTED TO						
+		203204	1568.	12.63	338.	106.	76.	2.76
	HYDROGRAPH AT						
+		S205	336.	12.30	59.	18.	13.	0.41
	DIVERSION TO						
+		DIV205	324.	12.23	25.	7.	5.	0.41
	HYDROGRAPH AT						
+		S205O	336.	12.30	41.	11.	8.	0.41
	2 COMBINED AT						
+		C204	1753.	12.63	374.	116.	84.	3.17
	ROUTED TO						
+		204205	1698.	12.77	374.	116.	84.	3.17
	HYDROGRAPH AT						
+		S206	421.	12.40	116.	36.	26.	0.85
	DIVERSION TO						
+		DIV206	421.	12.40	78.	21.	15.	0.85
	HYDROGRAPH AT						
+		S206O	270.	13.03	51.	15.	10.	0.85
	2 COMBINED AT						
+		C205L	1697.	12.77	418.	130.	94.	4.03
	HYDROGRAPH AT						
+		S207	494.	12.67	132.	42.	30.	0.96
	DIVERSION TO						
+		DIV207	333.	12.37	33.	10.	7.	0.96
	HYDROGRAPH AT						
+		S207O	494.	12.67	115.	32.	23.	0.96
	2 COMBINED AT						
+		C205	2130.	12.77	520.	159.	114.	4.98
	ROUTED TO						
+		205206	2001.	13.20	520.	158.	114.	4.98
	HYDROGRAPH AT						
+		S208	537.	12.83	152.	46.	34.	1.10
	DIVERSION TO						
+		DIV208	89.	12.07	20.	7.	5.	1.10
	HYDROGRAPH AT						
+		S208O	537.	12.83	148.	40.	29.	1.10
	2 COMBINED AT						
+		C206	2375.	13.20	651.	194.	140.	6.09
	ROUTED TO						
+		206207	2358.	13.27	650.	194.	140.	6.09

+	HYDROGRAPH AT	S209	443.	12.47	75.	21.	16.	0.65
+	2 COMBINED AT	C207R	2438.	13.27	710.	212.	154.	6.74
+	HYDROGRAPH AT	S210	348.	12.20	48.	12.	9.	0.48
+	2 COMBINED AT	C207	2450.	13.27	749.	223.	161.	7.22
+	ROUTED TO	207105	2428.	13.37	748.	223.	161.	7.22
+	HYDROGRAPH AT	S211	333.	12.23	52.	14.	10.	0.49
+	2 COMBINED AT	C105R	2447.	13.37	790.	234.	170.	7.70
+	2 COMBINED AT	C105	3822.	13.33	1222.	356.	258.	12.75
+	HYDROGRAPH AT	S300	533.	12.13	85.	26.	19.	0.62
+	DIVERSION TO	DIV300	533.	12.13	60.	16.	12.	0.62
+	HYDROGRAPH AT	S300O	322.	12.43	34.	10.	7.	0.62
+	HYDROGRAPH AT	S301	971.	12.10	150.	48.	35.	0.99
+	DIVERSION TO	DIV301	884.	12.00	66.	19.	14.	0.99
+	HYDROGRAPH AT	S301O	971.	12.10	104.	29.	21.	0.99
+	2 COMBINED AT	C300	961.	12.10	135.	38.	28.	1.61
+	ROUTED TO	300301	774.	12.33	133.	38.	28.	1.61
+	HYDROGRAPH AT	S302	386.	12.33	61.	19.	14.	0.47
+	DIVERSION TO	DIV302	181.	12.00	13.	4.	3.	0.47
+	HYDROGRAPH AT	S302O	386.	12.33	54.	15.	11.	0.47
+	2 COMBINED AT	C301	1145.	12.33	184.	52.	38.	2.07
+	ROUTED TO	301302	1038.	12.63	180.	52.	38.	2.07
+	HYDROGRAPH AT	S303	443.	12.43	73.	20.	15.	0.71
+	2 COMBINED AT	C302	1397.	12.60	245.	71.	51.	2.78
+	ROUTED TO	302303	1311.	12.80	243.	71.	51.	2.78
+	HYDROGRAPH AT	S304	519.	12.23	87.	23.	17.	0.82
+	DIVERSION TO	DIV304	519.	12.23	65.	17.	12.	0.82
+	HYDROGRAPH AT	S304O	227.	12.80	24.	6.	5.	0.82

+	2 COMBINED AT	C303	1450.	12.83	262.	76.	55.	3.60
+	2 COMBINED AT	WEST-1	4437.	13.27	1422.	416.	301.	16.36
+	HYDROGRAPH AT	S400	1088.	12.27	160.	50.	36.	1.05
+	DIVERSION TO	DIV400	1088.	12.27	101.	28.	20.	1.05
+	HYDROGRAPH AT	S400O	864.	12.40	77.	22.	16.	1.05
+	ROUTED TO	C400O	318.	12.73	76.	22.	16.	1.05
+	ROUTED TO	400401	314.	13.07	76.	22.	16.	1.05
+	HYDROGRAPH AT	S401	599.	12.13	75.	21.	15.	0.65
+	DIVERSION TO	DIV401	599.	12.13	70.	18.	13.	0.65
+	HYDROGRAPH AT	S401O	75.	12.87	9.	3.	2.	0.65
+	2 COMBINED AT	C401	340.	13.00	81.	24.	17.	1.69
+	ROUTED TO	401402	319.	13.63	81.	24.	17.	1.69
+	HYDROGRAPH AT	S402	815.	12.10	110.	34.	24.	0.74
+	DIVERSION TO	DIV402	815.	12.10	97.	26.	19.	0.74
+	HYDROGRAPH AT	S402O	183.	12.63	25.	8.	6.	0.74
+	2 COMBINED AT	C402	341.	13.67	100.	31.	22.	2.43
+	ROUTED TO	402403	331.	14.03	99.	31.	22.	2.43
+	HYDROGRAPH AT	S403	670.	12.10	100.	30.	22.	0.56
+	DIVERSION TO	DIV403	670.	12.10	93.	25.	18.	0.56
+	HYDROGRAPH AT	S403O	88.	12.97	17.	5.	4.	0.56
+	2 COMBINED AT	C403	347.	14.03	112.	35.	25.	2.99
+	ROUTED TO	403404	340.	14.20	111.	35.	25.	2.99
+	HYDROGRAPH AT	S404	276.	12.20	31.	8.	6.	0.26
+	DIVERSION TO	DIV404	155.	11.90	5.	1.	1.	0.26
+	HYDROGRAPH AT	S404O	276.	12.20	27.	7.	5.	0.26
+	2 COMBINED AT	C404	340.	14.20	128.	42.	30.	3.26
+	2 COMBINED AT	WEST-2	4437.	13.27	1511.	447.	324.	19.61

+	HYDROGRAPH AT	S500	639.	12.30	153.	49.	35.	1.05
+	DIVERSION TO	DIV500	639.	12.30	83.	23.	17.	1.05
+	HYDROGRAPH AT	S500O	542.	12.53	89.	25.	18.	1.05
+	ROUTED TO	500501	449.	12.87	87.	25.	18.	1.05
+	HYDROGRAPH AT	S501	499.	12.17	79.	24.	17.	0.61
+	DIVERSION TO	DIV501	499.	12.17	46.	13.	9.	0.61
+	HYDROGRAPH AT	S501O	403.	12.33	41.	11.	8.	0.61
+	2 COMBINED AT	C501	557.	12.83	124.	36.	26.	1.67
+	ROUTED TO	501502	522.	13.00	119.	34.	25.	1.67
+	HYDROGRAPH AT	S502	328.	12.30	49.	14.	10.	0.40
+	DIVERSION TO	DIV502	328.	12.30	24.	7.	5.	0.40
+	HYDROGRAPH AT	S502O	316.	12.37	29.	8.	6.	0.40
+	2 COMBINED AT	C502L	583.	12.97	146.	41.	30.	2.07
+	HYDROGRAPH AT	S503	762.	12.23	138.	42.	31.	0.99
+	DIVERSION TO	DIV503	604.	12.03	44.	13.	9.	0.99
+	HYDROGRAPH AT	S503O	762.	12.23	109.	30.	21.	0.99
+	2 COMBINED AT	C502I	967.	12.37	247.	69.	50.	3.07
+	ROUTED TO	C502O	952.	12.53	247.	69.	50.	3.07
+	ROUTED TO	502505	861.	12.87	234.	64.	46.	3.07
+	HYDROGRAPH AT	S504	225.	12.20	46.	14.	10.	0.33
+	DIVERSION TO	DIV504	225.	12.20	46.	13.	9.	0.33
+	HYDROGRAPH AT	S504O	6.	17.00	4.	1.	1.	0.33
+	2 COMBINED AT	C505L	861.	12.87	234.	64.	46.	3.39
+	HYDROGRAPH AT	S505	142.	12.17	17.	5.	4.	0.14
+	DIVERSION TO	DIV505	60.	11.80	3.	1.	1.	0.14
+	HYDROGRAPH AT	S505O	142.	12.17	15.	4.	3.	0.14
+	ROUTED TO	C503O	80.	12.33	15.	4.	3.	0.14

+	ROUTED TO 503505	78.	12.80	14.	4.	3.	0.14
+	HYDROGRAPH AT S506	159.	12.17	21.	6.	5.	0.15
+	DIVERSION TO DIV506	157.	12.13	11.	3.	2.	0.15
+	HYDROGRAPH AT S506O	159.	12.20	12.	3.	2.	0.15
+	ROUTED TO C504O	67.	12.50	12.	3.	2.	0.15
+	ROUTED TO 504505	64.	13.20	12.	3.	2.	0.15
+	HYDROGRAPH AT S507	669.	12.10	80.	22.	16.	0.67
+	DIVERSION TO DIV507	669.	12.10	80.	22.	16.	0.67
+	HYDROGRAPH AT S507O	0.	0.00	0.	0.	0.	0.67
+	3 COMBINED AT C505R	134.	13.07	26.	7.	5.	0.96
+	2 COMBINED AT C505	961.	12.90	255.	70.	50.	4.35
+	ROUTED TO 505509	867.	13.33	234.	60.	43.	4.35
+	HYDROGRAPH AT S508	311.	12.07	39.	11.	8.	0.29
+	DIVERSION TO DIV508	311.	12.07	39.	10.	8.	0.29
+	HYDROGRAPH AT S508O	5.	15.03	3.	1.	1.	0.29
+	2 COMBINED AT C509L	867.	13.33	234.	60.	43.	4.65
+	HYDROGRAPH AT S509	200.	12.03	24.	8.	5.	0.17
+	DIVERSION TO DIV509	161.	11.83	9.	3.	2.	0.17
+	HYDROGRAPH AT S509O	200.	12.03	18.	5.	4.	0.17
+	ROUTED TO C506O	79.	12.30	18.	5.	4.	0.17
+	ROUTED TO 506508	78.	12.50	18.	5.	4.	0.17
+	HYDROGRAPH AT S510	147.	12.10	23.	7.	5.	0.13
+	DIVERSION TO DIV510	147.	12.10	20.	6.	4.	0.13
+	HYDROGRAPH AT S510O	36.	12.80	6.	2.	1.	0.13
+	2 COMBINED AT C508R	110.	12.80	23.	7.	5.	0.30
+	HYDROGRAPH AT S511	413.	12.07	55.	17.	12.	0.38
+	DIVERSION TO DIV511	413.	12.07	32.	9.	6.	0.38

+	HYDROGRAPH AT	S511O	372.	12.17	28.	8.	6.	0.38
+	ROUTED TO	C507O	81.	12.67	28.	8.	6.	0.38
+	ROUTED TO	507508	80.	13.10	27.	8.	6.	0.38
+	HYDROGRAPH AT	S512	245.	12.10	42.	13.	9.	0.21
+	DIVERSION TO	DIV512	245.	12.10	36.	10.	7.	0.21
+	HYDROGRAPH AT	S512O	66.	12.83	10.	3.	2.	0.21
+	2 COMBINED AT	C508L	142.	12.83	37.	11.	8.	0.60
+	2 COMBINED AT	C508	249.	12.83	59.	18.	13.	0.90
+	ROUTED TO	508509	200.	13.53	56.	18.	13.	0.90
+	HYDROGRAPH AT	S513	657.	12.13	99.	28.	21.	0.78
+	DIVERSION TO	DIV513	657.	12.13	99.	28.	21.	0.78
+	HYDROGRAPH AT	S513O	0.	0.00	0.	0.	0.	0.78
+	2 COMBINED AT	C509R	200.	13.53	56.	18.	13.	1.67
+	2 COMBINED AT	C509	938.	13.40	274.	74.	53.	6.32
+	ROUTED TO	509510	930.	13.53	273.	73.	53.	6.32
+	HYDROGRAPH AT	S514	706.	12.13	110.	33.	24.	0.65
+	DIVERSION TO	DIV514	706.	12.13	98.	26.	19.	0.65
+	HYDROGRAPH AT	S514O	158.	12.87	22.	7.	5.	0.65
+	2 COMBINED AT	C510	950.	13.50	285.	77.	56.	6.97
+	ROUTED TO	510511	931.	13.83	282.	77.	56.	6.97
+	HYDROGRAPH AT	S515	1393.	12.10	198.	58.	42.	1.10
+	DIVERSION TO	DIV515	1393.	12.10	161.	43.	31.	1.10
+	HYDROGRAPH AT	S515O	479.	12.53	51.	15.	11.	1.10
+	2 COMBINED AT	C511	940.	13.87	308.	87.	63.	8.07
+	ROUTED TO	511512	892.	14.43	302.	86.	63.	8.07
+	HYDROGRAPH AT	S516	511.	12.13	91.	29.	21.	0.54
+	DIVERSION TO	DIV516	511.	12.13	72.	20.	14.	0.54

+	HYDROGRAPH AT	S516O	208.	12.67	30.	9.	7.	0.54
+	2 COMBINED AT	C512	903.	14.47	319.	93.	68.	8.61
+	2 COMBINED AT	WEST-3	4437.	13.27	1744.	517.	377.	28.22
+	HYDROGRAPH AT	S600	1057.	12.60	216.	65.	47.	2.02
+	ROUTED TO	600601	1033.	12.63	216.	65.	47.	2.02
+	HYDROGRAPH AT	S601	753.	12.40	146.	47.	34.	0.90
+	2 COMBINED AT	C601	1618.	12.57	357.	110.	80.	2.92
+	ROUTED TO	601602	1601.	12.67	357.	110.	80.	2.92
+	HYDROGRAPH AT	S603	688.	12.27	105.	33.	24.	0.67
+	2 COMBINED AT	C602L	1873.	12.60	457.	142.	103.	3.58
+	HYDROGRAPH AT	S602	1092.	12.60	253.	80.	58.	1.88
+	2 COMBINED AT	C602	2904.	12.60	697.	219.	158.	5.47
+	ROUTED TO	602603	2774.	12.83	653.	176.	127.	5.47
+	HYDROGRAPH AT	S606	412.	12.47	92.	29.	21.	0.66
+	2 COMBINED AT	C603L	3016.	12.80	735.	202.	145.	6.13
+	HYDROGRAPH AT	S605	635.	12.57	148.	47.	34.	1.09
+	HYDROGRAPH AT	S604	1144.	12.90	353.	112.	81.	2.66
+	3 COMBINED AT	C603	4426.	12.80	1178.	344.	248.	9.87
+	ROUTED TO	603604	4319.	12.97	1130.	300.	216.	9.87
+	HYDROGRAPH AT	S609	257.	12.57	68.	21.	15.	0.56
+	DIVERSION TO	DIV609	191.	12.33	17.	5.	4.	0.56
+	HYDROGRAPH AT	S609O	257.	12.57	59.	16.	12.	0.56
+	2 COMBINED AT	C604R	4474.	12.97	1176.	313.	226.	10.43
+	HYDROGRAPH AT	S607	463.	12.57	119.	37.	27.	0.82
+	DIVERSION TO	DIV607	13.	8.60	9.	3.	2.	0.82
+	HYDROGRAPH AT	S607O	463.	12.57	119.	35.	25.	0.82
+	2 COMBINED AT	C604	4763.	12.93	1280.	343.	247.	11.25

+	ROUTED TO 604605	4751.	13.00	1280.	343.	247.	11.25
+	HYDROGRAPH AT S608	474.	12.30	78.	24.	17.	0.51
+	DIVERSION TO DIV608	83.	11.80	14.	5.	3.	0.51
+	HYDROGRAPH AT S608O	474.	12.30	73.	20.	14.	0.51
+	2 COMBINED AT C605	4843.	12.97	1341.	360.	260.	11.76
+	ROUTED TO 605606	4793.	13.10	1333.	355.	256.	11.76
+	HYDROGRAPH AT S610	446.	12.23	94.	30.	21.	0.60
+	2 COMBINED AT C606L	4906.	13.10	1413.	381.	275.	12.36
+	HYDROGRAPH AT S612	277.	12.77	122.	38.	28.	0.81
+	2 COMBINED AT C606	5127.	13.10	1519.	415.	299.	13.17
+	ROUTED TO 606608	5123.	13.10	1516.	412.	297.	13.17
+	HYDROGRAPH AT S611	451.	12.33	78.	25.	18.	0.57
+	ROUTED TO 607608	425.	12.60	78.	25.	18.	0.57
+	HYDROGRAPH AT S613	1061.	12.70	257.	81.	58.	1.80
+	3 COMBINED AT C608	5953.	13.03	1804.	504.	364.	15.53
+	ROUTED TO 608609	5895.	13.17	1793.	496.	357.	15.53
+	HYDROGRAPH AT S614	568.	12.70	150.	47.	34.	1.08
+	2 COMBINED AT C609	6212.	13.17	1919.	536.	387.	16.61
+	ROUTED TO 609611	6091.	13.37	1890.	510.	367.	16.61
+	HYDROGRAPH AT S617	552.	12.20	86.	26.	19.	0.68
+	2 COMBINED AT C611R	6116.	13.37	1957.	531.	383.	17.29
+	HYDROGRAPH AT S615	696.	12.70	190.	62.	45.	1.05
+	ROUTED TO 610611	680.	12.90	190.	62.	45.	1.05
+	HYDROGRAPH AT S616	337.	12.40	64.	19.	13.	0.50
+	DIVERSION TO DIV616	324.	12.33	23.	6.	5.	0.50
+	HYDROGRAPH AT S616O	337.	12.40	46.	12.	9.	0.50
+	2 COMBINED AT C611L	857.	12.83	233.	74.	54.	1.56

+	2 COMBINED AT C611	6581.	13.37	2156.	596.	430.	18.85
+	ROUTED TO 611613	6552.	13.40	2146.	586.	422.	18.85
+	HYDROGRAPH AT S618	514.	12.60	120.	36.	26.	0.96
+	2 COMBINED AT C613R	6728.	13.40	2244.	615.	444.	19.81
+	HYDROGRAPH AT S619	704.	12.50	133.	41.	30.	0.83
+	ROUTED TO 612613	679.	12.67	133.	41.	30.	0.83
+	HYDROGRAPH AT S620	273.	12.53	69.	21.	16.	0.44
+	2 COMBINED AT C613L	929.	12.67	201.	63.	45.	1.27
+	2 COMBINED AT C613	7033.	13.37	2414.	670.	483.	21.08
+	ROUTED TO 613614	6989.	13.43	2402.	659.	475.	21.08
+	HYDROGRAPH AT S621	713.	12.33	89.	23.	17.	0.92
+	2 COMBINED AT C614	6997.	13.43	2471.	677.	488.	22.00
+	ROUTED TO 614615	6937.	13.53	2459.	667.	480.	22.00
+	HYDROGRAPH AT S622	362.	12.80	85.	22.	16.	0.90
+	2 COMBINED AT C615	7068.	13.53	2525.	684.	493.	22.90
+	2 COMBINED AT WEST-4	10062.	13.50	3877.	1091.	791.	51.12
+	HYDROGRAPH AT S700	519.	12.13	67.	18.	13.	0.61
+	HYDROGRAPH AT S701	343.	12.33	90.	26.	19.	0.72
+	DIVERSION TO DIV701	3.	2.70	1.	0.	0.	0.72
+	HYDROGRAPH AT S701O	343.	12.33	90.	26.	19.	0.72
+	HYDROGRAPH AT S702	227.	12.10	35.	10.	7.	0.26
+	DIVERSION TO DIV702	227.	12.10	31.	8.	6.	0.26
+	HYDROGRAPH AT S702O	37.	13.00	6.	2.	1.	0.26
+	HYDROGRAPH AT S703	178.	12.30	24.	6.	4.	0.26
+	DIVERSION TO DIV703	177.	12.27	10.	3.	2.	0.26
+	HYDROGRAPH AT S703O	176.	12.33	14.	3.	2.	0.26
+	HYDROGRAPH AT S704	373.	12.10	47.	13.	9.	0.41

+	ROUTED TO 704705	344.	12.37	47.	13.	9.	0.41
+	HYDROGRAPH AT S705	825.	12.10	120.	37.	26.	0.75
+	2 COMBINED AT C705	1022.	12.17	166.	49.	36.	1.16
+	ROUTED TO C705O	587.	12.53	166.	49.	36.	1.16
+	ROUTED TO 705OAF	584.	12.73	166.	49.	36.	1.16
+	HYDROGRAPH AT S705AF	168.	12.33	30.	8.	6.	0.18
+	DIVERSION TO DIV705	168.	12.33	11.	3.	2.	0.18
+	HYDROGRAPH AT 705AFO	163.	12.40	20.	5.	4.	0.18
+	2 COMBINED AT C705AF	697.	12.57	185.	54.	39.	1.34
+	5 COMBINED AT WEST-5	1438.	12.40	351.	101.	73.	3.19
+	HYDROGRAPH AT S706	788.	12.10	112.	35.	25.	0.71
+	DIVERSION TO DIV706	788.	12.10	94.	25.	18.	0.71
+	HYDROGRAPH AT S706O	258.	12.53	30.	9.	7.	0.71
+	HYDROGRAPH AT S707	721.	12.10	116.	37.	27.	0.64
+	DIVERSION TO DIV707	721.	12.10	96.	26.	19.	0.64
+	HYDROGRAPH AT S707O	256.	12.60	36.	11.	8.	0.64
+	HYDROGRAPH AT S728	230.	12.17	47.	15.	11.	0.28
+	DIVERSION TO DIV728	230.	12.17	32.	9.	6.	0.28
+	HYDROGRAPH AT S728O	142.	12.57	21.	6.	4.	0.28
+	5 COMBINED AT WEST	10415.	13.50	4146.	1174.	852.	55.94
+	HYDROGRAPH AT S708	908.	12.07	114.	30.	21.	0.71
+	DIVERSION TO DIV708	908.	12.07	84.	21.	15.	0.71
+	HYDROGRAPH AT S708O	450.	12.37	32.	8.	6.	0.71
+	HYDROGRAPH AT S709	534.	12.10	89.	24.	17.	0.44
+	DIVERSION TO DIV709	534.	12.10	43.	11.	8.	0.44
+	HYDROGRAPH AT S709O	489.	12.20	51.	13.	10.	0.44
+	ROUTED TO C709O	235.	12.57	50.	13.	10.	0.44

+	ROUTED TO	709710	233.	12.63	50.	13.	10.	0.44
+	HYDROGRAPH AT	S710	164.	12.00	20.	5.	4.	0.11
+	DIVERSION TO	DIV710	159.	11.93	9.	2.	2.	0.11
+	HYDROGRAPH AT	S710O	164.	12.00	12.	3.	2.	0.11
+	2 COMBINED AT	C710I	258.	12.57	61.	16.	12.	0.55
+	ROUTED TO	C710O	231.	12.83	61.	16.	12.	0.55
+	HYDROGRAPH AT	S711	246.	12.00	32.	9.	7.	0.16
+	DIVERSION TO	DIV711	246.	12.00	20.	5.	4.	0.16
+	HYDROGRAPH AT	S711O	226.	12.07	14.	4.	3.	0.16
+	ROUTED TO	C711O	117.	12.17	14.	4.	3.	0.16
+	ROUTED TO	711712	116.	12.27	14.	4.	3.	0.16
+	HYDROGRAPH AT	S712	105.	12.00	13.	4.	3.	0.07
+	DIVERSION TO	DIV712	105.	11.97	8.	2.	2.	0.07
+	HYDROGRAPH AT	S712O	100.	12.03	5.	1.	1.	0.07
+	2 COMBINED AT	C712I	135.	12.23	19.	5.	4.	0.23
+	ROUTED TO	C712O	118.	12.37	19.	5.	4.	0.23
+	ROUTED TO	712714	113.	12.53	19.	5.	4.	0.23
+	HYDROGRAPH AT	S713	163.	12.00	20.	5.	4.	0.11
+	DIVERSION TO	DIV713	129.	11.73	6.	1.	1.	0.11
+	HYDROGRAPH AT	S713O	163.	12.00	15.	4.	3.	0.11
+	ROUTED TO	C713O	96.	12.13	15.	4.	3.	0.11
+	ROUTED TO	713714	95.	12.20	15.	4.	3.	0.11
+	HYDROGRAPH AT	S714	79.	12.03	8.	2.	1.	0.06
+	3 COMBINED AT	C714	197.	12.37	42.	11.	8.	0.39
+	HYDROGRAPH AT	S715	244.	12.13	42.	11.	8.	0.22
+	DIVERSION TO	DIV715	173.	11.90	8.	2.	1.	0.22
+	HYDROGRAPH AT	S715O	244.	12.13	35.	9.	6.	0.22

+	HYDROGRAPH AT	S716	1286.	12.13	211.	60.	43.	1.13
+	DIVERSION TO	DIV716	1286.	12.13	150.	39.	28.	1.13
+	HYDROGRAPH AT	S716O	661.	12.50	75.	21.	15.	1.13
+	ROUTED TO	C716O	329.	12.87	75.	21.	15.	1.13
+	ROUTED TO	716717	327.	13.07	75.	21.	15.	1.13
+	HYDROGRAPH AT	S717	410.	12.10	57.	16.	11.	0.29
+	DIVERSION TO	DIV717	337.	11.90	16.	4.	3.	0.29
+	HYDROGRAPH AT	S717O	410.	12.10	44.	11.	8.	0.29
+	2 COMBINED AT	C717	407.	12.10	116.	32.	23.	1.41
+	ROUTED TO	717718	342.	13.60	114.	31.	23.	1.41
+	HYDROGRAPH AT	S718	285.	12.60	87.	23.	17.	0.44
+	DIVERSION TO	DIV718	285.	12.60	26.	7.	5.	0.44
+	HYDROGRAPH AT	S718O	280.	12.67	64.	17.	12.	0.44
+	2 COMBINED AT	C718	580.	12.67	175.	47.	34.	1.86
+	HYDROGRAPH AT	S719	157.	12.13	35.	10.	7.	0.15
+	DIVERSION TO	DIV719	157.	12.13	17.	4.	3.	0.15
+	HYDROGRAPH AT	S719O	131.	12.33	21.	6.	4.	0.15
+	6 COMBINED AT	EAST-1	1303.	12.67	345.	93.	67.	3.88
+	HYDROGRAPH AT	S720	431.	12.10	73.	20.	15.	0.37
+	DIVERSION TO	DIV720	431.	12.10	45.	12.	8.	0.37
+	HYDROGRAPH AT	S720O	292.	12.37	33.	9.	6.	0.37
+	HYDROGRAPH AT	S721	488.	12.03	64.	20.	15.	0.34
+	DIVERSION TO	DIV721	488.	12.03	56.	15.	11.	0.34
+	HYDROGRAPH AT	S721O	115.	12.43	16.	5.	4.	0.34
+	ROUTED TO	C721O	53.	12.73	16.	5.	4.	0.34
+	ROUTED TO	721722	46.	13.33	16.	5.	4.	0.34
+	HYDROGRAPH AT	S722	1017.	12.17	169.	48.	35.	0.95

+	DIVERSION TO	DIV722	1017.	12.17	121.	32.	23.	0.95
+	HYDROGRAPH AT	S722O	545.	12.57	59.	16.	12.	0.95
+	2 COMBINED AT	C722	510.	12.60	73.	21.	15.	1.29
+	HYDROGRAPH AT	S723	122.	12.03	17.	5.	4.	0.09
+	DIVERSION TO	DIV723	119.	11.97	8.	2.	2.	0.09
+	HYDROGRAPH AT	S723O	122.	12.03	10.	3.	2.	0.09
+	HYDROGRAPH AT	S724	1412.	12.13	259.	80.	58.	1.16
+	DIVERSION TO	DIV724	1412.	12.13	188.	51.	36.	1.16
+	HYDROGRAPH AT	S724O	667.	12.53	102.	30.	21.	1.16
+	HYDROGRAPH AT	S725	1045.	12.23	232.	73.	53.	1.16
+	DIVERSION TO	DIV725	1045.	12.23	196.	54.	39.	1.16
+	HYDROGRAPH AT	S725O	322.	13.13	63.	20.	14.	1.16
+	5 COMBINED AT	EAST-2	1311.	12.60	252.	76.	55.	4.06
+	HYDROGRAPH AT	S726	411.	12.03	48.	15.	10.	0.33
+	DIVERSION TO	DIV726	411.	12.03	40.	11.	8.	0.33
+	HYDROGRAPH AT	S726O	159.	12.30	13.	4.	3.	0.33
+	ROUTED TO	726727	63.	12.80	12.	4.	3.	0.33
+	HYDROGRAPH AT	S727	360.	12.17	78.	25.	18.	0.38
+	DIVERSION TO	DIV727	360.	12.17	61.	17.	12.	0.38
+	HYDROGRAPH AT	S727O	149.	12.90	26.	8.	6.	0.38
+	2 COMBINED AT	C727	208.	12.90	38.	12.	8.	0.71
+	4 COMBINED AT	TOTAL	10825.	13.50	4429.	1262.	915.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 10-Year, 6-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  10:08:59  *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR10-6.IH1
Original:06-22-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future condition 10-year, 6-hour storm event with 100-year, 2-hour retention. A companion model is also created for the future condition 10-year, 24-hour storm event. Both models (10-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 10-year, 6-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing
- 100-year, 2-hour retention volume diversions

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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24 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                    ICENT          19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

26 JD          INDEX STORM NO. 1
                     STRM       2.18  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

27 PI            PRECIPITATION PATTERN
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                  0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                  0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                  0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                  0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

30 JD        INDEX STORM NO. 2
                STRM        2.17  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

31 JD        INDEX STORM NO. 3
                STRM        2.14  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

32 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

35 JD        INDEX STORM NO. 4
                STRM        2.01  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

36 PI         PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

39 JD        INDEX STORM NO. 5
                STRM        1.77  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA
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40 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	301.	4.67	66.	17.	12.	0.57		
+	DIVERSION TO	DIV100	202.	4.43	13.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	301.	4.67	55.	14.	10.	0.57		
+	ROUTED TO	100102	287.	5.00	55.	14.	10.	0.57		
+	HYDROGRAPH AT	S101	390.	4.53	63.	16.	11.	0.63		
+	2 COMBINED AT	C102R	443.	4.93	105.	27.	19.	1.20		
+	HYDROGRAPH AT	S102	290.	4.30	57.	14.	10.	0.45		
+	DIVERSION TO	DIV102	290.	4.30	29.	7.	5.	0.45		
+	HYDROGRAPH AT	S102O	247.	4.57	28.	7.	5.	0.45		
+	ROUTED TO	101102	193.	4.97	28.	7.	5.	0.45		
+	HYDROGRAPH AT	S103	194.	4.73	43.	11.	8.	0.40		
+	2 COMBINED AT	C102L	287.	4.97	65.	16.	12.	0.84		
+	2 COMBINED AT	C102	561.	4.93	150.	38.	28.	2.05		
+	ROUTED TO	102103	531.	5.23	150.	38.	28.	2.05		
+	HYDROGRAPH AT	S104	554.	4.63	102.	26.	19.	0.90		
+	DIVERSION TO	DIV104	551.	4.60	41.	10.	7.	0.90		
	HYDROGRAPH AT									

+	S104O	509.	4.77	62.	15.	11.	0.90
2 COMBINED AT +	C103R	712.	4.87	189.	48.	35.	2.95
HYDROGRAPH AT +	S105	273.	4.47	69.	18.	13.	0.59
DIVERSION TO +	DIV105	273.	4.47	32.	8.	6.	0.59
HYDROGRAPH AT +	S105O	222.	4.77	38.	10.	7.	0.59
2 COMBINED AT +	C103	823.	4.97	209.	53.	38.	3.54
ROUTED TO +	103104	780.	5.37	208.	53.	38.	3.54
HYDROGRAPH AT +	S106	314.	4.30	57.	14.	10.	0.57
2 COMBINED AT +	C104	807.	5.33	241.	62.	45.	4.11
ROUTED TO +	104105	781.	5.70	241.	62.	45.	4.11
HYDROGRAPH AT +	S107	385.	4.63	75.	19.	14.	0.94
2 COMBINED AT +	C105L	806.	5.70	281.	72.	52.	5.05
HYDROGRAPH AT +	S200	566.	4.60	111.	28.	20.	0.96
ROUTED TO +	200201	560.	4.70	111.	28.	20.	0.96
HYDROGRAPH AT +	S201	258.	4.47	44.	11.	8.	0.35
2 COMBINED AT +	C201	682.	4.67	144.	37.	26.	1.31
ROUTED TO +	201203	664.	4.77	144.	37.	26.	1.31
HYDROGRAPH AT +	S202	126.	4.27	16.	4.	3.	0.13
ROUTED TO +	202203	120.	4.37	16.	4.	3.	0.13
HYDROGRAPH AT +	S203	195.	4.40	48.	12.	9.	0.37
DIVERSION TO +	DIV203	195.	4.40	31.	8.	6.	0.37
HYDROGRAPH AT +	S203O	127.	4.97	19.	5.	3.	0.37
3 COMBINED AT +	C203R	661.	4.77	164.	42.	30.	1.81
HYDROGRAPH AT +	S204	439.	4.77	104.	27.	19.	0.95
DIVERSION TO +	DIV204	13.	2.53	3.	1.	1.	0.95
HYDROGRAPH AT +	S204O	439.	4.77	103.	26.	19.	0.95
2 COMBINED AT +	C203	885.	4.80	237.	60.	43.	2.76
ROUTED TO							

+	203204	883.	4.87	237.	60.	43.	2.76
HYDROGRAPH AT +	S205	351.	4.40	54.	14.	10.	0.41
DIVERSION TO +	DIV205	351.	4.40	29.	7.	5.	0.41
HYDROGRAPH AT +	S205O	282.	4.57	26.	6.	5.	0.41
2 COMBINED AT +	C204	992.	4.80	249.	63.	45.	3.17
ROUTED TO +	204205	966.	5.03	249.	63.	45.	3.17
HYDROGRAPH AT +	S206	337.	4.57	99.	25.	18.	0.85
DIVERSION TO +	DIV206	337.	4.57	85.	21.	15.	0.85
HYDROGRAPH AT +	S206O	93.	5.83	17.	4.	3.	0.85
2 COMBINED AT +	C205L	965.	5.03	252.	64.	46.	4.03
HYDROGRAPH AT +	S207	398.	4.87	111.	29.	21.	0.96
DIVERSION TO +	DIV207	396.	4.83	40.	10.	7.	0.96
HYDROGRAPH AT +	S207O	379.	5.03	74.	18.	13.	0.96
2 COMBINED AT +	C205	1073.	5.20	288.	73.	53.	4.98
ROUTED TO +	205206	1023.	5.63	286.	73.	53.	4.98
HYDROGRAPH AT +	S208	413.	5.10	126.	33.	24.	1.10
DIVERSION TO +	DIV208	306.	4.80	26.	7.	5.	1.10
HYDROGRAPH AT +	S208O	413.	5.10	105.	26.	19.	1.10
2 COMBINED AT +	C206	1219.	5.63	360.	92.	66.	6.09
ROUTED TO +	206207	1211.	5.70	359.	92.	66.	6.09
HYDROGRAPH AT +	S209	380.	4.63	66.	17.	12.	0.65
2 COMBINED AT +	C207R	1234.	5.70	394.	102.	73.	6.74
HYDROGRAPH AT +	S210	311.	4.27	44.	11.	8.	0.48
2 COMBINED AT +	C207	1226.	5.70	413.	107.	77.	7.22
ROUTED TO +	207105	1214.	5.80	412.	107.	77.	7.22
HYDROGRAPH AT +	S211	292.	4.30	47.	12.	8.	0.49
2 COMBINED AT +	C105R	1210.	5.80	432.	113.	81.	7.70
2 COMBINED AT							

+		C105	1634.	5.90	614.	160.	116.	12.75
	HYDROGRAPH AT							
+		S300	525.	4.20	76.	19.	14.	0.62
	DIVERSION TO							
+		DIV300	525.	4.20	65.	16.	12.	0.62
	HYDROGRAPH AT							
+		S300O	129.	4.87	11.	3.	2.	0.62
	HYDROGRAPH AT							
+		S301	873.	4.17	130.	33.	24.	0.99
	DIVERSION TO							
+		DIV301	873.	4.17	76.	19.	14.	0.99
	HYDROGRAPH AT							
+		S301O	538.	4.50	55.	14.	10.	0.99
	2 COMBINED AT							
+		C300	505.	4.50	52.	13.	9.	1.61
	ROUTED TO							
+		300301	386.	4.77	52.	13.	9.	1.61
	HYDROGRAPH AT							
+		S302	405.	4.43	56.	14.	10.	0.47
	DIVERSION TO							
+		DIV302	325.	4.30	17.	4.	3.	0.47
	HYDROGRAPH AT							
+		S302O	405.	4.43	40.	10.	7.	0.47
	2 COMBINED AT							
+		C301	558.	4.77	78.	19.	14.	2.07
	ROUTED TO							
+		301302	475.	5.10	78.	19.	14.	2.07
	HYDROGRAPH AT							
+		S303	358.	4.63	63.	16.	11.	0.71
	2 COMBINED AT							
+		C302	608.	5.10	116.	29.	21.	2.78
	ROUTED TO							
+		302303	571.	5.30	115.	29.	21.	2.78
	HYDROGRAPH AT							
+		S304	372.	4.37	73.	18.	13.	0.82
	DIVERSION TO							
+		DIV304	372.	4.37	64.	16.	12.	0.82
	HYDROGRAPH AT							
+		S304O	78.	5.43	9.	2.	2.	0.82
	2 COMBINED AT							
+		C303	572.	5.30	115.	29.	21.	3.60
	2 COMBINED AT							
+		WEST-1	1741.	5.90	649.	169.	122.	16.36
	HYDROGRAPH AT							
+		S400	971.	4.37	141.	35.	26.	1.05
	DIVERSION TO							
+		DIV400	971.	4.37	112.	28.	20.	1.05
	HYDROGRAPH AT							
+		S400O	302.	4.70	30.	8.	5.	1.05
	ROUTED TO							
+		C400O	171.	5.17	30.	8.	5.	1.05
	ROUTED TO							
+		400401	142.	5.33	30.	8.	5.	1.05
	HYDROGRAPH AT							

+		S401	547.	4.20	66.	17.	12.	0.65
+	DIVERSION TO	DIV401	547.	4.20	66.	17.	12.	0.65
+	HYDROGRAPH AT	S401O	0.	0.00	0.	0.	0.	0.65
+	2 COMBINED AT	C401	142.	5.33	30.	8.	5.	1.69
+	ROUTED TO	401402	105.	6.30	25.	6.	5.	1.69
+	HYDROGRAPH AT	S402	831.	4.17	99.	25.	18.	0.74
+	DIVERSION TO	DIV402	831.	4.17	99.	25.	18.	0.74
+	HYDROGRAPH AT	S402O	0.	0.00	0.	0.	0.	0.74
+	2 COMBINED AT	C402	105.	6.30	25.	6.	5.	2.43
+	ROUTED TO	402403	95.	7.00	22.	5.	4.	2.43
+	HYDROGRAPH AT	S403	779.	4.13	93.	23.	17.	0.56
+	DIVERSION TO	DIV403	779.	4.13	93.	23.	17.	0.56
+	HYDROGRAPH AT	S403O	0.	0.00	0.	0.	0.	0.56
+	2 COMBINED AT	C403	100.	7.03	22.	5.	4.	2.99
+	ROUTED TO	403404	86.	7.33	20.	5.	4.	2.99
+	HYDROGRAPH AT	S404	318.	4.27	29.	7.	5.	0.26
+	DIVERSION TO	DIV404	200.	4.10	6.	1.	1.	0.26
+	HYDROGRAPH AT	S404O	318.	4.27	23.	6.	4.	0.26
+	2 COMBINED AT	C404	176.	4.27	36.	9.	6.	3.26
+	2 COMBINED AT	WEST-2	1741.	5.90	660.	172.	124.	19.61
+	HYDROGRAPH AT	S500	509.	4.47	129.	33.	24.	1.05
+	DIVERSION TO	DIV500	509.	4.47	94.	23.	17.	1.05
+	HYDROGRAPH AT	S500O	206.	5.03	38.	10.	7.	1.05
+	ROUTED TO	500501	169.	5.33	38.	10.	7.	1.05
+	HYDROGRAPH AT	S501	463.	4.23	71.	18.	13.	0.61
+	DIVERSION TO	DIV501	463.	4.23	51.	13.	9.	0.61
+	HYDROGRAPH AT	S501O	247.	4.63	21.	5.	4.	0.61
	2 COMBINED AT							

+		C501	164.	5.90	43.	11.	8.	1.67
	ROUTED TO							
+		S01502	144.	6.13	41.	10.	7.	1.67
	HYDROGRAPH AT							
+		S502	340.	4.40	45.	11.	8.	0.40
	DIVERSION TO							
+		DIV502	340.	4.40	27.	7.	5.	0.40
	HYDROGRAPH AT							
+		S502O	234.	4.63	18.	5.	3.	0.40
	2 COMBINED AT							
+		C502L	150.	6.13	45.	11.	8.	2.07
	HYDROGRAPH AT							
+		S503	602.	4.33	118.	30.	21.	0.99
	DIVERSION TO							
+		DIV503	602.	4.33	51.	13.	9.	0.99
	HYDROGRAPH AT							
+		S503O	547.	4.53	68.	17.	12.	0.99
	2 COMBINED AT							
+		C502I	429.	4.53	89.	22.	16.	3.07
	ROUTED TO							
+		C502O	407.	4.60	89.	22.	16.	3.07
	ROUTED TO							
+		502505	297.	5.33	81.	20.	15.	3.07
	HYDROGRAPH AT							
+		S504	218.	4.27	42.	11.	8.	0.33
	DIVERSION TO							
+		DIV504	218.	4.27	42.	11.	8.	0.33
	HYDROGRAPH AT							
+		S504O	0.	0.00	0.	0.	0.	0.33
	2 COMBINED AT							
+		C505L	297.	5.33	81.	20.	15.	3.39
	HYDROGRAPH AT							
+		S505	192.	4.17	15.	4.	3.	0.14
	DIVERSION TO							
+		DIV505	98.	4.03	4.	1.	1.	0.14
	HYDROGRAPH AT							
+		S505O	192.	4.17	12.	3.	2.	0.14
	ROUTED TO							
+		C503O	81.	4.40	12.	3.	2.	0.14
	ROUTED TO							
+		503505	77.	4.90	11.	3.	2.	0.14
	HYDROGRAPH AT							
+		S506	198.	4.20	20.	5.	4.	0.15
	DIVERSION TO							
+		DIV506	198.	4.20	12.	3.	2.	0.15
	HYDROGRAPH AT							
+		S506O	146.	4.33	8.	2.	1.	0.15
	ROUTED TO							
+		C504O	61.	4.60	8.	2.	1.	0.15
	ROUTED TO							
+		504505	58.	5.27	8.	2.	1.	0.15
	HYDROGRAPH AT							
+		S507	653.	4.17	72.	18.	13.	0.67
	DIVERSION TO							

+		DIV507	653.	4.17	72.	18.	13.	0.67
	HYDROGRAPH AT							
+		S507O	0.	0.00	0.	0.	0.	0.67
	3 COMBINED AT							
+		C505R	105.	5.17	17.	4.	3.	0.96
	2 COMBINED AT							
+		C505	307.	5.33	81.	20.	15.	4.35
	ROUTED TO							
+		505509	254.	6.00	67.	17.	12.	4.35
	HYDROGRAPH AT							
+		S508	383.	4.10	35.	9.	6.	0.29
	DIVERSION TO							
+		DIV508	383.	4.10	35.	9.	6.	0.29
	HYDROGRAPH AT							
+		S508O	0.	0.00	0.	0.	0.	0.29
	2 COMBINED AT							
+		C509L	254.	6.00	67.	17.	12.	4.65
	HYDROGRAPH AT							
+		S509	279.	4.07	22.	6.	4.	0.17
	DIVERSION TO							
+		DIV509	255.	4.00	10.	3.	2.	0.17
	HYDROGRAPH AT							
+		S509O	279.	4.07	12.	3.	2.	0.17
	ROUTED TO							
+		C506O	76.	4.33	12.	3.	2.	0.17
	ROUTED TO							
+		506508	76.	4.57	12.	3.	2.	0.17
	HYDROGRAPH AT							
+		S510	180.	4.10	22.	6.	4.	0.13
	DIVERSION TO							
+		DIV510	180.	4.10	22.	6.	4.	0.13
	HYDROGRAPH AT							
+		S510O	0.	0.00	0.	0.	0.	0.13
	2 COMBINED AT							
+		C508R	76.	4.57	12.	3.	2.	0.30
	HYDROGRAPH AT							
+		S511	505.	4.10	50.	13.	9.	0.38
	DIVERSION TO							
+		DIV511	505.	4.10	35.	9.	6.	0.38
	HYDROGRAPH AT							
+		S511O	285.	4.33	15.	4.	3.	0.38
	ROUTED TO							
+		C507O	73.	4.70	15.	4.	3.	0.38
	ROUTED TO							
+		507508	61.	5.33	15.	4.	3.	0.38
	HYDROGRAPH AT							
+		S512	292.	4.13	39.	10.	7.	0.21
	DIVERSION TO							
+		DIV512	292.	4.13	39.	10.	7.	0.21
	HYDROGRAPH AT							
+		S512O	0.	0.00	0.	0.	0.	0.21
	2 COMBINED AT							
+		C508L	61.	5.33	15.	4.	3.	0.60
	2 COMBINED AT							

+		C508	108.	4.90	23.	6.	5.	0.90
	ROUTED TO							
+		508509	62.	5.40	21.	7.	5.	0.90
	HYDROGRAPH AT							
+		S513	551.	4.23	86.	22.	16.	0.78
	DIVERSION TO							
+		DIV513	551.	4.23	86.	22.	16.	0.78
	HYDROGRAPH AT							
+		S513O	0.	0.00	0.	0.	0.	0.78
	2 COMBINED AT							
+		C509R	62.	5.40	21.	7.	5.	1.67
	2 COMBINED AT							
+		C509	232.	6.03	67.	19.	13.	6.32
	ROUTED TO							
+		509510	214.	6.17	65.	18.	13.	6.32
	HYDROGRAPH AT							
+		S514	748.	4.17	102.	26.	19.	0.65
	DIVERSION TO							
+		DIV514	748.	4.17	102.	26.	19.	0.65
	HYDROGRAPH AT							
+		S514O	0.	0.00	0.	0.	0.	0.65
	2 COMBINED AT							
+		C510	214.	6.17	65.	18.	13.	6.97
	ROUTED TO							
+		510511	196.	6.80	60.	18.	13.	6.97
	HYDROGRAPH AT							
+		S515	1319.	4.17	177.	44.	32.	1.10
	DIVERSION TO							
+		DIV515	1319.	4.17	171.	43.	31.	1.10
	HYDROGRAPH AT							
+		S515O	91.	4.90	6.	2.	1.	1.10
	2 COMBINED AT							
+		C511	195.	6.80	60.	18.	13.	8.07
	ROUTED TO							
+		511512	165.	7.77	53.	17.	12.	8.07
	HYDROGRAPH AT							
+		S516	539.	4.20	83.	21.	15.	0.54
	DIVERSION TO							
+		DIV516	539.	4.20	79.	20.	14.	0.54
	HYDROGRAPH AT							
+		S516O	47.	5.43	5.	1.	1.	0.54
	2 COMBINED AT							
+		C512	165.	7.77	53.	17.	12.	8.61
	2 COMBINED AT							
+		WEST-3	1741.	5.90	688.	183.	132.	28.22
	HYDROGRAPH AT							
+		S600	558.	4.97	151.	39.	28.	2.02
	ROUTED TO							
+		600601	555.	5.03	151.	39.	28.	2.02
	HYDROGRAPH AT							
+		S601	673.	4.53	128.	32.	23.	0.90
	2 COMBINED AT							
+		C601	856.	4.87	254.	65.	47.	2.92
	ROUTED TO							

+		601602	844.	5.07	254.	65.	47.	2.92
+	HYDROGRAPH AT	S603	708.	4.33	94.	24.	17.	0.67
+	2 COMBINED AT	C602L	964.	4.93	329.	85.	61.	3.58
+	HYDROGRAPH AT	S602	717.	4.90	198.	51.	37.	1.88
+	2 COMBINED AT	C602	1466.	4.90	486.	126.	90.	5.47
+	ROUTED TO	602603	1412.	5.10	442.	111.	80.	5.47
+	HYDROGRAPH AT	S606	380.	4.57	81.	21.	15.	0.66
+	2 COMBINED AT	C603L	1550.	5.03	497.	125.	90.	6.13
+	HYDROGRAPH AT	S605	497.	4.77	123.	32.	23.	1.09
+	HYDROGRAPH AT	S604	755.	5.20	261.	68.	49.	2.66
+	3 COMBINED AT	C603	2258.	5.07	779.	201.	145.	9.87
+	ROUTED TO	603604	2174.	5.33	731.	184.	133.	9.87
+	HYDROGRAPH AT	S609	243.	4.70	62.	16.	11.	0.56
+	DIVERSION TO	DIV609	243.	4.70	21.	5.	4.	0.56
+	HYDROGRAPH AT	S6090	229.	4.77	43.	11.	8.	0.56
+	2 COMBINED AT	C604R	2234.	5.33	744.	187.	135.	10.43
+	HYDROGRAPH AT	S607	391.	4.73	102.	26.	19.	0.82
+	DIVERSION TO	DIV607	105.	4.20	11.	3.	2.	0.82
+	HYDROGRAPH AT	S6070	391.	4.73	94.	24.	17.	0.82
+	2 COMBINED AT	C604	2382.	5.30	804.	203.	146.	11.25
+	ROUTED TO	604605	2376.	5.33	804.	203.	146.	11.25
+	HYDROGRAPH AT	S608	497.	4.37	71.	18.	13.	0.51
+	DIVERSION TO	DIV608	327.	4.20	18.	5.	3.	0.51
+	HYDROGRAPH AT	S6080	497.	4.37	53.	13.	10.	0.51
+	2 COMBINED AT	C605	2421.	5.33	835.	210.	152.	11.76
+	ROUTED TO	605606	2395.	5.47	827.	208.	150.	11.76
+	HYDROGRAPH AT	S610	417.	4.30	84.	21.	15.	0.60
	2 COMBINED AT							

+		C606L	2451.	5.43	882.	223.	161.	12.36
	HYDROGRAPH AT							
+		S612	480.	4.40	112.	29.	21.	0.81
	2 COMBINED AT							
+		C606	2557.	5.43	960.	244.	176.	13.17
	ROUTED TO							
+		606608	2549.	5.47	957.	243.	175.	13.17
	HYDROGRAPH AT							
+		S611	465.	4.43	71.	18.	13.	0.57
	ROUTED TO							
+		607608	429.	4.70	71.	18.	13.	0.57
	HYDROGRAPH AT							
+		S613	747.	5.00	207.	53.	38.	1.80
	3 COMBINED AT							
+		C608	2977.	5.43	1139.	291.	210.	15.53
	ROUTED TO							
+		608609	2948.	5.57	1128.	287.	207.	15.53
	HYDROGRAPH AT							
+		S614	443.	4.93	124.	32.	23.	1.08
	2 COMBINED AT							
+		C609	3096.	5.53	1203.	308.	222.	16.61
	ROUTED TO							
+		609611	3041.	5.83	1175.	298.	215.	16.61
	HYDROGRAPH AT							
+		S617	488.	4.27	76.	19.	14.	0.68
	2 COMBINED AT							
+		C611R	3041.	5.80	1211.	308.	222.	17.29
	HYDROGRAPH AT							
+		S615	619.	4.87	167.	43.	31.	1.05
	ROUTED TO							
+		610611	609.	5.07	167.	43.	31.	1.05
	HYDROGRAPH AT							
+		S616	318.	4.53	58.	15.	10.	0.50
	DIVERSION TO							
+		DIV616	318.	4.53	25.	6.	5.	0.50
	HYDROGRAPH AT							
+		S616O	275.	4.70	33.	8.	6.	0.50
	2 COMBINED AT							
+		C611L	726.	5.00	189.	48.	35.	1.56
	2 COMBINED AT							
+		C611	3296.	5.77	1335.	342.	247.	18.85
	ROUTED TO							
+		611613	3282.	5.83	1325.	338.	244.	18.85
	HYDROGRAPH AT							
+		S618	389.	4.87	100.	26.	19.	0.96
	2 COMBINED AT							
+		C613R	3355.	5.80	1376.	352.	254.	19.81
	HYDROGRAPH AT							
+		S619	641.	4.63	118.	30.	22.	0.83
	ROUTED TO							
+		612613	617.	4.83	118.	30.	22.	0.83
	HYDROGRAPH AT							
+		S620	267.	4.63	62.	16.	12.	0.44
	2 COMBINED AT							

+	C613L	781.	4.83	174.	44.	32.	1.27
+ 2 COMBINED AT	C613	3549.	5.73	1489.	383.	276.	21.08
+ ROUTED TO	613614	3532.	5.87	1478.	379.	273.	21.08
+ HYDROGRAPH AT	S621	528.	4.53	72.	18.	13.	0.92
+ 2 COMBINED AT	C614	3532.	5.87	1501.	385.	277.	22.00
+ ROUTED TO	614615	3500.	6.00	1485.	380.	274.	22.00
+ HYDROGRAPH AT	S622	241.	5.13	69.	17.	13.	0.90
+ 2 COMBINED AT	C615	3521.	5.97	1501.	384.	277.	22.90
+ 2 COMBINED AT	WEST-4	3965.	5.93	1744.	457.	329.	51.12
+ HYDROGRAPH AT	S700	491.	4.20	59.	15.	11.	0.61
+ HYDROGRAPH AT	S701	272.	4.53	78.	20.	14.	0.72
+ DIVERSION TO	DIV701	5.	1.97	1.	0.	0.	0.72
+ HYDROGRAPH AT	S701O	272.	4.53	78.	20.	14.	0.72
+ HYDROGRAPH AT	S702	255.	4.13	32.	8.	6.	0.26
+ DIVERSION TO	DIV702	255.	4.13	32.	8.	6.	0.26
+ HYDROGRAPH AT	S702O	0.	0.00	0.	0.	0.	0.26
+ HYDROGRAPH AT	S703	167.	4.40	22.	5.	4.	0.26
+ DIVERSION TO	DIV703	167.	4.40	10.	3.	2.	0.26
+ HYDROGRAPH AT	S703O	129.	4.60	12.	3.	2.	0.26
+ HYDROGRAPH AT	S704	408.	4.17	42.	11.	8.	0.41
+ ROUTED TO	704705	373.	4.43	42.	11.	8.	0.41
+ HYDROGRAPH AT	S705	838.	4.17	110.	28.	20.	0.75
+ 2 COMBINED AT	C705	868.	4.33	144.	36.	26.	1.16
+ ROUTED TO	C705O	544.	4.63	144.	36.	26.	1.16
+ ROUTED TO	705OAF	541.	4.83	144.	36.	26.	1.16
+ HYDROGRAPH AT	S705AF	171.	4.40	25.	6.	5.	0.18
+ DIVERSION TO	DIV705	171.	4.40	11.	3.	2.	0.18
HYDROGRAPH AT							

+		705AFO	155.	4.53	15.	4.	3.	0.18
	2 COMBINED AT							
+		C705AF	635.	4.73	156.	39.	28.	1.34
	5 COMBINED AT							
+		WEST-5	945.	4.63	258.	66.	47.	3.19
	HYDROGRAPH AT							
+		S706	842.	4.13	102.	26.	18.	0.71
	DIVERSION TO							
+		DIV706	842.	4.13	100.	25.	18.	0.71
	HYDROGRAPH AT							
+		S706O	22.	5.37	2.	1.	0.	0.71
	HYDROGRAPH AT							
+		S707	812.	4.13	108.	27.	20.	0.64
	DIVERSION TO							
+		DIV707	812.	4.13	105.	26.	19.	0.64
	HYDROGRAPH AT							
+		S707O	31.	5.40	3.	1.	1.	0.64
	HYDROGRAPH AT							
+		S728	236.	4.23	43.	11.	8.	0.28
	DIVERSION TO							
+		DIV728	236.	4.23	35.	9.	6.	0.28
	HYDROGRAPH AT							
+		S728O	76.	5.03	8.	2.	2.	0.28
	5 COMBINED AT							
+		WEST	4006.	5.90	1841.	485.	349.	55.94
	HYDROGRAPH AT							
+		S708	991.	4.13	100.	25.	18.	0.71
	DIVERSION TO							
+		DIV708	991.	4.13	86.	21.	15.	0.71
	HYDROGRAPH AT							
+		S708O	310.	4.47	14.	4.	3.	0.71
	HYDROGRAPH AT							
+		S709	622.	4.13	72.	18.	13.	0.44
	DIVERSION TO							
+		DIV709	622.	4.13	44.	11.	8.	0.44
	HYDROGRAPH AT							
+		S709O	468.	4.33	28.	7.	5.	0.44
	ROUTED TO							
+		C709O	210.	4.60	28.	7.	5.	0.44
	ROUTED TO							
+		709710	209.	4.70	28.	7.	5.	0.44
	HYDROGRAPH AT							
+		S710	230.	4.03	18.	4.	3.	0.11
	DIVERSION TO							
+		DIV710	223.	4.00	9.	2.	2.	0.11
	HYDROGRAPH AT							
+		S710O	219.	4.07	8.	2.	1.	0.11
	2 COMBINED AT							
+		C710I	210.	4.70	36.	9.	7.	0.55
	ROUTED TO							
+		C710O	182.	4.90	36.	9.	6.	0.55
	HYDROGRAPH AT							
+		S711	361.	4.03	27.	7.	5.	0.16
	DIVERSION TO							

+		DIV711	361.	4.03	21.	5.	4.	0.16
	HYDROGRAPH AT							
+		S711O	187.	4.13	6.	2.	1.	0.16
	ROUTED TO							
+		C711O	112.	4.23	6.	2.	1.	0.16
	ROUTED TO							
+		711712	95.	4.30	6.	2.	1.	0.16
	HYDROGRAPH AT							
+		S712	163.	4.00	11.	3.	2.	0.07
	DIVERSION TO							
+		DIV712	163.	4.00	8.	2.	2.	0.07
	HYDROGRAPH AT							
+		S712O	111.	4.07	3.	1.	0.	0.07
	2 COMBINED AT							
+		C712I	115.	4.30	9.	2.	2.	0.23
	ROUTED TO							
+		C712O	92.	4.40	9.	2.	2.	0.23
	ROUTED TO							
+		712714	79.	4.50	9.	2.	2.	0.23
	HYDROGRAPH AT							
+		S713	233.	4.03	17.	4.	3.	0.11
	DIVERSION TO							
+		DIV713	151.	3.87	6.	1.	1.	0.11
	HYDROGRAPH AT							
+		S713O	233.	4.03	11.	3.	2.	0.11
	ROUTED TO							
+		C713O	101.	4.20	11.	3.	2.	0.11
	ROUTED TO							
+		713714	100.	4.23	11.	3.	2.	0.11
	HYDROGRAPH AT							
+		S714	105.	4.03	7.	2.	1.	0.06
	3 COMBINED AT							
+		C714	188.	4.17	27.	7.	5.	0.39
	HYDROGRAPH AT							
+		S715	268.	4.17	34.	8.	6.	0.22
	DIVERSION TO							
+		DIV715	229.	4.07	8.	2.	1.	0.22
	HYDROGRAPH AT							
+		S715O	268.	4.17	25.	6.	5.	0.22
	HYDROGRAPH AT							
+		S716	1153.	4.20	182.	46.	33.	1.13
	DIVERSION TO							
+		DIV716	1153.	4.20	157.	39.	28.	1.13
	HYDROGRAPH AT							
+		S716O	260.	5.03	26.	6.	5.	1.13
	ROUTED TO							
+		C716O	197.	5.13	26.	6.	5.	1.13
	ROUTED TO							
+		716717	162.	5.43	26.	6.	5.	1.13
	HYDROGRAPH AT							
+		S717	553.	4.13	47.	12.	8.	0.29
	DIVERSION TO							
+		DIV717	419.	4.03	16.	4.	3.	0.29
	HYDROGRAPH AT							

+		S717O	553.	4.13	31.	8.	6.	0.29
	2 COMBINED AT							
+		C717	414.	4.13	54.	14.	10.	1.41
	ROUTED TO							
+		717718	303.	4.70	54.	13.	10.	1.41
	HYDROGRAPH AT							
+		S718	284.	4.67	70.	18.	13.	0.44
	DIVERSION TO							
+		DIV718	284.	4.67	27.	7.	5.	0.44
	HYDROGRAPH AT							
+		S718O	261.	4.87	44.	11.	8.	0.44
	2 COMBINED AT							
+		C718	420.	4.93	95.	24.	17.	1.86
	HYDROGRAPH AT							
+		S719	177.	4.17	28.	7.	5.	0.15
	DIVERSION TO							
+		DIV719	177.	4.17	17.	4.	3.	0.15
	HYDROGRAPH AT							
+		S719O	111.	4.53	11.	3.	2.	0.15
	6 COMBINED AT							
+		EAST-1	805.	4.93	180.	45.	32.	3.88
	HYDROGRAPH AT							
+		S720	508.	4.13	62.	15.	11.	0.37
	DIVERSION TO							
+		DIV720	508.	4.13	47.	12.	8.	0.37
	HYDROGRAPH AT							
+		S720O	245.	4.50	15.	4.	3.	0.37
	HYDROGRAPH AT							
+		S721	680.	4.07	60.	15.	11.	0.34
	DIVERSION TO							
+		DIV721	680.	4.07	60.	15.	11.	0.34
	HYDROGRAPH AT							
+		S721O	0.	6.17	0.	0.	0.	0.34
	ROUTED TO							
+		C721O	0.	6.33	0.	0.	0.	0.34
	ROUTED TO							
+		721722	0.	6.90	0.	0.	0.	0.34
	HYDROGRAPH AT							
+		S722	925.	4.23	149.	37.	27.	0.95
	DIVERSION TO							
+		DIV722	925.	4.23	127.	32.	23.	0.95
	HYDROGRAPH AT							
+		S722O	203.	4.87	23.	6.	4.	0.95
	2 COMBINED AT							
+		C722	196.	5.10	22.	5.	4.	1.29
	HYDROGRAPH AT							
+		S723	167.	4.03	15.	4.	3.	0.09
	DIVERSION TO							
+		DIV723	167.	4.03	9.	2.	2.	0.09
	HYDROGRAPH AT							
+		S723O	133.	4.13	6.	1.	1.	0.09
	HYDROGRAPH AT							
+		S724	1342.	4.20	224.	56.	41.	1.16
	DIVERSION TO							

+		DIV724	1342.	4.20	202.	51.	36.	1.16
+	HYDROGRAPH AT	S724O	199.	5.17	23.	6.	4.	1.16
+	HYDROGRAPH AT	S725	950.	4.33	210.	53.	38.	1.16
+	DIVERSION TO	DIV725	950.	4.33	210.	53.	38.	1.16
+	HYDROGRAPH AT	S725O	18.	6.67	1.	0.	0.	1.16
+	5 COMBINED AT	EAST-2	396.	5.17	47.	12.	9.	4.06
+	HYDROGRAPH AT	S726	569.	4.07	44.	11.	8.	0.33
+	DIVERSION TO	DIV726	569.	4.07	43.	11.	8.	0.33
+	HYDROGRAPH AT	S726O	15.	4.77	2.	0.	0.	0.33
+	ROUTED TO	726727	9.	5.30	2.	0.	0.	0.33
+	HYDROGRAPH AT	S727	391.	4.20	71.	18.	13.	0.38
+	DIVERSION TO	DIV727	391.	4.20	67.	17.	12.	0.38
+	HYDROGRAPH AT	S727O	44.	5.63	5.	1.	1.	0.38
+	2 COMBINED AT	C727	40.	5.63	5.	1.	1.	0.71
+	4 COMBINED AT	TOTAL	4006.	5.83	1867.	491.	354.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 10-Year, 24-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  10:08:23  *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR10-24.IH1
Original:06-22-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future condition 10-year, 24-hour storm event with 100-year, 2-hour retention. A companion model is also created for the future condition 10-year, 6-hour storm event. Both models (10-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 10-year, 24-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing
- 100-year, 2-hour retention volume diversions

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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24 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

26 JD          INDEX STORM NO. 1
                     STRM       2.73  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

27 PI            PRECIPITATION PATTERN
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                 0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 2

STRM 2.71 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 3

STRM 2.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

39 JD INDEX STORM NO. 4

STRM 2.57 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

40 JD INDEX STORM NO. 5

STRM 2.47 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

41 JD INDEX STORM NO. 6

STRM 2.34 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	213.	12.63	55.	17.	12.	0.57		
+	DIVERSION TO	DIV100	90.	12.20	10.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	213.	12.63	51.	14.	10.	0.57		
+	ROUTED TO	100102	207.	12.90	50.	14.	10.	0.57		
+	HYDROGRAPH AT	S101	284.	12.50	52.	15.	11.	0.63		
+	2 COMBINED AT	C102R	390.	12.77	100.	29.	21.	1.20		
	HYDROGRAPH AT									

+		S102	196.	12.30	46.	15.	11.	0.45
	DIVERSION TO							
+		DIV102	196.	12.30	26.	7.	5.	0.45
	HYDROGRAPH AT							
+		S102O	164.	12.57	26.	7.	5.	0.45
	ROUTED TO							
+		101102	130.	13.03	26.	7.	5.	0.45
	HYDROGRAPH AT							
+		S103	137.	12.70	35.	10.	7.	0.40
	2 COMBINED AT							
+		C102L	238.	13.00	59.	18.	13.	0.84
	2 COMBINED AT							
+		C102	550.	13.00	156.	45.	33.	2.05
	ROUTED TO							
+		102103	526.	13.23	156.	45.	33.	2.05
	HYDROGRAPH AT							
+		S104	452.	12.57	89.	27.	19.	0.90
	DIVERSION TO							
+		DIV104	445.	12.50	36.	10.	7.	0.90
	HYDROGRAPH AT							
+		S104O	452.	12.57	61.	17.	12.	0.90
	2 COMBINED AT							
+		C103R	751.	12.87	213.	61.	44.	2.95
	HYDROGRAPH AT							
+		S105	207.	12.40	59.	18.	13.	0.59
	DIVERSION TO							
+		DIV105	207.	12.40	30.	8.	6.	0.59
	HYDROGRAPH AT							
+		S105O	182.	12.73	35.	10.	7.	0.59
	2 COMBINED AT							
+		C103	915.	12.77	244.	70.	50.	3.54
	ROUTED TO							
+		103104	872.	13.17	243.	70.	50.	3.54
	HYDROGRAPH AT							
+		S106	238.	12.27	47.	13.	9.	0.57
	2 COMBINED AT							
+		C104	943.	13.13	282.	82.	59.	4.11
	ROUTED TO							
+		104105	910.	13.50	281.	82.	59.	4.11
	HYDROGRAPH AT							
+		S107	344.	12.53	65.	17.	12.	0.94
	2 COMBINED AT							
+		C105L	992.	13.47	338.	97.	70.	5.05
	HYDROGRAPH AT							
+		S200	438.	12.57	96.	31.	22.	0.96
	ROUTED TO							
+		200201	431.	12.63	96.	31.	22.	0.96
	HYDROGRAPH AT							
+		S201	158.	12.47	35.	11.	8.	0.35
	2 COMBINED AT							
+		C201	569.	12.60	130.	42.	30.	1.31
	ROUTED TO							
+		201203	556.	12.73	130.	42.	30.	1.31
	HYDROGRAPH AT							

+	S202	72.	12.27	13.	4.	3.	0.13
ROUTED TO +	202203	69.	12.37	13.	4.	3.	0.13
HYDROGRAPH AT +	S203	130.	12.37	40.	13.	9.	0.37
DIVERSION TO +	DIV203	130.	12.37	27.	8.	6.	0.37
HYDROGRAPH AT +	S203O	79.	13.13	18.	5.	4.	0.37
3 COMBINED AT +	C203R	591.	12.73	157.	51.	37.	1.81
HYDROGRAPH AT +	S204	342.	12.70	90.	29.	21.	0.95
DIVERSION TO +	DIV204	7.	3.57	3.	1.	1.	0.95
HYDROGRAPH AT +	S204O	342.	12.70	90.	28.	20.	0.95
2 COMBINED AT +	C203	917.	12.70	243.	78.	57.	2.76
ROUTED TO +	203204	909.	12.77	243.	78.	57.	2.76
HYDROGRAPH AT +	S205	229.	12.37	45.	14.	10.	0.41
DIVERSION TO +	DIV205	229.	12.37	26.	7.	5.	0.41
HYDROGRAPH AT +	S205O	183.	12.57	25.	7.	5.	0.41
2 COMBINED AT +	C204	1039.	12.73	264.	85.	61.	3.17
ROUTED TO +	204205	1016.	12.90	264.	85.	61.	3.17
HYDROGRAPH AT +	S206	274.	12.47	88.	27.	20.	0.85
DIVERSION TO +	DIV206	274.	12.47	78.	21.	15.	0.85
HYDROGRAPH AT +	S206O	72.	14.27	20.	6.	4.	0.85
2 COMBINED AT +	C205L	1016.	12.90	278.	90.	65.	4.03
HYDROGRAPH AT +	S207	318.	12.80	98.	32.	23.	0.96
DIVERSION TO +	DIV207	298.	12.67	34.	10.	7.	0.96
HYDROGRAPH AT +	S207O	318.	12.80	78.	22.	16.	0.96
2 COMBINED AT +	C205	1301.	12.90	345.	110.	79.	4.98
ROUTED TO +	205206	1223.	13.40	345.	110.	79.	4.98
HYDROGRAPH AT +	S208	357.	13.00	115.	36.	26.	1.10
DIVERSION TO +	DIV208	147.	12.47	20.	7.	5.	1.10
HYDROGRAPH AT							

+	S208O	357.	13.00	108.	29.	21.	1.10
2 COMBINED AT +	C206	1477.	13.37	440.	136.	98.	6.09
ROUTED TO +	206207	1467.	13.47	439.	136.	98.	6.09
HYDROGRAPH AT +	S209	283.	12.57	55.	16.	12.	0.65
2 COMBINED AT +	C207R	1525.	13.47	479.	149.	108.	6.74
HYDROGRAPH AT +	S210	215.	12.23	34.	9.	6.	0.48
2 COMBINED AT +	C207	1535.	13.47	505.	156.	113.	7.22
ROUTED TO +	207105	1519.	13.57	504.	156.	113.	7.22
HYDROGRAPH AT +	S211	208.	12.27	37.	10.	7.	0.49
2 COMBINED AT +	C105R	1535.	13.57	532.	164.	119.	7.70
2 COMBINED AT +	C105	2326.	13.57	813.	246.	178.	12.75
HYDROGRAPH AT +	S300	366.	12.17	64.	20.	15.	0.62
DIVERSION TO +	DIV300	366.	12.17	60.	16.	12.	0.62
HYDROGRAPH AT +	S300O	40.	13.43	11.	4.	3.	0.62
HYDROGRAPH AT +	S301	691.	12.13	115.	37.	27.	0.99
DIVERSION TO +	DIV301	691.	12.13	67.	19.	14.	0.99
HYDROGRAPH AT +	S301O	588.	12.27	64.	18.	13.	0.99
2 COMBINED AT +	C300	582.	12.27	72.	22.	16.	1.61
ROUTED TO +	300301	449.	12.53	70.	22.	16.	1.61
HYDROGRAPH AT +	S302	256.	12.40	46.	14.	10.	0.47
DIVERSION TO +	DIV302	185.	12.17	14.	4.	3.	0.47
HYDROGRAPH AT +	S302O	256.	12.40	37.	10.	7.	0.47
2 COMBINED AT +	C301	665.	12.53	105.	31.	23.	2.07
ROUTED TO +	301302	552.	12.83	102.	31.	23.	2.07
HYDROGRAPH AT +	S303	269.	12.57	51.	14.	10.	0.71
2 COMBINED AT +	C302	736.	12.83	145.	45.	32.	2.78
ROUTED TO +	302303	682.	13.07	144.	45.	32.	2.78
HYDROGRAPH AT							

+	S304	321.	12.30	62.	17.	12.	0.82
DIVERSION TO +	DIV304	321.	12.30	62.	17.	12.	0.82
HYDROGRAPH AT +	S304O	1.	23.87	0.	0.	0.	0.82
2 COMBINED AT +	C303	682.	13.07	144.	45.	32.	3.60
2 COMBINED AT +	WEST-1	2588.	13.53	908.	277.	201.	16.36
HYDROGRAPH AT +	S400	367.	13.10	124.	39.	28.	1.05
DIVERSION TO +	DIV400	367.	13.10	102.	28.	20.	1.05
HYDROGRAPH AT +	S400O	139.	14.43	38.	11.	8.	1.05
ROUTED TO +	C400O	97.	14.93	37.	11.	8.	1.05
ROUTED TO +	400401	92.	15.53	37.	11.	8.	1.05
HYDROGRAPH AT +	S401	404.	12.17	55.	16.	11.	0.65
DIVERSION TO +	DIV401	404.	12.17	55.	16.	11.	0.65
HYDROGRAPH AT +	S401O	0.	0.00	0.	0.	0.	0.65
2 COMBINED AT +	C401	92.	15.53	37.	11.	8.	1.69
ROUTED TO +	401402	85.	16.07	36.	11.	8.	1.69
HYDROGRAPH AT +	S402	597.	12.13	86.	27.	19.	0.74
DIVERSION TO +	DIV402	597.	12.13	86.	26.	19.	0.74
HYDROGRAPH AT +	S402O	6.	22.23	2.	1.	0.	0.74
2 COMBINED AT +	C402	85.	16.07	35.	11.	8.	2.43
ROUTED TO +	402403	80.	16.77	34.	11.	8.	2.43
HYDROGRAPH AT +	S403	517.	12.10	79.	24.	17.	0.56
DIVERSION TO +	DIV403	517.	12.10	79.	24.	17.	0.56
HYDROGRAPH AT +	S403O	0.	0.00	0.	0.	0.	0.56
2 COMBINED AT +	C403	80.	16.77	34.	11.	8.	2.99
ROUTED TO +	403404	77.	17.10	34.	11.	8.	2.99
HYDROGRAPH AT +	S404	197.	12.23	23.	6.	5.	0.26
DIVERSION TO +	DIV404	141.	12.00	5.	1.	1.	0.26
HYDROGRAPH AT							

+	S404O	197.	12.23	19.	5.	3.	0.26
2 COMBINED AT							
+	C404	191.	12.23	35.	15.	11.	3.26
2 COMBINED AT							
+	WEST-2	2581.	13.53	927.	288.	209.	19.61
HYDROGRAPH AT							
+	S500	419.	12.37	116.	38.	27.	1.05
DIVERSION TO							
+	DIV500	419.	12.37	84.	23.	17.	1.05
HYDROGRAPH AT							
+	S500O	227.	13.10	48.	14.	10.	1.05
ROUTED TO							
+	500501	192.	13.43	47.	14.	10.	1.05
HYDROGRAPH AT							
+	S501	324.	12.20	59.	18.	13.	0.61
DIVERSION TO							
+	DIV501	324.	12.20	47.	13.	9.	0.61
HYDROGRAPH AT							
+	S501O	129.	12.80	18.	6.	4.	0.61
2 COMBINED AT							
+	C501	216.	13.50	62.	19.	14.	1.67
ROUTED TO							
+	501502	199.	13.70	57.	17.	13.	1.67
HYDROGRAPH AT							
+	S502	212.	12.40	36.	11.	8.	0.40
DIVERSION TO							
+	DIV502	212.	12.40	25.	7.	5.	0.40
HYDROGRAPH AT							
+	S502O	128.	12.70	14.	4.	3.	0.40
2 COMBINED AT							
+	C502L	214.	13.70	69.	21.	15.	2.07
HYDROGRAPH AT							
+	S503	507.	12.27	105.	33.	24.	0.99
DIVERSION TO							
+	DIV503	502.	12.27	45.	13.	9.	0.99
HYDROGRAPH AT							
+	S503O	505.	12.30	72.	20.	14.	0.99
2 COMBINED AT							
+	C502I	484.	12.33	135.	40.	29.	3.07
ROUTED TO							
+	C502O	465.	12.40	135.	40.	29.	3.07
ROUTED TO							
+	502505	355.	13.07	123.	34.	25.	3.07
HYDROGRAPH AT							
+	S504	149.	12.23	35.	11.	8.	0.33
DIVERSION TO							
+	DIV504	149.	12.23	35.	11.	8.	0.33
HYDROGRAPH AT							
+	S504O	0.	0.00	0.	0.	0.	0.33
2 COMBINED AT							
+	C505L	355.	13.07	123.	34.	25.	3.39
HYDROGRAPH AT							
+	S505	98.	12.20	12.	4.	3.	0.14
DIVERSION TO							

+		DIV505	59.	11.90	3.	1.	1.	0.14
	HYDROGRAPH AT							
+		S505O	98.	12.20	10.	3.	2.	0.14
	ROUTED TO							
+		C503O	70.	12.33	10.	3.	2.	0.14
	ROUTED TO							
+		503505	66.	12.83	9.	2.	2.	0.14
	HYDROGRAPH AT							
+		S506	117.	12.20	17.	5.	4.	0.15
	DIVERSION TO							
+		DIV506	117.	12.20	11.	3.	2.	0.15
	HYDROGRAPH AT							
+		S506O	78.	12.40	7.	2.	1.	0.15
	ROUTED TO							
+		C504O	52.	12.53	7.	2.	1.	0.15
	ROUTED TO							
+		504505	45.	13.20	7.	2.	1.	0.15
	HYDROGRAPH AT							
+		S507	476.	12.13	60.	17.	12.	0.67
	DIVERSION TO							
+		DIV507	476.	12.13	60.	17.	12.	0.67
	HYDROGRAPH AT							
+		S507O	0.	0.00	0.	0.	0.	0.67
	3 COMBINED AT							
+		C505R	83.	13.07	16.	4.	3.	0.96
	2 COMBINED AT							
+		C505	422.	13.10	135.	38.	27.	4.35
	ROUTED TO							
+		505509	353.	13.73	114.	29.	21.	4.35
	HYDROGRAPH AT							
+		S508	223.	12.10	29.	9.	6.	0.29
	DIVERSION TO							
+		DIV508	223.	12.10	29.	9.	6.	0.29
	HYDROGRAPH AT							
+		S508O	0.	0.00	0.	0.	0.	0.29
	2 COMBINED AT							
+		C509L	353.	13.73	114.	29.	21.	4.65
	HYDROGRAPH AT							
+		S509	147.	12.03	19.	6.	4.	0.17
	DIVERSION TO							
+		DIV509	139.	11.97	9.	3.	2.	0.17
	HYDROGRAPH AT							
+		S509O	147.	12.03	12.	3.	2.	0.17
	ROUTED TO							
+		C506O	70.	12.30	12.	3.	2.	0.17
	ROUTED TO							
+		506508	69.	12.53	11.	3.	2.	0.17
	HYDROGRAPH AT							
+		S510	113.	12.10	19.	6.	4.	0.13
	DIVERSION TO							
+		DIV510	113.	12.10	19.	6.	4.	0.13
	HYDROGRAPH AT							
+		S510O	2.	19.20	1.	0.	0.	0.13
	2 COMBINED AT							

+		C508R	69.	12.53	11.	4.	3.	0.30
	HYDROGRAPH AT							
+		S511	299.	12.10	42.	13.	9.	0.38
	DIVERSION TO							
+		DIV511	299.	12.10	33.	9.	6.	0.38
	HYDROGRAPH AT							
+		S511O	135.	12.43	14.	4.	3.	0.38
	ROUTED TO							
+		C507O	62.	12.73	14.	4.	3.	0.38
	ROUTED TO							
+		507508	46.	13.20	13.	4.	3.	0.38
	HYDROGRAPH AT							
+		S512	191.	12.13	33.	10.	8.	0.21
	DIVERSION TO							
+		DIV512	191.	12.13	33.	10.	7.	0.21
	HYDROGRAPH AT							
+		S512O	3.	19.27	2.	1.	0.	0.21
	2 COMBINED AT							
+		C508L	46.	13.20	13.	5.	4.	0.60
	2 COMBINED AT							
+		C508	92.	12.80	24.	8.	6.	0.90
	ROUTED TO							
+		508509	48.	13.37	20.	8.	6.	0.90
	HYDROGRAPH AT							
+		S513	449.	12.17	74.	22.	16.	0.78
	DIVERSION TO							
+		DIV513	449.	12.17	74.	22.	16.	0.78
	HYDROGRAPH AT							
+		S513O	0.	0.00	0.	0.	0.	0.78
	2 COMBINED AT							
+		C509R	48.	13.37	20.	8.	6.	1.67
	2 COMBINED AT							
+		C509	361.	13.77	124.	34.	25.	6.32
	ROUTED TO							
+		509510	357.	13.87	123.	34.	24.	6.32
	HYDROGRAPH AT							
+		S514	538.	12.13	87.	26.	19.	0.65
	DIVERSION TO							
+		DIV514	538.	12.13	87.	26.	19.	0.65
	HYDROGRAPH AT							
+		S514O	0.	24.33	0.	0.	0.	0.65
	2 COMBINED AT							
+		C510	357.	13.87	123.	34.	24.	6.97
	ROUTED TO							
+		510511	323.	14.27	119.	33.	24.	6.97
	HYDROGRAPH AT							
+		S515	1082.	12.10	153.	45.	32.	1.10
	DIVERSION TO							
+		DIV515	1082.	12.10	153.	43.	31.	1.10
	HYDROGRAPH AT							
+		S515O	12.	17.37	8.	2.	2.	1.10
	2 COMBINED AT							
+		C511	323.	14.27	119.	34.	24.	8.07
	ROUTED TO							

+	511512	291.	14.90	112.	32.	23.	8.07
HYDROGRAPH AT +	S516	376.	12.17	71.	23.	17.	0.54
DIVERSION TO +	DIV516	376.	12.17	71.	20.	14.	0.54
HYDROGRAPH AT +	S516O	18.	14.57	10.	3.	2.	0.54
2 COMBINED AT +	C512	288.	14.90	115.	34.	24.	8.61
2 COMBINED AT +	WEST-3	2590.	13.57	1001.	312.	229.	28.22
HYDROGRAPH AT +	S600	615.	12.73	150.	47.	34.	2.02
ROUTED TO +	600601	608.	12.80	150.	47.	34.	2.02
HYDROGRAPH AT +	S601	530.	12.47	114.	37.	27.	0.90
2 COMBINED AT +	C601	990.	12.70	260.	82.	60.	2.92
ROUTED TO +	601602	975.	12.90	260.	82.	60.	2.92
HYDROGRAPH AT +	S603	499.	12.30	82.	26.	19.	0.67
2 COMBINED AT +	C602L	1117.	12.83	338.	108.	78.	3.58
HYDROGRAPH AT +	S602	702.	12.73	189.	61.	44.	1.88
2 COMBINED AT +	C602	1766.	12.77	516.	166.	120.	5.47
ROUTED TO +	602603	1695.	13.00	472.	125.	90.	5.47
HYDROGRAPH AT +	S606	270.	12.53	69.	22.	16.	0.66
2 COMBINED AT +	C603L	1855.	12.97	533.	145.	104.	6.13
HYDROGRAPH AT +	S605	409.	12.67	110.	36.	26.	1.09
HYDROGRAPH AT +	S604	736.	13.07	261.	85.	62.	2.66
3 COMBINED AT +	C603	2757.	12.97	857.	252.	182.	9.87
ROUTED TO +	603604	2681.	13.13	809.	212.	152.	9.87
HYDROGRAPH AT +	S609	157.	12.70	49.	16.	11.	0.56
DIVERSION TO +	DIV609	156.	12.63	18.	5.	4.	0.56
HYDROGRAPH AT +	S609O	157.	12.70	38.	11.	8.	0.56
2 COMBINED AT +	C604R	2772.	13.13	836.	220.	158.	10.43
HYDROGRAPH AT +	S607	311.	12.67	91.	29.	21.	0.82
DIVERSION TO							

+	DIV607	13.	9.70	9.	3.	2.	0.82
HYDROGRAPH AT							
+	S607O	311.	12.67	91.	26.	19.	0.82
2 COMBINED AT							
+	C604	2954.	13.13	914.	242.	175.	11.25
ROUTED TO							
+	604605	2937.	13.17	914.	242.	175.	11.25
HYDROGRAPH AT							
+	S608	333.	12.33	60.	19.	14.	0.51
DIVERSION TO							
+	DIV608	164.	12.00	14.	5.	3.	0.51
HYDROGRAPH AT							
+	S608O	333.	12.33	53.	15.	10.	0.51
2 COMBINED AT							
+	C605	2993.	13.17	957.	254.	183.	11.76
ROUTED TO							
+	605606	2951.	13.30	949.	250.	180.	11.76
HYDROGRAPH AT							
+	S610	306.	12.27	72.	23.	17.	0.60
2 COMBINED AT							
+	C606L	3024.	13.30	1010.	270.	195.	12.36
HYDROGRAPH AT							
+	S612	383.	12.33	98.	30.	22.	0.81
2 COMBINED AT							
+	C606	3142.	13.30	1093.	297.	214.	13.17
ROUTED TO							
+	606608	3134.	13.33	1090.	294.	212.	13.17
HYDROGRAPH AT							
+	S611	297.	12.43	58.	19.	14.	0.57
ROUTED TO							
+	607608	279.	12.73	58.	19.	14.	0.57
HYDROGRAPH AT							
+	S613	708.	12.83	195.	62.	45.	1.80
3 COMBINED AT							
+	C608	3644.	13.30	1303.	364.	262.	15.53
ROUTED TO							
+	608609	3602.	13.43	1293.	355.	256.	15.53
HYDROGRAPH AT							
+	S614	370.	12.83	112.	36.	26.	1.08
2 COMBINED AT							
+	C609	3791.	13.40	1384.	386.	278.	16.61
ROUTED TO							
+	609611	3725.	13.63	1356.	360.	260.	16.61
HYDROGRAPH AT							
+	S617	364.	12.23	64.	19.	14.	0.68
2 COMBINED AT							
+	C611R	3739.	13.63	1403.	376.	271.	17.29
HYDROGRAPH AT							
+	S615	500.	12.80	151.	50.	36.	1.05
ROUTED TO							
+	610611	490.	13.00	151.	50.	36.	1.05
HYDROGRAPH AT							
+	S616	221.	12.50	47.	14.	10.	0.50
DIVERSION TO							

+	DIV616	221.	12.50	23.	6.	5.	0.50
+ HYDROGRAPH AT	S616O	194.	12.67	28.	8.	6.	0.50
+ 2 COMBINED AT	C611L	616.	12.93	177.	57.	42.	1.56
+ 2 COMBINED AT	C611	4043.	13.60	1550.	425.	307.	18.85
+ ROUTED TO	611613	4024.	13.67	1540.	415.	299.	18.85
+ HYDROGRAPH AT	S618	332.	12.73	90.	27.	19.	0.96
+ 2 COMBINED AT	C613R	4130.	13.67	1610.	437.	315.	19.81
+ HYDROGRAPH AT	S619	500.	12.60	104.	33.	24.	0.83
+ ROUTED TO	612613	481.	12.83	104.	33.	24.	0.83
+ HYDROGRAPH AT	S620	189.	12.63	54.	17.	12.	0.44
+ 2 COMBINED AT	C613L	652.	12.80	157.	49.	36.	1.27
+ 2 COMBINED AT	C613	4350.	13.63	1740.	479.	346.	21.08
+ ROUTED TO	613614	4319.	13.77	1729.	468.	337.	21.08
+ HYDROGRAPH AT	S621	443.	12.43	62.	16.	12.	0.92
+ 2 COMBINED AT	C614	4318.	13.77	1773.	480.	346.	22.00
+ ROUTED TO	614615	4284.	13.90	1761.	471.	339.	22.00
+ HYDROGRAPH AT	S622	210.	12.97	59.	15.	11.	0.90
+ 2 COMBINED AT	C615	4349.	13.90	1803.	482.	347.	22.90
+ 2 COMBINED AT	WEST-4	6013.	13.70	2517.	710.	516.	51.12
+ HYDROGRAPH AT	S700	351.	12.17	49.	13.	10.	0.61
+ HYDROGRAPH AT	S701	221.	12.43	67.	20.	14.	0.72
+ DIVERSION TO	DIV701	3.	3.20	1.	0.	0.	0.72
+ HYDROGRAPH AT	S701O	221.	12.43	67.	20.	14.	0.72
+ HYDROGRAPH AT	S702	163.	12.13	26.	8.	6.	0.26
+ DIVERSION TO	DIV702	163.	12.13	26.	8.	6.	0.26
+ HYDROGRAPH AT	S702O	0.	0.00	0.	0.	0.	0.26
+ HYDROGRAPH AT	S703	109.	12.37	16.	4.	3.	0.26
DIVERSION TO							

+	DIV703	109.	12.37	10.	3.	2.	0.26
HYDROGRAPH AT +	S703O	71.	12.67	6.	2.	1.	0.26
HYDROGRAPH AT +	S704	253.	12.13	34.	10.	7.	0.41
ROUTED TO +	704705	238.	12.40	34.	10.	7.	0.41
HYDROGRAPH AT +	S705	617.	12.13	93.	29.	21.	0.75
2 COMBINED AT +	C705	714.	12.20	127.	38.	28.	1.16
ROUTED TO +	C705O	479.	12.53	127.	38.	28.	1.16
ROUTED TO +	705OAF	475.	12.73	127.	38.	28.	1.16
HYDROGRAPH AT +	S705AF	123.	12.40	22.	6.	4.	0.18
DIVERSION TO +	DIV705	123.	12.40	11.	3.	2.	0.18
HYDROGRAPH AT +	705AFO	100.	12.60	11.	3.	2.	0.18
2 COMBINED AT +	C705AF	561.	12.67	137.	41.	29.	1.34
5 COMBINED AT +	WEST-5	918.	12.70	253.	73.	53.	3.19
HYDROGRAPH AT +	S706	584.	12.10	88.	28.	20.	0.71
DIVERSION TO +	DIV706	584.	12.10	88.	25.	18.	0.71
HYDROGRAPH AT +	S706O	13.	16.87	7.	2.	2.	0.71
HYDROGRAPH AT +	S707	549.	12.10	92.	30.	22.	0.64
DIVERSION TO +	DIV707	549.	12.10	92.	26.	19.	0.64
HYDROGRAPH AT +	S707O	18.	15.30	11.	4.	3.	0.64
HYDROGRAPH AT +	S728	166.	12.20	37.	12.	9.	0.28
DIVERSION TO +	DIV728	166.	12.20	32.	9.	6.	0.28
HYDROGRAPH AT +	S728O	47.	13.23	10.	3.	2.	0.28
5 COMBINED AT +	WEST	6200.	13.67	2685.	762.	554.	55.94
HYDROGRAPH AT +	S708	700.	12.10	85.	22.	16.	0.71
DIVERSION TO +	DIV708	700.	12.10	84.	21.	15.	0.71
HYDROGRAPH AT +	S708O	16.	13.37	3.	1.	1.	0.71
HYDROGRAPH AT +	S709	418.	12.13	68.	18.	13.	0.44
DIVERSION TO							

+	DIV709	418.	12.13	43.	11.	8.	0.44
+ HYDROGRAPH AT	S709O	254.	12.43	28.	7.	5.	0.44
+ ROUTED TO	C709O	139.	12.73	28.	7.	5.	0.44
+ ROUTED TO	709710	138.	12.83	28.	7.	5.	0.44
+ HYDROGRAPH AT	S710	130.	12.03	15.	4.	3.	0.11
+ DIVERSION TO	DIV710	130.	12.03	9.	2.	2.	0.11
+ HYDROGRAPH AT	S710O	116.	12.10	7.	2.	1.	0.11
+ 2 COMBINED AT	C710I	148.	12.80	34.	9.	6.	0.55
+ ROUTED TO	C710O	131.	13.03	33.	9.	6.	0.55
+ HYDROGRAPH AT	S711	200.	12.00	25.	7.	5.	0.16
+ DIVERSION TO	DIV711	200.	12.00	20.	5.	4.	0.16
+ HYDROGRAPH AT	S711O	48.	12.33	6.	2.	1.	0.16
+ ROUTED TO	C711O	40.	12.40	6.	2.	1.	0.16
+ ROUTED TO	711712	35.	12.53	6.	2.	1.	0.16
+ HYDROGRAPH AT	S712	85.	12.00	10.	3.	2.	0.07
+ DIVERSION TO	DIV712	85.	12.00	8.	2.	2.	0.07
+ HYDROGRAPH AT	S712O	18.	12.23	2.	1.	0.	0.07
+ 2 COMBINED AT	C712I	47.	12.53	8.	2.	2.	0.23
+ ROUTED TO	C712O	42.	12.60	8.	2.	2.	0.23
+ ROUTED TO	712714	37.	12.73	8.	2.	2.	0.23
+ HYDROGRAPH AT	S713	131.	12.00	15.	4.	3.	0.11
+ DIVERSION TO	DIV713	119.	11.83	6.	1.	1.	0.11
+ HYDROGRAPH AT	S713O	131.	12.00	10.	3.	2.	0.11
+ ROUTED TO	C713O	64.	12.20	10.	3.	2.	0.11
+ ROUTED TO	713714	63.	12.23	10.	3.	2.	0.11
+ HYDROGRAPH AT	S714	60.	12.03	6.	1.	1.	0.06
+ 3 COMBINED AT	C714	105.	12.10	23.	6.	5.	0.39
HYDROGRAPH AT							

+		S715	188.	12.17	31.	8.	6.	0.22
	DIVERSION TO							
+		DIV715	161.	12.00	8.	2.	1.	0.22
	HYDROGRAPH AT							
+		S715O	188.	12.17	24.	6.	4.	0.22
	HYDROGRAPH AT							
+		S716	988.	12.17	162.	46.	33.	1.13
	DIVERSION TO							
+		DIV716	988.	12.17	150.	39.	28.	1.13
	HYDROGRAPH AT							
+		S716O	138.	13.20	22.	7.	5.	1.13
	ROUTED TO							
+		C716O	123.	13.27	22.	7.	5.	1.13
	ROUTED TO							
+		716717	71.	13.63	21.	7.	5.	1.13
	HYDROGRAPH AT							
+		S717	328.	12.13	44.	12.	8.	0.29
	DIVERSION TO							
+		DIV717	307.	12.00	16.	4.	3.	0.29
	HYDROGRAPH AT							
+		S717O	328.	12.13	30.	8.	5.	0.29
	2 COMBINED AT							
+		C717	325.	12.13	48.	14.	10.	1.41
	ROUTED TO							
+		717718	252.	12.67	47.	14.	10.	1.41
	HYDROGRAPH AT							
+		S718	210.	12.67	66.	17.	13.	0.44
	DIVERSION TO							
+		DIV718	210.	12.67	26.	7.	5.	0.44
	HYDROGRAPH AT							
+		S718O	185.	12.97	42.	11.	8.	0.44
	2 COMBINED AT							
+		C718	306.	12.97	86.	24.	17.	1.86
	HYDROGRAPH AT							
+		S719	122.	12.17	28.	8.	6.	0.15
	DIVERSION TO							
+		DIV719	122.	12.17	17.	4.	3.	0.15
	HYDROGRAPH AT							
+		S719O	74.	12.63	13.	4.	3.	0.15
	6 COMBINED AT							
+		EAST-1	561.	12.97	167.	46.	33.	3.88
	HYDROGRAPH AT							
+		S720	337.	12.13	56.	16.	11.	0.37
	DIVERSION TO							
+		DIV720	337.	12.13	45.	12.	8.	0.37
	HYDROGRAPH AT							
+		S720O	113.	12.77	14.	4.	3.	0.37
	HYDROGRAPH AT							
+		S721	388.	12.03	51.	16.	12.	0.34
	DIVERSION TO							
+		DIV721	388.	12.03	51.	15.	11.	0.34
	HYDROGRAPH AT							
+		S721O	8.	17.33	4.	1.	1.	0.34
	ROUTED TO							

+	C721O	6.	17.93	4.	1.	1.	0.34
ROUTED TO +	721722	5.	18.43	4.	1.	1.	0.34
HYDROGRAPH AT +	S722	768.	12.17	130.	37.	27.	0.95
DIVERSION TO +	DIV722	768.	12.17	121.	32.	23.	0.95
HYDROGRAPH AT +	S722O	109.	13.30	17.	5.	4.	0.95
2 COMBINED AT +	C722	92.	13.30	17.	6.	5.	1.29
HYDROGRAPH AT +	S723	98.	12.03	13.	4.	3.	0.09
DIVERSION TO +	DIV723	98.	12.03	9.	2.	2.	0.09
HYDROGRAPH AT +	S723O	66.	12.20	5.	2.	1.	0.09
HYDROGRAPH AT +	S724	1119.	12.13	206.	63.	46.	1.16
DIVERSION TO +	DIV724	1119.	12.13	188.	51.	36.	1.16
HYDROGRAPH AT +	S724O	147.	13.27	41.	13.	9.	1.16
HYDROGRAPH AT +	S725	783.	12.27	184.	58.	42.	1.16
DIVERSION TO +	DIV725	783.	12.27	184.	54.	39.	1.16
HYDROGRAPH AT +	S725O	24.	16.93	16.	5.	4.	1.16
5 COMBINED AT +	EAST-2	210.	13.53	64.	25.	18.	4.06
HYDROGRAPH AT +	S726	305.	12.03	37.	11.	8.	0.33
DIVERSION TO +	DIV726	305.	12.03	37.	11.	8.	0.33
HYDROGRAPH AT +	S726O	4.	17.83	2.	1.	0.	0.33
ROUTED TO +	726727	3.	19.60	2.	1.	0.	0.33
HYDROGRAPH AT +	S727	276.	12.20	62.	20.	14.	0.38
DIVERSION TO +	DIV727	276.	12.20	61.	17.	12.	0.38
HYDROGRAPH AT +	S727O	22.	14.40	9.	3.	2.	0.38
2 COMBINED AT +	C727	22.	14.40	10.	4.	3.	0.71
4 COMBINED AT +	TOTAL	6281.	13.67	2743.	779.	567.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 5-Year, 6-Hour HEC-1 Model Output

```
(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUN  1998            *
 *           VERSION 4.1             *
 *                                   *
 *  RUN DATE   10AUG01  TIME  10:34:30  *
 *                                   *
 *************************************
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*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR5-6.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 5-year, 6-hour storm event. A companion model is also created for the existing condition 5-year, 24-hour storm event. Both models (5-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 5-year, 6-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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22 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1   0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2   0  ENDING DATE
                    NDTIME       0918  ENDING TIME
                     ICENT         19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

24 JD          INDEX STORM NO. 1
                     STRM       1.85  PRECIPITATION DEPTH
                     TRDA       0.01  TRANSPOSITION DRAINAGE AREA

25 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

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                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

28 JD         INDEX STORM NO. 2
                STRM        1.84  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

29 JD         INDEX STORM NO. 3
                STRM        1.81  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

30 PI           PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

33 JD         INDEX STORM NO. 4
                STRM        1.71  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

34 PI           PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

37 JD         INDEX STORM NO. 5
                STRM        1.50  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

38 PI           PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	208.	4.77	52.	13.	10.	0.57		
+	DIVERSION TO	DIV100	188.	4.63	13.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	208.	4.80	41.	10.	7.	0.57		
+	ROUTED TO	100102	188.	5.17	41.	10.	7.	0.57		
+	HYDROGRAPH AT	S101	255.	4.63	48.	12.	9.	0.63		
+	2 COMBINED AT	C102R	256.	5.20	74.	19.	14.	1.20		
+	HYDROGRAPH AT	S102	204.	4.37	45.	11.	8.	0.45		
+	DIVERSION TO	DIV102	204.	4.37	29.	7.	5.	0.45		
+	HYDROGRAPH AT	S102O	132.	4.90	17.	4.	3.	0.45		
+	ROUTED TO	101102	95.	5.40	17.	4.	3.	0.45		
+	HYDROGRAPH AT	S103	129.	4.87	33.	8.	6.	0.40		
+	2 COMBINED AT	C102L	146.	5.37	43.	11.	8.	0.84		
+	2 COMBINED AT	C102	299.	5.27	97.	25.	18.	2.05		
+	ROUTED TO	102103	284.	5.60	96.	25.	18.	2.05		
+	HYDROGRAPH AT	S104	367.	4.77	78.	20.	14.	0.90		
+	DIVERSION TO	DIV104	367.	4.77	41.	10.	7.	0.90		
+	HYDROGRAPH AT	S104O	248.	4.93	38.	10.	7.	0.90		
+	2 COMBINED AT	C103R	390.	5.23	110.	28.	20.	2.95		

	HYDROGRAPH AT							
+		S105	183.	4.57	54.	14.	10.	0.59
	DIVERSION TO							
+		DIV105	183.	4.57	32.	8.	6.	0.59
	HYDROGRAPH AT							
+		S105O	121.	5.17	23.	6.	4.	0.59
	2 COMBINED AT							
+		C103	386.	5.23	120.	31.	22.	3.54
	ROUTED TO							
+		103104	337.	5.73	115.	30.	21.	3.54
	HYDROGRAPH AT							
+		S106	204.	4.40	43.	11.	8.	0.57
	2 COMBINED AT							
+		C104	347.	5.70	135.	35.	26.	4.11
	ROUTED TO							
+		104105	339.	6.17	135.	35.	26.	4.11
	HYDROGRAPH AT							
+		S107	220.	4.83	53.	13.	10.	0.94
	2 COMBINED AT							
+		C105L	347.	6.10	156.	41.	30.	5.05
	HYDROGRAPH AT							
+		S200	391.	4.70	86.	22.	16.	0.96
	ROUTED TO							
+		200201	387.	4.80	86.	22.	16.	0.96
	HYDROGRAPH AT							
+		S201	181.	4.53	35.	9.	6.	0.35
	2 COMBINED AT							
+		C201	467.	4.77	111.	28.	20.	1.31
	ROUTED TO							
+		201203	457.	4.90	111.	28.	20.	1.31
	HYDROGRAPH AT							
+		S202	89.	4.30	13.	3.	2.	0.13
	ROUTED TO							
+		202203	85.	4.40	13.	3.	2.	0.13
	HYDROGRAPH AT							
+		S203	138.	4.47	38.	10.	7.	0.37
	DIVERSION TO							
+		DIV203	138.	4.47	31.	8.	6.	0.37
	HYDROGRAPH AT							
+		S203O	54.	5.63	9.	2.	2.	0.37
	3 COMBINED AT							
+		C203R	455.	4.90	120.	31.	22.	1.81
	HYDROGRAPH AT							
+		S204	296.	4.90	80.	21.	15.	0.95
	DIVERSION TO							
+		DIV204	12.	2.97	3.	1.	1.	0.95
	HYDROGRAPH AT							
+		S204O	296.	4.90	79.	20.	14.	0.95
	2 COMBINED AT							
+		C203	580.	4.93	168.	43.	31.	2.76
	ROUTED TO							
+		203204	579.	4.97	168.	43.	31.	2.76
	HYDROGRAPH AT							
+		S205	251.	4.43	44.	11.	8.	0.41

+	DIVERSION TO	DIV205	251.	4.43	29.	7.	5.	0.41
+	HYDROGRAPH AT	S205O	142.	4.87	15.	4.	3.	0.41
+	2 COMBINED AT	C204	579.	4.97	174.	44.	32.	3.17
+	ROUTED TO	204205	559.	5.13	171.	44.	31.	3.17
+	HYDROGRAPH AT	S206	228.	4.67	76.	20.	14.	0.85
+	DIVERSION TO	DIV206	228.	4.67	76.	20.	14.	0.85
+	HYDROGRAPH AT	S206O	5.	9.00	1.	0.	0.	0.85
+	2 COMBINED AT	C205L	559.	5.13	171.	44.	31.	4.03
+	HYDROGRAPH AT	S207	273.	5.00	86.	22.	16.	0.96
+	DIVERSION TO	DIV207	273.	5.00	40.	10.	7.	0.96
+	HYDROGRAPH AT	S207O	205.	5.53	49.	12.	9.	0.96
+	2 COMBINED AT	C205	556.	5.53	192.	49.	36.	4.98
+	ROUTED TO	205206	512.	6.00	191.	49.	36.	4.98
+	HYDROGRAPH AT	S208	310.	5.13	97.	25.	18.	1.10
+	DIVERSION TO	DIV208	273.	4.93	26.	7.	5.	1.10
+	HYDROGRAPH AT	S208O	310.	5.13	75.	19.	14.	1.10
+	2 COMBINED AT	C206	670.	5.57	240.	62.	45.	6.09
+	ROUTED TO	206207	663.	5.67	240.	62.	45.	6.09
+	HYDROGRAPH AT	S209	251.	4.73	50.	13.	9.	0.65
+	2 COMBINED AT	C207R	701.	5.67	262.	69.	49.	6.74
+	HYDROGRAPH AT	S210	197.	4.33	33.	8.	6.	0.48
+	2 COMBINED AT	C207	704.	5.63	273.	71.	52.	7.22
+	ROUTED TO	207105	697.	5.80	271.	71.	52.	7.22
+	HYDROGRAPH AT	S211	188.	4.37	35.	9.	6.	0.49
+	2 COMBINED AT	C105R	704.	5.80	283.	75.	54.	7.70
+	2 COMBINED AT	C105	822.	5.90	371.	99.	71.	12.75
+	HYDROGRAPH AT	S300	366.	4.23	60.	15.	11.	0.62

+	DIVERSION TO	DIV300	366.	4.23	60.	15.	11.	0.62
+	HYDROGRAPH AT	S300O	0.	0.00	0.	0.	0.	0.62
+	HYDROGRAPH AT	S301	625.	4.20	103.	26.	19.	0.99
+	DIVERSION TO	DIV301	625.	4.20	76.	19.	14.	0.99
+	HYDROGRAPH AT	S301O	286.	4.53	28.	7.	5.	0.99
+	2 COMBINED AT	C300	153.	4.53	21.	5.	4.	1.61
+	ROUTED TO	300301	95.	4.83	21.	5.	4.	1.61
+	HYDROGRAPH AT	S302	285.	4.50	45.	11.	8.	0.47
+	DIVERSION TO	DIV302	272.	4.43	17.	4.	3.	0.47
+	HYDROGRAPH AT	S302O	285.	4.50	29.	7.	5.	0.47
+	2 COMBINED AT	C301	186.	4.77	37.	9.	7.	2.07
+	ROUTED TO	301302	126.	5.37	37.	9.	7.	2.07
+	HYDROGRAPH AT	S303	226.	4.77	46.	12.	8.	0.71
+	2 COMBINED AT	C302	160.	5.37	59.	15.	11.	2.78
+	ROUTED TO	302303	151.	5.77	59.	15.	11.	2.78
+	HYDROGRAPH AT	S304	224.	4.47	53.	13.	10.	0.82
+	DIVERSION TO	DIV304	224.	4.47	53.	13.	10.	0.82
+	HYDROGRAPH AT	S304O	0.	0.00	0.	0.	0.	0.82
+	2 COMBINED AT	C303	151.	5.77	59.	15.	11.	3.60
+	2 COMBINED AT	WEST-1	822.	5.93	381.	102.	74.	16.36
+	HYDROGRAPH AT	S400	694.	4.43	111.	28.	20.	1.05
+	DIVERSION TO	DIV400	694.	4.43	107.	27.	19.	1.05
+	HYDROGRAPH AT	S400O	51.	5.47	5.	1.	1.	1.05
+	ROUTED TO	C400O	23.	5.90	5.	1.	1.	1.05
+	ROUTED TO	400401	21.	6.47	5.	1.	1.	1.05
+	HYDROGRAPH AT	S401	358.	4.27	50.	13.	9.	0.65
+	DIVERSION TO	DIV401	358.	4.27	50.	13.	9.	0.65

+	HYDROGRAPH AT	S401O	0.	0.00	0.	0.	0.	0.65
+	2 COMBINED AT	C401	21.	6.47	5.	1.	1.	1.69
+	ROUTED TO	401402	11.	7.00	2.	1.	0.	1.69
+	HYDROGRAPH AT	S402	593.	4.20	78.	20.	14.	0.74
+	DIVERSION TO	DIV402	593.	4.20	78.	20.	14.	0.74
+	HYDROGRAPH AT	S402O	0.	0.00	0.	0.	0.	0.74
+	2 COMBINED AT	C402	11.	7.00	2.	1.	0.	2.43
+	ROUTED TO	402403	3.	7.60	1.	0.	0.	2.43
+	HYDROGRAPH AT	S403	593.	4.17	76.	19.	14.	0.56
+	DIVERSION TO	DIV403	593.	4.17	76.	19.	14.	0.56
+	HYDROGRAPH AT	S403O	0.	0.00	0.	0.	0.	0.56
+	2 COMBINED AT	C403	25.	3.83	1.	0.	0.	2.99
+	ROUTED TO	403404	0.	0.00	0.	0.	0.	2.99
+	HYDROGRAPH AT	S404	219.	4.30	22.	5.	4.	0.26
+	DIVERSION TO	DIV404	170.	4.20	6.	1.	1.	0.26
+	HYDROGRAPH AT	S404O	219.	4.30	16.	4.	3.	0.26
+	2 COMBINED AT	C404	109.	4.33	10.	3.	2.	3.26
+	2 COMBINED AT	WEST-2	822.	5.93	386.	103.	75.	19.61
+	HYDROGRAPH AT	S500	355.	4.53	101.	26.	19.	1.05
+	DIVERSION TO	DIV500	355.	4.53	90.	23.	17.	1.05
+	HYDROGRAPH AT	S500O	81.	5.73	12.	3.	2.	1.05
+	ROUTED TO	500501	61.	6.17	12.	3.	2.	1.05
+	HYDROGRAPH AT	S501	319.	4.30	56.	14.	10.	0.61
+	DIVERSION TO	DIV501	319.	4.30	49.	12.	9.	0.61
+	HYDROGRAPH AT	S501O	67.	5.23	6.	2.	1.	0.61
+	2 COMBINED AT	C501	61.	6.17	14.	4.	3.	1.67
+	ROUTED TO	501502	32.	6.43	8.	2.	1.	1.67

+	HYDROGRAPH AT S502	113.	5.17	34.	9.	6.	0.40
+	DIVERSION TO DIV502	113.	5.17	27.	7.	5.	0.40
+	HYDROGRAPH AT S502O	46.	6.37	9.	2.	2.	0.40
+	2 COMBINED AT C502L	34.	6.40	8.	2.	1.	2.07
+	HYDROGRAPH AT S503	410.	4.40	92.	23.	17.	0.99
+	DIVERSION TO DIV503	410.	4.40	51.	13.	9.	0.99
+	HYDROGRAPH AT S503O	256.	4.97	41.	10.	7.	0.99
+	2 COMBINED AT C502I	205.	4.97	27.	7.	5.	3.07
+	ROUTED TO C502O	183.	5.07	27.	7.	5.	3.07
+	ROUTED TO 502505	113.	6.07	22.	5.	4.	3.07
+	HYDROGRAPH AT S504	154.	4.33	34.	9.	6.	0.33
+	DIVERSION TO DIV504	154.	4.33	34.	9.	6.	0.33
+	HYDROGRAPH AT S504O	0.	0.00	0.	0.	0.	0.33
+	2 COMBINED AT C505L	113.	6.07	22.	5.	4.	3.39
+	HYDROGRAPH AT S505	135.	4.23	12.	3.	2.	0.14
+	DIVERSION TO DIV505	99.	4.10	4.	1.	1.	0.14
+	HYDROGRAPH AT S505O	135.	4.23	8.	2.	2.	0.14
+	ROUTED TO C503O	71.	4.43	8.	2.	2.	0.14
+	ROUTED TO 503505	67.	4.97	8.	2.	1.	0.14
+	HYDROGRAPH AT S506	144.	4.23	16.	4.	3.	0.15
+	DIVERSION TO DIV506	144.	4.23	12.	3.	2.	0.15
+	HYDROGRAPH AT S506O	55.	4.60	4.	1.	1.	0.15
+	ROUTED TO C504O	45.	4.67	4.	1.	1.	0.15
+	ROUTED TO 504505	31.	5.37	4.	1.	1.	0.15
+	HYDROGRAPH AT S507	434.	4.20	54.	14.	10.	0.67
+	DIVERSION TO DIV507	434.	4.20	54.	14.	10.	0.67
+	HYDROGRAPH AT S507O	0.	0.00	0.	0.	0.	0.67

+	3 COMBINED AT	C505R	67.	5.07	11.	3.	2.	0.96
+	2 COMBINED AT	C505	106.	6.07	24.	6.	4.	4.35
+	ROUTED TO	505509	75.	6.67	14.	4.	3.	4.35
+	HYDROGRAPH AT	S508	273.	4.13	28.	7.	5.	0.29
+	DIVERSION TO	DIV508	273.	4.13	28.	7.	5.	0.29
+	HYDROGRAPH AT	S508O	0.	0.00	0.	0.	0.	0.29
+	2 COMBINED AT	C509L	75.	6.67	14.	4.	3.	4.65
+	HYDROGRAPH AT	S509	215.	4.07	18.	5.	3.	0.17
+	DIVERSION TO	DIV509	215.	4.07	10.	3.	2.	0.17
+	HYDROGRAPH AT	S509O	184.	4.13	8.	2.	1.	0.17
+	ROUTED TO	C506O	69.	4.33	8.	2.	1.	0.17
+	ROUTED TO	506508	67.	4.63	8.	2.	1.	0.17
+	HYDROGRAPH AT	S510	139.	4.13	18.	5.	3.	0.13
+	DIVERSION TO	DIV510	139.	4.13	18.	5.	3.	0.13
+	HYDROGRAPH AT	S510O	0.	0.00	0.	0.	0.	0.13
+	2 COMBINED AT	C508R	67.	4.63	8.	2.	1.	0.30
+	HYDROGRAPH AT	S511	364.	4.13	40.	10.	7.	0.38
+	DIVERSION TO	DIV511	364.	4.13	35.	9.	6.	0.38
+	HYDROGRAPH AT	S511O	66.	4.73	5.	1.	1.	0.38
+	ROUTED TO	C507O	44.	4.87	5.	1.	1.	0.38
+	ROUTED TO	507508	36.	0.00	6.	2.	1.	0.38
+	HYDROGRAPH AT	S512	227.	4.17	32.	8.	6.	0.21
+	DIVERSION TO	DIV512	227.	4.17	32.	8.	6.	0.21
+	HYDROGRAPH AT	S512O	0.	0.00	0.	0.	0.	0.21
+	2 COMBINED AT	C508L	36.	0.00	6.	2.	1.	0.60
+	2 COMBINED AT	C508	67.	4.63	13.	4.	3.	0.90
+	ROUTED TO	508509	36.	0.00	12.	4.	3.	0.90

+	HYDROGRAPH AT	S513	364.	4.30	66.	17.	12.	0.78
+	DIVERSION TO	DIV513	364.	4.30	66.	17.	12.	0.78
+	HYDROGRAPH AT	S513O	0.	0.00	0.	0.	0.	0.78
+	2 COMBINED AT	C509R	36.	0.00	12.	4.	3.	1.67
+	2 COMBINED AT	C509	61.	6.73	13.	5.	4.	6.32
+	ROUTED TO	509510	58.	6.90	13.	6.	4.	6.32
+	HYDROGRAPH AT	S514	562.	4.20	82.	21.	15.	0.65
+	DIVERSION TO	DIV514	562.	4.20	82.	21.	15.	0.65
+	HYDROGRAPH AT	S514O	0.	0.00	0.	0.	0.	0.65
+	2 COMBINED AT	C510	58.	6.90	13.	6.	4.	6.97
+	ROUTED TO	510511	46.	7.23	13.	6.	4.	6.97
+	HYDROGRAPH AT	S515	1015.	4.17	142.	36.	26.	1.10
+	DIVERSION TO	DIV515	1015.	4.17	142.	36.	26.	1.10
+	HYDROGRAPH AT	S515O	0.	0.00	0.	0.	0.	1.10
+	2 COMBINED AT	C511	46.	7.23	13.	6.	4.	8.07
+	ROUTED TO	511512	36.	0.00	17.	6.	5.	8.07
+	HYDROGRAPH AT	S516	397.	4.23	68.	17.	12.	0.54
+	DIVERSION TO	DIV516	397.	4.23	68.	17.	12.	0.54
+	HYDROGRAPH AT	S516O	0.	0.00	0.	0.	0.	0.54
+	2 COMBINED AT	C512	36.	0.00	17.	6.	5.	8.61
+	2 COMBINED AT	WEST-3	822.	5.93	389.	108.	78.	28.22
+	HYDROGRAPH AT	S600	345.	5.13	108.	28.	20.	2.02
+	ROUTED TO	600601	341.	5.23	108.	28.	20.	2.02
+	HYDROGRAPH AT	S601	482.	4.63	102.	26.	19.	0.90
+	2 COMBINED AT	C601	539.	4.97	185.	48.	35.	2.92
+	ROUTED TO	601602	537.	5.17	185.	48.	35.	2.92
+	HYDROGRAPH AT	S603	518.	4.40	76.	19.	14.	0.67

+	2 COMBINED AT	C602L	670.	4.80	244.	63.	46.	3.58
+	HYDROGRAPH AT	S602	473.	5.03	149.	39.	28.	1.88
+	2 COMBINED AT	C602	984.	4.97	363.	95.	68.	5.47
+	ROUTED TO	602603	934.	5.20	319.	80.	58.	5.47
+	HYDROGRAPH AT	S606	267.	4.67	64.	16.	12.	0.66
+	2 COMBINED AT	C603L	1036.	5.13	362.	91.	66.	6.13
+	HYDROGRAPH AT	S605	340.	4.90	95.	25.	18.	1.09
+	HYDROGRAPH AT	S604	547.	5.17	195.	51.	37.	2.66
+	3 COMBINED AT	C603	1577.	5.13	584.	151.	109.	9.87
+	ROUTED TO	603604	1514.	5.47	536.	135.	97.	9.87
+	HYDROGRAPH AT	S609	164.	4.83	48.	12.	9.	0.56
+	DIVERSION TO	DIV609	164.	4.83	21.	5.	4.	0.56
+	HYDROGRAPH AT	S609O	141.	5.07	29.	7.	5.	0.56
+	2 COMBINED AT	C604R	1510.	5.53	542.	136.	98.	10.43
+	HYDROGRAPH AT	S607	272.	4.87	80.	21.	15.	0.82
+	DIVERSION TO	DIV607	110.	4.40	11.	3.	2.	0.82
+	HYDROGRAPH AT	S607O	272.	4.87	72.	18.	13.	0.82
+	2 COMBINED AT	C604	1604.	5.53	585.	147.	106.	11.25
+	ROUTED TO	604605	1602.	5.53	585.	147.	106.	11.25
+	HYDROGRAPH AT	S608	360.	4.43	57.	14.	10.	0.51
+	DIVERSION TO	DIV608	315.	4.33	18.	5.	3.	0.51
+	HYDROGRAPH AT	S608O	359.	4.43	39.	10.	7.	0.51
+	2 COMBINED AT	C605	1638.	5.47	605.	152.	110.	11.76
+	ROUTED TO	605606	1625.	5.60	598.	150.	108.	11.76
+	HYDROGRAPH AT	S610	298.	4.37	68.	17.	12.	0.60
+	2 COMBINED AT	C606L	1672.	5.57	640.	162.	117.	12.36
+	HYDROGRAPH AT	S612	331.	4.47	87.	22.	16.	0.81

+	2 COMBINED AT	C606	1758.	5.53	700.	178.	128.	13.17
+	ROUTED TO	606608	1754.	5.57	698.	177.	128.	13.17
+	HYDROGRAPH AT	S611	326.	4.53	57.	14.	10.	0.57
+	ROUTED TO	607608	303.	4.83	56.	14.	10.	0.57
+	HYDROGRAPH AT	S613	508.	5.13	158.	41.	29.	1.80
+	3 COMBINED AT	C608	2092.	5.50	838.	215.	155.	15.53
+	ROUTED TO	608609	2070.	5.67	828.	211.	152.	15.53
+	HYDROGRAPH AT	S614	303.	5.07	96.	25.	18.	1.08
+	2 COMBINED AT	C609	2188.	5.63	887.	227.	164.	16.61
+	ROUTED TO	609611	2145.	5.90	859.	218.	157.	16.61
+	HYDROGRAPH AT	S617	332.	4.33	59.	15.	11.	0.68
+	2 COMBINED AT	C611R	2152.	5.90	884.	225.	162.	17.29
+	HYDROGRAPH AT	S615	451.	4.97	134.	35.	25.	1.05
+	ROUTED TO	610611	446.	5.20	134.	35.	25.	1.05
+	HYDROGRAPH AT	S616	218.	4.63	45.	11.	8.	0.50
+	DIVERSION TO	DIV616	218.	4.63	25.	6.	5.	0.50
+	HYDROGRAPH AT	S6160	151.	5.00	20.	5.	4.	0.50
+	2 COMBINED AT	C611L	462.	5.17	143.	37.	27.	1.56
+	2 COMBINED AT	C611	2356.	5.87	979.	251.	181.	18.85
+	ROUTED TO	611613	2342.	5.93	969.	247.	178.	18.85
+	HYDROGRAPH AT	S618	253.	5.03	76.	20.	14.	0.96
+	2 COMBINED AT	C613R	2398.	5.90	1005.	257.	186.	19.81
+	HYDROGRAPH AT	S619	455.	4.73	94.	24.	17.	0.83
+	ROUTED TO	612613	441.	5.00	94.	24.	17.	0.83
+	HYDROGRAPH AT	S620	190.	4.73	50.	13.	9.	0.44
+	2 COMBINED AT	C613L	555.	4.97	136.	35.	25.	1.27
+	2 COMBINED AT	C613	2568.	5.87	1093.	282.	203.	21.08

+	ROUTED TO	613614	2549.	6.00	1082.	277.	200.	21.08
+	HYDROGRAPH AT	S621	312.	4.70	51.	13.	9.	0.92
+	2 COMBINED AT	C614	2549.	6.00	1092.	280.	202.	22.00
+	ROUTED TO	614615	2523.	6.13	1079.	276.	199.	22.00
+	HYDROGRAPH AT	S622	171.	5.13	49.	12.	9.	0.90
+	2 COMBINED AT	C615	2526.	6.13	1085.	277.	200.	22.90
+	2 COMBINED AT	WEST-4	2734.	6.13	1232.	326.	235.	51.12
+	HYDROGRAPH AT	S700	317.	4.23	45.	11.	8.	0.61
+	HYDROGRAPH AT	S701	175.	4.63	59.	15.	11.	0.72
+	DIVERSION TO	DIV701	4.	2.33	1.	0.	0.	0.72
+	HYDROGRAPH AT	S7010	175.	4.63	59.	15.	11.	0.72
+	HYDROGRAPH AT	S702	178.	4.17	25.	6.	5.	0.26
+	DIVERSION TO	DIV702	178.	4.17	25.	6.	5.	0.26
+	HYDROGRAPH AT	S7020	0.	0.00	0.	0.	0.	0.26
+	HYDROGRAPH AT	S703	105.	4.50	16.	4.	3.	0.26
+	DIVERSION TO	DIV703	105.	4.50	10.	3.	2.	0.26
+	HYDROGRAPH AT	S7030	56.	4.97	6.	2.	1.	0.26
+	HYDROGRAPH AT	S704	275.	4.20	33.	8.	6.	0.41
+	ROUTED TO	704705	248.	4.50	33.	8.	6.	0.41
+	HYDROGRAPH AT	S705	617.	4.17	87.	22.	16.	0.75
+	2 COMBINED AT	C705	595.	4.37	111.	28.	20.	1.16
+	ROUTED TO	C7050	437.	4.63	111.	28.	20.	1.16
+	ROUTED TO	7050AF	432.	4.83	111.	28.	20.	1.16
+	HYDROGRAPH AT	S705AF	123.	4.47	20.	5.	4.	0.18
+	DIVERSION TO	DIV705	123.	4.47	11.	3.	2.	0.18
+	HYDROGRAPH AT	705AF0	90.	4.77	9.	2.	2.	0.18
+	2 COMBINED AT	C705AF	487.	4.93	117.	30.	21.	1.34

+	5 COMBINED AT WEST-5	625.	4.93	179.	46.	33.	3.19
+	HYDROGRAPH AT S706	613.	4.17	81.	20.	15.	0.71
+	DIVERSION TO DIV706	613.	4.17	81.	20.	15.	0.71
+	HYDROGRAPH AT S706O	0.	0.00	0.	0.	0.	0.71
+	HYDROGRAPH AT S707	617.	4.13	87.	22.	16.	0.64
+	DIVERSION TO DIV707	617.	4.13	87.	22.	16.	0.64
+	HYDROGRAPH AT S707O	0.	0.00	0.	0.	0.	0.64
+	HYDROGRAPH AT S728	172.	4.27	35.	9.	6.	0.28
+	DIVERSION TO DIV728	172.	4.27	35.	9.	6.	0.28
+	HYDROGRAPH AT S728O	4.	7.00	0.	0.	0.	0.28
+	5 COMBINED AT WEST	2770.	6.10	1301.	347.	250.	55.94
+	HYDROGRAPH AT S708	758.	4.13	78.	20.	14.	0.71
+	DIVERSION TO DIV708	758.	4.13	78.	20.	14.	0.71
+	HYDROGRAPH AT S708O	0.	0.00	0.	0.	0.	0.71
+	HYDROGRAPH AT S709	482.	4.17	57.	14.	10.	0.44
+	DIVERSION TO DIV709	482.	4.17	44.	11.	8.	0.44
+	HYDROGRAPH AT S709O	236.	4.53	14.	3.	2.	0.44
+	ROUTED TO C709O	112.	4.80	14.	3.	2.	0.44
+	ROUTED TO 709710	104.	4.97	14.	3.	2.	0.44
+	HYDROGRAPH AT S710	186.	4.03	14.	4.	3.	0.11
+	DIVERSION TO DIV710	186.	4.03	9.	2.	2.	0.11
+	HYDROGRAPH AT S710O	133.	4.13	5.	1.	1.	0.11
+	2 COMBINED AT C710I	122.	4.13	18.	5.	3.	0.55
+	ROUTED TO C710O	97.	5.10	18.	5.	3.	0.55
+	HYDROGRAPH AT S711	297.	4.03	22.	6.	4.	0.16
+	DIVERSION TO DIV711	297.	4.03	21.	5.	4.	0.16
+	HYDROGRAPH AT S711O	12.	4.47	1.	0.	0.	0.16

+	ROUTED TO	C711O	10.	4.53	1.	0.	0.	0.16
+	ROUTED TO	711712	9.	4.60	1.	0.	0.	0.16
+	HYDROGRAPH AT	S712	135.	4.00	9.	2.	2.	0.07
+	DIVERSION TO	DIV712	135.	4.00	8.	2.	2.	0.07
+	HYDROGRAPH AT	S712O	14.	4.30	0.	0.	0.	0.07
+	2 COMBINED AT	C712I	12.	4.30	1.	0.	0.	0.23
+	ROUTED TO	C712O	9.	4.67	1.	0.	0.	0.23
+	ROUTED TO	712714	8.	4.83	1.	0.	0.	0.23
+	HYDROGRAPH AT	S713	193.	4.03	14.	3.	3.	0.11
+	DIVERSION TO	DIV713	163.	3.93	6.	1.	1.	0.11
+	HYDROGRAPH AT	S713O	193.	4.03	8.	2.	1.	0.11
+	ROUTED TO	C713O	71.	4.23	8.	2.	1.	0.11
+	ROUTED TO	713714	69.	4.27	8.	2.	1.	0.11
+	HYDROGRAPH AT	S714	81.	4.07	5.	1.	1.	0.06
+	3 COMBINED AT	C714	118.	4.13	15.	4.	3.	0.39
+	HYDROGRAPH AT	S715	201.	4.20	27.	7.	5.	0.22
+	DIVERSION TO	DIV715	199.	4.17	8.	2.	1.	0.22
+	HYDROGRAPH AT	S715O	199.	4.23	18.	5.	3.	0.22
+	HYDROGRAPH AT	S716	876.	4.23	146.	37.	26.	1.13
+	DIVERSION TO	DIV716	876.	4.23	146.	37.	26.	1.13
+	HYDROGRAPH AT	S716O	0.	0.00	0.	0.	0.	1.13
+	ROUTED TO	C716O	0.	0.00	0.	0.	0.	1.13
+	ROUTED TO	716717	0.	0.00	0.	0.	0.	1.13
+	HYDROGRAPH AT	S717	445.	4.17	38.	9.	7.	0.29
+	DIVERSION TO	DIV717	417.	4.10	16.	4.	3.	0.29
+	HYDROGRAPH AT	S717O	445.	4.17	21.	5.	4.	0.29
+	2 COMBINED AT	C717	327.	4.17	20.	5.	4.	1.41

+	ROUTED TO 717718	221.	4.77	20.	5.	4.	1.41
+	HYDROGRAPH AT S718	205.	4.77	56.	14.	10.	0.44
+	DIVERSION TO DIV718	205.	4.77	27.	7.	5.	0.44
+	HYDROGRAPH AT S718O	158.	5.20	30.	7.	5.	0.44
+	2 COMBINED AT C718	216.	4.77	48.	12.	9.	1.86
+	HYDROGRAPH AT S719	137.	4.20	22.	6.	4.	0.15
+	DIVERSION TO DIV719	137.	4.20	17.	4.	3.	0.15
+	HYDROGRAPH AT S719O	52.	4.87	5.	1.	1.	0.15
+	6 COMBINED AT EAST-1	311.	4.77	89.	22.	16.	3.88
+	HYDROGRAPH AT S720	391.	4.17	50.	12.	9.	0.37
+	DIVERSION TO DIV720	391.	4.17	47.	12.	8.	0.37
+	HYDROGRAPH AT S720O	42.	5.10	3.	1.	1.	0.37
+	HYDROGRAPH AT S721	553.	4.07	50.	12.	9.	0.34
+	DIVERSION TO DIV721	553.	4.07	50.	12.	9.	0.34
+	HYDROGRAPH AT S721O	0.	0.00	0.	0.	0.	0.34
+	ROUTED TO C721O	0.	0.00	0.	0.	0.	0.34
+	ROUTED TO 721722	0.	0.00	0.	0.	0.	0.34
+	HYDROGRAPH AT S722	692.	4.27	119.	30.	22.	0.95
+	DIVERSION TO DIV722	692.	4.27	119.	30.	22.	0.95
+	HYDROGRAPH AT S722O	0.	0.00	0.	0.	0.	0.95
+	2 COMBINED AT C722	0.	0.00	0.	0.	0.	1.29
+	HYDROGRAPH AT S723	134.	4.07	12.	3.	2.	0.09
+	DIVERSION TO DIV723	134.	4.07	9.	2.	2.	0.09
+	HYDROGRAPH AT S723O	66.	4.27	3.	1.	1.	0.09
+	HYDROGRAPH AT S724	1071.	4.20	185.	46.	33.	1.16
+	DIVERSION TO DIV724	1071.	4.20	185.	46.	33.	1.16
+	HYDROGRAPH AT S724O	0.	0.00	0.	0.	0.	1.16

+	HYDROGRAPH AT	S725	732.	4.37	172.	44.	31.	1.16
+	DIVERSION TO	DIV725	732.	4.37	172.	44.	31.	1.16
+	HYDROGRAPH AT	S725O	0.	0.00	0.	0.	0.	1.16
+	5 COMBINED AT	EAST-2	85.	4.43	5.	1.	1.	4.06
+	HYDROGRAPH AT	S726	436.	4.07	35.	9.	6.	0.33
+	DIVERSION TO	DIV726	436.	4.07	35.	9.	6.	0.33
+	HYDROGRAPH AT	S726O	0.	0.00	0.	0.	0.	0.33
+	ROUTED TO	726727	0.	0.00	0.	0.	0.	0.33
+	HYDROGRAPH AT	S727	302.	4.23	59.	15.	11.	0.38
+	DIVERSION TO	DIV727	302.	4.23	59.	15.	11.	0.38
+	HYDROGRAPH AT	S727O	0.	0.00	0.	0.	0.	0.38
+	2 COMBINED AT	C727	0.	0.00	0.	0.	0.	0.71
+	4 COMBINED AT	TOTAL	2763.	6.10	1307.	348.	251.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 5-Year, 24-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   10AUG01  TIME  11:17:59  *
*                                      *
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*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR5-24.IH1
Original:06-18-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future watershed condition 5-year, 24-hour storm event. A companion model is also created for the existing condition 5-year, 6-hour storm event. Both models (5-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 5-year, 24-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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22 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME        0918  ENDING TIME
                     ICENT          19  CENTURY MARK

                COMPUTATION INTERVAL    0.03 HOURS
                     TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

24 JD          INDEX STORM NO. 1
                      STRM        2.32  PRECIPITATION DEPTH
                      TRDA        0.01  TRANSPOSITION DRAINAGE AREA

25 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

35 JD INDEX STORM NO. 2

STRM 2.31 PRECIPITATION DEPTH

TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

36 JD INDEX STORM NO. 3

STRM 2.25 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 4

STRM 2.18 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 5

STRM 2.10 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

39 JD INDEX STORM NO. 6

STRM 1.99 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	140.	12.73	42.	13.	10.	0.57		
+	DIVERSION TO	DIV100	100.	12.47	10.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	140.	12.73	36.	10.	7.	0.57		
+	ROUTED TO	100102	135.	13.07	36.	10.	7.	0.57		
+	HYDROGRAPH AT	S101	178.	12.60	38.	11.	8.	0.63		
+	2 COMBINED AT	C102R	242.	13.00	71.	21.	15.	1.20		
+	HYDROGRAPH AT	S102	130.	12.37	36.	12.	8.	0.45		
+	DIVERSION TO	DIV102	130.	12.37	26.	7.	5.	0.45		
+	HYDROGRAPH AT	S102O	69.	13.13	14.	4.	3.	0.45		

+	ROUTED TO 101102	51.	13.73	14.	4.	3.	0.45
+	HYDROGRAPH AT S103	70.	13.10	25.	8.	6.	0.40
+	2 COMBINED AT C102L	103.	13.70	38.	12.	9.	0.84
+	2 COMBINED AT C102	303.	13.03	107.	32.	23.	2.05
+	ROUTED TO 102103	284.	13.40	106.	32.	23.	2.05
+	HYDROGRAPH AT S104	309.	12.67	69.	21.	15.	0.90
+	DIVERSION TO DIV104	309.	12.67	37.	10.	7.	0.90
+	HYDROGRAPH AT S104O	262.	12.87	39.	11.	8.	0.90
+	2 COMBINED AT C103R	426.	12.90	140.	42.	30.	2.95
+	HYDROGRAPH AT S105	139.	12.50	45.	14.	10.	0.59
+	DIVERSION TO DIV105	139.	12.50	30.	8.	6.	0.59
+	HYDROGRAPH AT S105O	89.	13.27	20.	6.	4.	0.59
+	2 COMBINED AT C103	477.	13.40	157.	47.	34.	3.54
+	ROUTED TO 103104	449.	13.70	156.	47.	34.	3.54
+	HYDROGRAPH AT S106	150.	12.33	34.	10.	7.	0.57
+	2 COMBINED AT C104	477.	13.67	181.	55.	40.	4.11
+	ROUTED TO 104105	465.	14.03	180.	55.	40.	4.11
+	HYDROGRAPH AT S107	132.	13.10	44.	12.	9.	0.94
+	2 COMBINED AT C105L	530.	14.00	219.	66.	48.	5.05
+	HYDROGRAPH AT S200	286.	12.67	72.	24.	17.	0.96
+	ROUTED TO 200201	281.	12.73	72.	24.	17.	0.96
+	HYDROGRAPH AT S201	103.	12.57	26.	9.	6.	0.35
+	2 COMBINED AT C201	369.	12.70	98.	33.	24.	1.31
+	ROUTED TO 201203	362.	12.87	98.	33.	24.	1.31
+	HYDROGRAPH AT S202	49.	12.30	10.	3.	2.	0.13
+	ROUTED TO 202203	47.	12.43	10.	3.	2.	0.13
+	HYDROGRAPH AT S203	86.	12.47	30.	10.	7.	0.37

+	DIVERSION TO	DIV203	86.	12.47	27.	8.	6.	0.37
+	HYDROGRAPH AT	S203O	24.	14.40	8.	3.	2.	0.37
+	3 COMBINED AT	C203R	385.	12.87	111.	38.	27.	1.81
+	HYDROGRAPH AT	S204	217.	12.83	67.	22.	16.	0.95
+	DIVERSION TO	DIV204	6.	4.87	3.	1.	1.	0.95
+	HYDROGRAPH AT	S204O	217.	12.83	67.	22.	16.	0.95
+	2 COMBINED AT	C203	588.	12.87	175.	58.	42.	2.76
+	ROUTED TO	203204	586.	12.90	175.	58.	42.	2.76
+	HYDROGRAPH AT	S205	159.	12.43	35.	11.	8.	0.41
+	DIVERSION TO	DIV205	159.	12.43	26.	7.	5.	0.41
+	HYDROGRAPH AT	S205O	80.	13.00	14.	4.	3.	0.41
+	2 COMBINED AT	C204	607.	13.10	185.	62.	45.	3.17
+	ROUTED TO	204205	592.	13.20	185.	62.	45.	3.17
+	HYDROGRAPH AT	S206	182.	12.57	67.	21.	16.	0.85
+	DIVERSION TO	DIV206	182.	12.57	67.	21.	15.	0.85
+	HYDROGRAPH AT	S206O	4.	23.80	1.	0.	0.	0.85
+	2 COMBINED AT	C205L	592.	13.20	185.	62.	45.	4.03
+	HYDROGRAPH AT	S207	209.	12.93	74.	25.	18.	0.96
+	DIVERSION TO	DIV207	209.	12.93	35.	10.	7.	0.96
+	HYDROGRAPH AT	S207O	199.	13.13	52.	15.	11.	0.96
+	2 COMBINED AT	C205	756.	13.20	227.	75.	54.	4.98
+	ROUTED TO	205206	694.	13.70	227.	75.	54.	4.98
+	HYDROGRAPH AT	S208	260.	13.07	89.	28.	20.	1.10
+	DIVERSION TO	DIV208	172.	12.70	21.	7.	5.	1.10
+	HYDROGRAPH AT	S208O	260.	13.07	79.	22.	16.	1.10
+	2 COMBINED AT	C206	836.	13.70	296.	94.	68.	6.09
+	ROUTED TO	206207	827.	13.80	295.	94.	68.	6.09

	HYDROGRAPH AT						
+	S209	180.	12.70	40.	12.	9.	0.65
	2 COMBINED AT						
+	C207R	855.	13.80	323.	104.	75.	6.74
	HYDROGRAPH AT						
+	S210	130.	12.30	24.	6.	5.	0.48
	2 COMBINED AT						
+	C207	857.	13.77	339.	108.	79.	7.22
	ROUTED TO						
+	207105	847.	13.90	339.	108.	79.	7.22
	HYDROGRAPH AT						
+	S211	128.	12.33	27.	7.	5.	0.49
	2 COMBINED AT						
+	C105R	853.	13.90	357.	114.	83.	7.70
	2 COMBINED AT						
+	C105	1226.	13.93	528.	167.	122.	12.75
	HYDROGRAPH AT						
+	S300	246.	12.20	49.	16.	11.	0.62
	DIVERSION TO						
+	DIV300	246.	12.20	49.	16.	11.	0.62
	HYDROGRAPH AT						
+	S300O	0.	0.00	0.	0.	0.	0.62
	HYDROGRAPH AT						
+	S301	492.	12.17	90.	30.	22.	0.99
	DIVERSION TO						
+	DIV301	492.	12.17	68.	19.	14.	0.99
	HYDROGRAPH AT						
+	S301O	256.	12.57	35.	11.	8.	0.99
	2 COMBINED AT						
+	C300	206.	12.67	34.	11.	8.	1.61
	ROUTED TO						
+	300301	141.	13.03	33.	11.	8.	1.61
	HYDROGRAPH AT						
+	S302	170.	12.50	35.	11.	8.	0.47
	DIVERSION TO						
+	DIV302	162.	12.40	14.	4.	3.	0.47
	HYDROGRAPH AT						
+	S302O	170.	12.50	25.	7.	5.	0.47
	2 COMBINED AT						
+	C301	214.	13.00	56.	17.	12.	2.07
	ROUTED TO						
+	301302	192.	13.40	54.	17.	12.	2.07
	HYDROGRAPH AT						
+	S303	159.	12.70	35.	10.	7.	0.71
	2 COMBINED AT						
+	C302	254.	13.37	83.	27.	19.	2.78
	ROUTED TO						
+	302303	245.	13.67	83.	27.	19.	2.78
	HYDROGRAPH AT						
+	S304	197.	12.37	45.	12.	9.	0.82
	DIVERSION TO						
+	DIV304	197.	12.37	45.	12.	9.	0.82
	HYDROGRAPH AT						
+	S304O	0.	0.00	0.	0.	0.	0.82

+	2 COMBINED AT C303	245.	13.67	83.	27.	19.	3.60
+	2 COMBINED AT WEST-1	1318.	13.93	576.	185.	134.	16.36
+	HYDROGRAPH AT S400	582.	12.33	100.	32.	23.	1.05
+	DIVERSION TO DIV400	582.	12.33	99.	28.	20.	1.05
+	HYDROGRAPH AT S400O	20.	15.00	12.	4.	3.	1.05
+	ROUTED TO C400O	15.	15.93	11.	4.	3.	1.05
+	ROUTED TO 400401	15.	16.50	11.	4.	3.	1.05
+	HYDROGRAPH AT S401	267.	12.20	41.	12.	8.	0.65
+	DIVERSION TO DIV401	267.	12.20	41.	12.	8.	0.65
+	HYDROGRAPH AT S401O	0.	0.00	0.	0.	0.	0.65
+	2 COMBINED AT C401	15.	16.50	11.	4.	3.	1.69
+	ROUTED TO 401402	13.	18.30	10.	4.	3.	1.69
+	HYDROGRAPH AT S402	447.	12.13	68.	21.	15.	0.74
+	DIVERSION TO DIV402	447.	12.13	68.	21.	15.	0.74
+	HYDROGRAPH AT S402O	0.	0.00	0.	0.	0.	0.74
+	2 COMBINED AT C402	13.	18.30	10.	4.	3.	2.43
+	ROUTED TO 402403	12.	19.10	9.	3.	2.	2.43
+	HYDROGRAPH AT S403	413.	12.13	64.	20.	14.	0.56
+	DIVERSION TO DIV403	413.	12.13	64.	20.	14.	0.56
+	HYDROGRAPH AT S403O	0.	0.00	0.	0.	0.	0.56
+	2 COMBINED AT C403	12.	19.10	9.	3.	2.	2.99
+	ROUTED TO 403404	12.	19.50	9.	3.	2.	2.99
+	HYDROGRAPH AT S404	143.	12.27	18.	5.	3.	0.26
+	DIVERSION TO DIV404	117.	12.10	5.	1.	1.	0.26
+	HYDROGRAPH AT S404O	143.	12.27	13.	3.	2.	0.26
+	2 COMBINED AT C404	137.	12.27	13.	6.	4.	3.26
+	2 COMBINED AT WEST-2	1318.	13.93	586.	188.	136.	19.61

+	HYDROGRAPH AT S500	281.	12.43	89.	30.	22.	1.05
+	DIVERSION TO DIV500	281.	12.43	83.	23.	17.	1.05
+	HYDROGRAPH AT S500O	58.	14.43	20.	6.	5.	1.05
+	ROUTED TO 500501	45.	15.03	19.	6.	5.	1.05
+	HYDROGRAPH AT S501	211.	12.27	44.	14.	10.	0.61
+	DIVERSION TO DIV501	211.	12.27	44.	13.	9.	0.61
+	HYDROGRAPH AT S501O	6.	16.97	4.	1.	1.	0.61
+	2 COMBINED AT C501	41.	15.03	22.	8.	5.	1.67
+	ROUTED TO 501502	25.	16.03	17.	6.	4.	1.67
+	HYDROGRAPH AT S502	137.	12.47	26.	8.	6.	0.40
+	DIVERSION TO DIV502	137.	12.47	25.	7.	5.	0.40
+	HYDROGRAPH AT S502O	18.	13.80	5.	2.	1.	0.40
+	2 COMBINED AT C502L	28.	16.10	19.	7.	5.	2.07
+	HYDROGRAPH AT S503	344.	12.33	81.	26.	19.	0.99
+	DIVERSION TO DIV503	344.	12.33	46.	13.	9.	0.99
+	HYDROGRAPH AT S503O	290.	12.60	46.	13.	9.	0.99
+	2 COMBINED AT C502I	271.	12.63	55.	18.	13.	3.07
+	ROUTED TO C502O	241.	12.73	55.	18.	13.	3.07
+	ROUTED TO 502505	153.	13.73	44.	13.	10.	3.07
+	HYDROGRAPH AT S504	101.	12.30	27.	9.	6.	0.33
+	DIVERSION TO DIV504	101.	12.30	27.	9.	6.	0.33
+	HYDROGRAPH AT S504O	0.	0.00	0.	0.	0.	0.33
+	2 COMBINED AT C505L	153.	13.73	44.	13.	10.	3.39
+	HYDROGRAPH AT S505	67.	12.23	9.	3.	2.	0.14
+	DIVERSION TO DIV505	51.	12.03	3.	1.	1.	0.14
+	HYDROGRAPH AT S505O	67.	12.23	7.	2.	1.	0.14
+	ROUTED TO C503O	57.	12.33	7.	2.	1.	0.14

+	ROUTED TO	503505	39.	12.93	6.	1.	1.	0.14
+	HYDROGRAPH AT	S506	87.	12.23	13.	4.	3.	0.15
+	DIVERSION TO	DIV506	87.	12.23	11.	3.	2.	0.15
+	HYDROGRAPH AT	S506O	22.	12.83	3.	1.	1.	0.15
+	ROUTED TO	C504O	20.	12.87	3.	1.	1.	0.15
+	ROUTED TO	504505	14.	13.60	3.	1.	1.	0.15
+	HYDROGRAPH AT	S507	334.	12.17	46.	13.	9.	0.67
+	DIVERSION TO	DIV507	334.	12.17	46.	13.	9.	0.67
+	HYDROGRAPH AT	S507O	0.	0.00	0.	0.	0.	0.67
+	3 COMBINED AT	C505R	38.	12.97	9.	2.	2.	0.96
+	2 COMBINED AT	C505	171.	13.70	49.	15.	11.	4.35
+	ROUTED TO	505509	135.	14.30	29.	7.	5.	4.35
+	HYDROGRAPH AT	S508	161.	12.10	23.	7.	5.	0.29
+	DIVERSION TO	DIV508	161.	12.10	23.	7.	5.	0.29
+	HYDROGRAPH AT	S508O	0.	0.00	0.	0.	0.	0.29
+	2 COMBINED AT	C509L	135.	14.30	29.	7.	5.	4.65
+	HYDROGRAPH AT	S509	109.	12.07	15.	5.	3.	0.17
+	DIVERSION TO	DIV509	109.	12.07	9.	3.	2.	0.17
+	HYDROGRAPH AT	S509O	91.	12.17	7.	2.	1.	0.17
+	ROUTED TO	C506O	51.	12.33	7.	2.	1.	0.17
+	ROUTED TO	506508	46.	12.60	7.	2.	1.	0.17
+	HYDROGRAPH AT	S510	90.	12.13	15.	5.	3.	0.13
+	DIVERSION TO	DIV510	90.	12.13	15.	5.	3.	0.13
+	HYDROGRAPH AT	S510O	0.	0.00	0.	0.	0.	0.13
+	2 COMBINED AT	C508R	46.	12.60	7.	2.	1.	0.30
+	HYDROGRAPH AT	S511	221.	12.13	33.	10.	7.	0.38
+	DIVERSION TO	DIV511	221.	12.13	32.	9.	6.	0.38

+	HYDROGRAPH AT	S511O	8.	14.03	4.	1.	1.	0.38
+	ROUTED TO	C507O	36.	0.00	4.	1.	1.	0.38
+	ROUTED TO	507508	36.	0.00	4.	2.	1.	0.38
+	HYDROGRAPH AT	S512	154.	12.13	27.	9.	6.	0.21
+	DIVERSION TO	DIV512	154.	12.13	27.	9.	6.	0.21
+	HYDROGRAPH AT	S512O	0.	0.00	0.	0.	0.	0.21
+	2 COMBINED AT	C508L	36.	0.00	4.	2.	1.	0.60
+	2 COMBINED AT	C508	46.	12.60	10.	4.	3.	0.90
+	ROUTED TO	508509	36.	0.00	9.	4.	3.	0.90
+	HYDROGRAPH AT	S513	303.	12.23	57.	17.	12.	0.78
+	DIVERSION TO	DIV513	303.	12.23	57.	17.	12.	0.78
+	HYDROGRAPH AT	S513O	0.	0.00	0.	0.	0.	0.78
+	2 COMBINED AT	C509R	36.	0.00	9.	4.	3.	1.67
+	2 COMBINED AT	C509	138.	14.30	30.	10.	7.	6.32
+	ROUTED TO	509510	133.	14.47	29.	10.	7.	6.32
+	HYDROGRAPH AT	S514	423.	12.13	70.	21.	15.	0.65
+	DIVERSION TO	DIV514	423.	12.13	70.	21.	15.	0.65
+	HYDROGRAPH AT	S514O	0.	0.00	0.	0.	0.	0.65
+	2 COMBINED AT	C510	133.	14.47	29.	10.	7.	6.97
+	ROUTED TO	510511	121.	14.93	27.	10.	7.	6.97
+	HYDROGRAPH AT	S515	869.	12.13	124.	37.	27.	1.10
+	DIVERSION TO	DIV515	869.	12.13	124.	37.	27.	1.10
+	HYDROGRAPH AT	S515O	0.	0.00	0.	0.	0.	1.10
+	2 COMBINED AT	C511	121.	14.93	27.	10.	7.	8.07
+	ROUTED TO	511512	98.	15.83	24.	10.	7.	8.07
+	HYDROGRAPH AT	S516	277.	12.20	58.	19.	14.	0.54
+	DIVERSION TO	DIV516	277.	12.20	58.	19.	14.	0.54

+	HYDROGRAPH AT	S516O	0.	0.00	0.	0.	0.	0.54
+	2 COMBINED AT	C512	98.	15.83	24.	10.	7.	8.61
+	2 COMBINED AT	WEST-3	1320.	13.90	610.	193.	144.	28.22
+	HYDROGRAPH AT	S600	349.	12.90	104.	34.	25.	2.02
+	ROUTED TO	600601	347.	13.00	104.	34.	25.	2.02
+	HYDROGRAPH AT	S601	383.	12.57	91.	30.	22.	0.90
+	2 COMBINED AT	C601	588.	12.90	191.	63.	45.	2.92
+	ROUTED TO	601602	580.	13.07	191.	63.	45.	2.92
+	HYDROGRAPH AT	S603	364.	12.33	65.	21.	15.	0.67
+	2 COMBINED AT	C602L	686.	12.83	252.	83.	60.	3.58
+	HYDROGRAPH AT	S602	457.	12.87	142.	47.	34.	1.88
+	2 COMBINED AT	C602	1111.	12.83	385.	127.	92.	5.47
+	ROUTED TO	602603	1056.	13.07	341.	89.	64.	5.47
+	HYDROGRAPH AT	S606	178.	12.63	52.	17.	13.	0.66
+	2 COMBINED AT	C603L	1172.	13.03	386.	104.	75.	6.13
+	HYDROGRAPH AT	S605	267.	12.80	83.	28.	20.	1.09
+	HYDROGRAPH AT	S604	535.	13.07	197.	66.	48.	2.66
+	3 COMBINED AT	C603	1827.	13.03	627.	187.	135.	9.87
+	ROUTED TO	603604	1750.	13.37	579.	150.	108.	9.87
+	HYDROGRAPH AT	S609	96.	12.83	35.	12.	9.	0.56
+	DIVERSION TO	DIV609	96.	12.83	18.	5.	4.	0.56
+	HYDROGRAPH AT	S609O	84.	13.20	23.	7.	5.	0.56
+	2 COMBINED AT	C604R	1805.	13.37	593.	154.	111.	10.43
+	HYDROGRAPH AT	S607	212.	12.80	70.	23.	17.	0.82
+	DIVERSION TO	DIV607	14.	10.70	8.	3.	2.	0.82
+	HYDROGRAPH AT	S607O	212.	12.80	70.	20.	15.	0.82
+	2 COMBINED AT	C604	1924.	13.37	652.	172.	124.	11.25

+	ROUTED TO 604605	1907.	13.43	652.	172.	124.	11.25
+	HYDROGRAPH AT S608	238.	12.40	48.	15.	11.	0.51
+	DIVERSION TO DIV608	181.	12.20	15.	5.	3.	0.51
+	HYDROGRAPH AT S608O	238.	12.40	39.	11.	8.	0.51
+	2 COMBINED AT C605	1946.	13.40	683.	180.	130.	11.76
+	ROUTED TO 605606	1919.	13.53	675.	176.	127.	11.76
+	HYDROGRAPH AT S610	215.	12.33	57.	19.	14.	0.60
+	2 COMBINED AT C606L	1971.	13.53	722.	192.	139.	12.36
+	HYDROGRAPH AT S612	276.	12.37	79.	25.	18.	0.81
+	2 COMBINED AT C606	2057.	13.50	788.	214.	154.	13.17
+	ROUTED TO 606608	2052.	13.53	786.	211.	152.	13.17
+	HYDROGRAPH AT S611	197.	12.50	44.	15.	11.	0.57
+	ROUTED TO 607608	185.	12.87	44.	15.	11.	0.57
+	HYDROGRAPH AT S613	482.	12.97	151.	49.	36.	1.80
+	3 COMBINED AT C608	2443.	13.43	947.	265.	192.	15.53
+	ROUTED TO 608609	2420.	13.60	936.	257.	185.	15.53
+	HYDROGRAPH AT S614	228.	13.07	85.	28.	21.	1.08
+	2 COMBINED AT C609	2565.	13.57	1005.	281.	202.	16.61
+	ROUTED TO 609611	2518.	13.83	977.	257.	185.	16.61
+	HYDROGRAPH AT S617	133.	12.63	48.	15.	11.	0.68
+	2 COMBINED AT C611R	2570.	13.83	1012.	268.	194.	17.29
+	HYDROGRAPH AT S615	372.	12.90	123.	41.	30.	1.05
+	ROUTED TO 610611	366.	13.10	123.	41.	30.	1.05
+	HYDROGRAPH AT S616	145.	12.60	36.	11.	8.	0.50
+	DIVERSION TO DIV616	145.	12.60	23.	6.	5.	0.50
+	HYDROGRAPH AT S616O	88.	13.13	16.	5.	3.	0.50
+	2 COMBINED AT C611L	437.	13.20	137.	45.	33.	1.56

+	2 COMBINED AT	C611	2818.	13.77	1122.	307.	221.	18.85
+	ROUTED TO	611613	2802.	13.87	1112.	297.	214.	18.85
+	HYDROGRAPH AT	S618	217.	12.87	67.	21.	15.	0.96
+	2 COMBINED AT	C613R	2882.	13.83	1163.	313.	226.	19.81
+	HYDROGRAPH AT	S619	364.	12.67	83.	27.	19.	0.83
+	ROUTED TO	612613	352.	12.90	83.	27.	19.	0.83
+	HYDROGRAPH AT	S620	135.	12.70	43.	14.	10.	0.44
+	2 COMBINED AT	C613L	475.	12.90	125.	40.	29.	1.27
+	2 COMBINED AT	C613	3066.	13.80	1265.	347.	251.	21.08
+	ROUTED TO	613614	3046.	13.93	1254.	337.	243.	21.08
+	HYDROGRAPH AT	S621	267.	12.57	43.	11.	8.	0.92
+	2 COMBINED AT	C614	3052.	13.93	1280.	344.	248.	22.00
+	ROUTED TO	614615	3029.	14.07	1269.	336.	242.	22.00
+	HYDROGRAPH AT	S622	134.	13.07	40.	11.	8.	0.90
+	2 COMBINED AT	C615	3067.	14.07	1293.	343.	247.	22.90
+	2 COMBINED AT	WEST-4	3844.	14.03	1685.	476.	347.	51.12
+	HYDROGRAPH AT	S700	232.	12.20	36.	10.	7.	0.61
+	HYDROGRAPH AT	S701	145.	12.53	51.	15.	11.	0.72
+	DIVERSION TO	DIV701	2.	3.70	1.	0.	0.	0.72
+	HYDROGRAPH AT	S701O	145.	12.53	51.	15.	11.	0.72
+	HYDROGRAPH AT	S702	117.	12.17	20.	6.	4.	0.26
+	DIVERSION TO	DIV702	117.	12.17	20.	6.	4.	0.26
+	HYDROGRAPH AT	S702O	0.	0.00	0.	0.	0.	0.26
+	HYDROGRAPH AT	S703	65.	12.47	11.	3.	2.	0.26
+	DIVERSION TO	DIV703	65.	12.47	10.	3.	2.	0.26
+	HYDROGRAPH AT	S703O	9.	13.80	1.	0.	0.	0.26
+	HYDROGRAPH AT	S704	170.	12.17	25.	7.	5.	0.41

+	ROUTED TO 704705	156.	12.47	25.	7.	5.	0.41
+	HYDROGRAPH AT S705	478.	12.13	76.	23.	17.	0.75
+	2 COMBINED AT C705	490.	12.17	100.	31.	22.	1.16
+	ROUTED TO C705O	390.	12.50	100.	31.	22.	1.16
+	ROUTED TO 705OAF	385.	12.73	100.	31.	22.	1.16
+	HYDROGRAPH AT S705AF	93.	12.43	17.	4.	3.	0.18
+	DIVERSION TO DIV705	93.	12.43	11.	3.	2.	0.18
+	HYDROGRAPH AT 705AFO	56.	12.90	6.	2.	1.	0.18
+	2 COMBINED AT C705AF	419.	12.90	106.	32.	23.	1.34
+	5 COMBINED AT WEST-5	623.	12.50	186.	55.	40.	3.19
+	HYDROGRAPH AT S706	445.	12.13	71.	22.	16.	0.71
+	DIVERSION TO DIV706	445.	12.13	71.	22.	16.	0.71
+	HYDROGRAPH AT S706O	0.	0.00	0.	0.	0.	0.71
+	HYDROGRAPH AT S707	433.	12.13	76.	25.	18.	0.64
+	DIVERSION TO DIV707	433.	12.13	76.	25.	18.	0.64
+	HYDROGRAPH AT S707O	0.	0.00	0.	0.	0.	0.64
+	HYDROGRAPH AT S728	122.	12.23	30.	10.	7.	0.28
+	DIVERSION TO DIV728	122.	12.23	30.	9.	6.	0.28
+	HYDROGRAPH AT S728O	5.	16.90	3.	1.	1.	0.28
+	5 COMBINED AT WEST	3921.	14.00	1800.	514.	375.	55.94
+	HYDROGRAPH AT S708	557.	12.10	67.	18.	13.	0.71
+	DIVERSION TO DIV708	557.	12.10	67.	18.	13.	0.71
+	HYDROGRAPH AT S708O	0.	0.00	0.	0.	0.	0.71
+	HYDROGRAPH AT S709	338.	12.13	53.	14.	10.	0.44
+	DIVERSION TO DIV709	338.	12.13	43.	11.	8.	0.44
+	HYDROGRAPH AT S709O	113.	12.77	12.	3.	2.	0.44
+	ROUTED TO C709O	66.	13.03	12.	3.	2.	0.44

+	ROUTED TO 709710	63.	13.20	12.	3.	2.	0.44
+	HYDROGRAPH AT S710	107.	12.03	12.	3.	2.	0.11
+	DIVERSION TO DIV710	107.	12.03	9.	2.	2.	0.11
+	HYDROGRAPH AT S7100	49.	12.27	3.	1.	1.	0.11
+	2 COMBINED AT C710I	66.	13.20	15.	4.	3.	0.55
+	ROUTED TO C7100	61.	13.33	15.	4.	3.	0.55
+	HYDROGRAPH AT S711	167.	12.00	20.	6.	4.	0.16
+	DIVERSION TO DIV711	167.	12.00	20.	5.	4.	0.16
+	HYDROGRAPH AT S7110	2.	16.77	1.	0.	0.	0.16
+	ROUTED TO C7110	2.	16.80	1.	0.	0.	0.16
+	ROUTED TO 711712	2.	16.87	1.	0.	0.	0.16
+	HYDROGRAPH AT S712	71.	12.00	8.	2.	2.	0.07
+	DIVERSION TO DIV712	71.	12.00	8.	2.	2.	0.07
+	HYDROGRAPH AT S7120	0.	21.23	0.	0.	0.	0.07
+	2 COMBINED AT C712I	2.	16.87	1.	0.	0.	0.23
+	ROUTED TO C7120	2.	16.93	1.	0.	0.	0.23
+	ROUTED TO 712714	2.	17.07	1.	0.	0.	0.23
+	HYDROGRAPH AT S713	108.	12.00	12.	3.	2.	0.11
+	DIVERSION TO DIV713	105.	11.93	6.	1.	1.	0.11
+	HYDROGRAPH AT S7130	108.	12.00	7.	2.	1.	0.11
+	ROUTED TO C7130	43.	12.23	7.	2.	1.	0.11
+	ROUTED TO 713714	43.	12.30	7.	2.	1.	0.11
+	HYDROGRAPH AT S714	46.	12.03	4.	1.	1.	0.06
+	3 COMBINED AT C714	71.	12.13	11.	3.	2.	0.39
+	HYDROGRAPH AT S715	150.	12.17	24.	6.	5.	0.22
+	DIVERSION TO DIV715	145.	12.10	8.	2.	1.	0.22
+	HYDROGRAPH AT S7150	150.	12.17	17.	4.	3.	0.22

+	HYDROGRAPH AT	S716	775.	12.20	129.	37.	27.	1.13
+	DIVERSION TO	DIV716	775.	12.20	129.	37.	27.	1.13
+	HYDROGRAPH AT	S716O	0.	0.00	0.	0.	0.	1.13
+	ROUTED TO	C716O	0.	0.00	0.	0.	0.	1.13
+	ROUTED TO	716717	0.	0.00	0.	0.	0.	1.13
+	HYDROGRAPH AT	S717	270.	12.13	34.	9.	7.	0.29
+	DIVERSION TO	DIV717	267.	12.10	16.	4.	3.	0.29
+	HYDROGRAPH AT	S717O	269.	12.17	20.	5.	4.	0.29
+	2 COMBINED AT	C717	267.	12.17	19.	5.	4.	1.41
+	ROUTED TO	717718	172.	12.77	19.	5.	3.	1.41
+	HYDROGRAPH AT	S718	159.	12.73	51.	13.	10.	0.44
+	DIVERSION TO	DIV718	159.	12.73	26.	7.	5.	0.44
+	HYDROGRAPH AT	S718O	122.	13.30	27.	7.	5.	0.44
+	2 COMBINED AT	C718	172.	12.77	44.	11.	8.	1.86
+	HYDROGRAPH AT	S719	99.	12.17	23.	6.	5.	0.15
+	DIVERSION TO	DIV719	99.	12.17	17.	4.	3.	0.15
+	HYDROGRAPH AT	S719O	36.	13.07	7.	2.	1.	0.15
+	6 COMBINED AT	EAST-1	269.	12.73	86.	23.	16.	3.88
+	HYDROGRAPH AT	S720	272.	12.13	45.	12.	9.	0.37
+	DIVERSION TO	DIV720	272.	12.13	44.	12.	8.	0.37
+	HYDROGRAPH AT	S720O	4.	15.10	2.	1.	1.	0.37
+	HYDROGRAPH AT	S721	317.	12.03	42.	14.	10.	0.34
+	DIVERSION TO	DIV721	317.	12.03	42.	14.	10.	0.34
+	HYDROGRAPH AT	S721O	0.	0.00	0.	0.	0.	0.34
+	ROUTED TO	C721O	0.	0.00	0.	0.	0.	0.34
+	ROUTED TO	721722	0.	0.00	0.	0.	0.	0.34
+	HYDROGRAPH AT	S722	594.	12.20	104.	30.	22.	0.95

+	DIVERSION TO	DIV722	594.	12.20	104.	30.	22.	0.95
+	HYDROGRAPH AT	S722O	0.	0.00	0.	0.	0.	0.95
+	2 COMBINED AT	C722	0.	0.00	0.	0.	0.	1.29
+	HYDROGRAPH AT	S723	80.	12.03	11.	3.	2.	0.09
+	DIVERSION TO	DIV723	80.	12.03	9.	2.	2.	0.09
+	HYDROGRAPH AT	S723O	27.	12.43	3.	1.	1.	0.09
+	HYDROGRAPH AT	S724	913.	12.17	170.	52.	38.	1.16
+	DIVERSION TO	DIV724	913.	12.17	170.	51.	36.	1.16
+	HYDROGRAPH AT	S724O	12.	20.00	7.	2.	1.	1.16
+	HYDROGRAPH AT	S725	610.	12.30	152.	48.	35.	1.16
+	DIVERSION TO	DIV725	610.	12.30	152.	48.	35.	1.16
+	HYDROGRAPH AT	S725O	0.	0.00	0.	0.	0.	1.16
+	5 COMBINED AT	EAST-2	27.	12.43	9.	3.	2.	4.06
+	HYDROGRAPH AT	S726	231.	12.07	29.	9.	7.	0.33
+	DIVERSION TO	DIV726	231.	12.07	29.	9.	7.	0.33
+	HYDROGRAPH AT	S726O	0.	0.00	0.	0.	0.	0.33
+	ROUTED TO	726727	0.	0.00	0.	0.	0.	0.33
+	HYDROGRAPH AT	S727	216.	12.20	51.	16.	12.	0.38
+	DIVERSION TO	DIV727	216.	12.20	51.	16.	12.	0.38
+	HYDROGRAPH AT	S727O	0.	0.00	0.	0.	0.	0.38
+	2 COMBINED AT	C727	0.	0.00	0.	0.	0.	0.71
+	4 COMBINED AT	TOTAL	3921.	13.97	1818.	518.	379.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 2-Year, 6-Hour HEC-1 Model Output

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(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             JUN   1998                *
*           VERSION 4.1                 *
*                                       *
*  RUN DATE   10AUG01  TIME  10:10:26   *
*                                       *
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*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
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N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR2-6.IH1
Original:06-22-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future condition 2-year, 6-hour storm event with 100-year, 2-hour retention. A companion model is also created for the future condition 2-year, 24-hour storm event. Both models (2-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 2-year, 6-hour rainfall with FCDMC design rainfall distributions
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing
- 100-year, 2-hour retention volume diversions

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

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23 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME        0918  ENDING TIME
                     ICENT          19  CENTURY MARK

               COMPUTATION INTERVAL    0.03 HOURS
                    TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

25 JD          INDEX STORM NO. 1
                     STRM        1.36  PRECIPITATION DEPTH
                     TRDA        0.01  TRANSPOSITION DRAINAGE AREA

26 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                   0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                   0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                   0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
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```
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

29 JD        INDEX STORM NO. 2
                STRM        1.35  PRECIPITATION DEPTH
                TRDA        0.50  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.04      0.06      0.06      0.06      0.06      0.06      0.06      0.06
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

30 JD        INDEX STORM NO. 3
                STRM        1.33  PRECIPITATION DEPTH
                TRDA        2.80  TRANSPOSITION DRAINAGE AREA

31 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.03      0.03      0.03      0.03      0.03
                0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

34 JD        INDEX STORM NO. 4
                STRM        1.25  PRECIPITATION DEPTH
                TRDA       16.00  TRANSPOSITION DRAINAGE AREA

35 PI          PRECIPITATION PATTERN
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.02      0.02      0.02      0.02      0.02
                0.02      0.02      0.02      0.03      0.03      0.03      0.03      0.03      0.03      0.03
                0.02      0.02      0.02      0.02      0.02      0.02      0.02      0.01      0.01      0.01
                0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01      0.01
                0.01      0.01      0.01      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00

38 JD        INDEX STORM NO. 5
                STRM        1.10  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

39 PI          PRECIPITATION PATTERN
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO

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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	93.	5.10	31.	8.	6.	0.57		
+	DIVERSION TO	DIV100	93.	5.10	13.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	83.	5.30	20.	5.	4.	0.57		
+	ROUTED TO	100102	72.	5.80	20.	5.	4.	0.57		
+	HYDROGRAPH AT	S101	97.	4.97	26.	7.	5.	0.63		
+	2 COMBINED AT	C102R	79.	5.77	35.	9.	7.	1.20		
+	HYDROGRAPH AT	S102	97.	4.53	28.	7.	5.	0.45		
+	DIVERSION TO	DIV102	97.	4.53	28.	7.	5.	0.45		
+	HYDROGRAPH AT	S102O	0.	8.77	0.	0.	0.	0.45		
+	ROUTED TO	101102	0.	9.63	0.	0.	0.	0.45		
+	HYDROGRAPH AT	S103	58.	5.13	19.	5.	4.	0.40		
+	2 COMBINED AT	C102L	48.	5.17	16.	4.	3.	0.84		
+	2 COMBINED AT	C102	84.	5.07	39.	10.	7.	2.05		
+	ROUTED TO	102103	80.	5.60	38.	10.	7.	2.05		
+	HYDROGRAPH AT	S104	160.	5.07	45.	12.	8.	0.90		
+	DIVERSION TO	DIV104	160.	5.07	38.	10.	7.	0.90		
+	HYDROGRAPH AT	S104O	51.	6.10	8.	2.	1.	0.90		
	2 COMBINED AT									

+		C103R	83.	5.67	39.	10.	7.	2.95
	HYDROGRAPH AT							
+		S105	83.	4.77	32.	8.	6.	0.59
	DIVERSION TO							
+		DIV105	83.	4.77	31.	8.	6.	0.59
	HYDROGRAPH AT							
+		S105O	11.	8.00	2.	1.	0.	0.59
	2 COMBINED AT							
+		C103	83.	5.67	39.	10.	7.	3.54
	ROUTED TO							
+		103104	62.	6.17	31.	9.	6.	3.54
	HYDROGRAPH AT							
+		S106	78.	4.60	24.	6.	4.	0.57
	2 COMBINED AT							
+		C104	72.	6.13	39.	11.	8.	4.11
	ROUTED TO							
+		104105	70.	6.67	38.	11.	8.	4.11
	HYDROGRAPH AT							
+		S107	73.	5.17	23.	6.	4.	0.94
	2 COMBINED AT							
+		C105L	75.	6.67	43.	13.	9.	5.05
	HYDROGRAPH AT							
+		S200	184.	5.00	53.	14.	10.	0.96
	ROUTED TO							
+		200201	182.	5.10	53.	14.	10.	0.96
	HYDROGRAPH AT							
+		S201	83.	4.77	21.	5.	4.	0.35
	2 COMBINED AT							
+		C201	225.	5.03	70.	18.	13.	1.31
	ROUTED TO							
+		201203	223.	5.20	70.	18.	13.	1.31
	HYDROGRAPH AT							
+		S202	41.	4.47	8.	2.	1.	0.13
	ROUTED TO							
+		202203	39.	4.60	8.	2.	1.	0.13
	HYDROGRAPH AT							
+		S203	65.	4.67	24.	6.	5.	0.37
	DIVERSION TO							
+		DIV203	65.	4.67	24.	6.	5.	0.37
	HYDROGRAPH AT							
+		S203O	0.	0.00	0.	0.	0.	0.37
	3 COMBINED AT							
+		C203R	223.	5.20	73.	19.	14.	1.81
	HYDROGRAPH AT							
+		S204	146.	5.13	49.	13.	9.	0.95
	DIVERSION TO							
+		DIV204	13.	3.73	3.	1.	1.	0.95
	HYDROGRAPH AT							
+		S204O	146.	5.13	48.	12.	9.	0.95
	2 COMBINED AT							
+		C203	308.	5.20	108.	28.	20.	2.76
	ROUTED TO							
+		203204	307.	5.27	108.	28.	20.	2.76
	HYDROGRAPH AT							

+	S205	124.	4.60	27.	7.	5.	0.41
DIVERSION TO							
+	DIV205	124.	4.60	27.	7.	5.	0.41
HYDROGRAPH AT							
+	S205O	0.	0.00	0.	0.	0.	0.41
2 COMBINED AT							
+	C204	308.	5.27	108.	28.	20.	3.17
ROUTED TO							
+	204205	300.	5.43	107.	28.	20.	3.17
HYDROGRAPH AT							
+	S206	120.	4.80	46.	12.	9.	0.85
DIVERSION TO							
+	DIV206	120.	4.80	46.	12.	9.	0.85
HYDROGRAPH AT							
+	S206O	0.	0.00	0.	0.	0.	0.85
2 COMBINED AT							
+	C205L	300.	5.43	107.	28.	20.	4.03
HYDROGRAPH AT							
+	S207	150.	5.17	53.	14.	10.	0.96
DIVERSION TO							
+	DIV207	150.	5.17	40.	10.	7.	0.96
HYDROGRAPH AT							
+	S207O	61.	6.07	16.	4.	3.	0.96
2 COMBINED AT							
+	C205	300.	5.43	114.	30.	21.	4.98
ROUTED TO							
+	205206	281.	6.00	110.	29.	21.	4.98
HYDROGRAPH AT							
+	S208	179.	5.13	58.	15.	11.	1.10
DIVERSION TO							
+	DIV208	179.	5.13	26.	7.	5.	1.10
HYDROGRAPH AT							
+	S208O	142.	5.60	35.	9.	6.	1.10
2 COMBINED AT							
+	C206	354.	5.93	129.	34.	24.	6.09
ROUTED TO							
+	206207	351.	6.10	129.	34.	24.	6.09
HYDROGRAPH AT							
+	S209	99.	5.10	28.	7.	5.	0.65
2 COMBINED AT							
+	C207R	370.	6.10	138.	37.	27.	6.74
HYDROGRAPH AT							
+	S210	69.	4.53	17.	4.	3.	0.48
2 COMBINED AT							
+	C207	371.	6.10	140.	38.	27.	7.22
ROUTED TO							
+	207105	367.	6.30	139.	38.	27.	7.22
HYDROGRAPH AT							
+	S211	69.	4.60	19.	5.	3.	0.49
2 COMBINED AT							
+	C105R	369.	6.30	142.	39.	28.	7.70
2 COMBINED AT							
+	C105	393.	6.40	170.	48.	35.	12.75
HYDROGRAPH AT							

+		S300	170.	4.33	37.	9.	7.	0.62
	DIVERSION TO							
+		DIV300	170.	4.33	37.	9.	7.	0.62
	HYDROGRAPH AT							
+		S300O	0.	0.00	0.	0.	0.	0.62
	HYDROGRAPH AT							
+		S301	317.	4.30	67.	17.	12.	0.99
	DIVERSION TO							
+		DIV301	317.	4.30	67.	17.	12.	0.99
	HYDROGRAPH AT							
+		S301O	0.	0.00	0.	0.	0.	0.99
	2 COMBINED AT							
+		C300	0.	0.00	0.	0.	0.	1.61
	ROUTED TO							
+		300301	0.	0.00	0.	0.	0.	1.61
	HYDROGRAPH AT							
+		S302	130.	4.70	27.	7.	5.	0.47
	DIVERSION TO							
+		DIV302	130.	4.70	17.	4.	3.	0.47
	HYDROGRAPH AT							
+		S302O	90.	5.07	11.	3.	2.	0.47
	2 COMBINED AT							
+		C301	22.	5.90	4.	1.	1.	2.07
	ROUTED TO							
+		301302	16.	7.23	4.	1.	1.	2.07
	HYDROGRAPH AT							
+		S303	82.	5.13	24.	6.	4.	0.71
	2 COMBINED AT							
+		C302	31.	5.20	14.	4.	3.	2.78
	ROUTED TO							
+		302303	31.	5.77	14.	4.	3.	2.78
	HYDROGRAPH AT							
+		S304	74.	4.73	26.	7.	5.	0.82
	DIVERSION TO							
+		DIV304	74.	4.73	26.	7.	5.	0.82
	HYDROGRAPH AT							
+		S304O	0.	0.00	0.	0.	0.	0.82
	2 COMBINED AT							
+		C303	31.	5.77	14.	4.	3.	3.60
	2 COMBINED AT							
+		WEST-1	400.	6.40	176.	50.	36.	16.36
	HYDROGRAPH AT							
+		S400	348.	4.60	70.	18.	13.	1.05
	DIVERSION TO							
+		DIV400	348.	4.60	70.	18.	13.	1.05
	HYDROGRAPH AT							
+		S400O	0.	0.00	0.	0.	0.	1.05
	ROUTED TO							
+		C400O	0.	0.00	0.	0.	0.	1.05
	ROUTED TO							
+		400401	0.	0.00	0.	0.	0.	1.05
	HYDROGRAPH AT							
+		S401	142.	4.40	28.	7.	5.	0.65
	DIVERSION TO							

+	DIV401	142.	4.40	28.	7.	5.	0.65
HYDROGRAPH AT +	S401O	0.	0.00	0.	0.	0.	0.65
2 COMBINED AT +	C401	0.	0.00	0.	0.	0.	1.69
ROUTED TO +	401402	0.	0.00	0.	0.	0.	1.69
HYDROGRAPH AT +	S402	299.	4.27	50.	13.	9.	0.74
DIVERSION TO +	DIV402	299.	4.27	50.	13.	9.	0.74
HYDROGRAPH AT +	S402O	0.	0.00	0.	0.	0.	0.74
2 COMBINED AT +	C402	0.	0.00	0.	0.	0.	2.43
ROUTED TO +	402403	0.	0.00	0.	0.	0.	2.43
HYDROGRAPH AT +	S403	338.	4.20	50.	12.	9.	0.56
DIVERSION TO +	DIV403	338.	4.20	50.	12.	9.	0.56
HYDROGRAPH AT +	S403O	0.	0.00	0.	0.	0.	0.56
2 COMBINED AT +	C403	0.	0.00	0.	0.	0.	2.99
ROUTED TO +	403404	0.	0.00	0.	0.	0.	2.99
HYDROGRAPH AT +	S404	96.	4.47	13.	3.	2.	0.26
DIVERSION TO +	DIV404	96.	4.47	6.	1.	1.	0.26
HYDROGRAPH AT +	S404O	83.	4.60	7.	2.	1.	0.26
2 COMBINED AT +	C404	9.	5.33	1.	0.	0.	3.26
2 COMBINED AT +	WEST-2	400.	6.40	176.	50.	36.	19.61
HYDROGRAPH AT +	S500	174.	4.73	63.	17.	12.	1.05
DIVERSION TO +	DIV500	174.	4.73	63.	17.	12.	1.05
HYDROGRAPH AT +	S500O	0.	0.00	0.	0.	0.	1.05
ROUTED TO +	500501	0.	0.00	0.	0.	0.	1.05
HYDROGRAPH AT +	S501	140.	4.43	33.	8.	6.	0.61
DIVERSION TO +	DIV501	140.	4.43	33.	8.	6.	0.61
HYDROGRAPH AT +	S501O	0.	0.00	0.	0.	0.	0.61
2 COMBINED AT +	C501	0.	0.00	0.	0.	0.	1.67
ROUTED TO							

+	501502	0.	0.00	0.	0.	0.	1.67
+ HYDROGRAPH AT	S502	98.	4.70	20.	5.	4.	0.40
+ DIVERSION TO	DIV502	98.	4.70	20.	5.	4.	0.40
+ HYDROGRAPH AT	S502O	0.	0.00	0.	0.	0.	0.40
+ 2 COMBINED AT	C502L	0.	0.00	0.	0.	0.	2.07
+ HYDROGRAPH AT	S503	189.	4.57	55.	14.	10.	0.99
+ DIVERSION TO	DIV503	189.	4.57	48.	12.	9.	0.99
+ HYDROGRAPH AT	S503O	51.	5.73	8.	2.	1.	0.99
+ 2 COMBINED AT	C502I	0.	0.00	0.	0.	0.	3.07
+ ROUTED TO	C502O	0.	0.00	0.	0.	0.	3.07
+ ROUTED TO	502505	0.	0.00	0.	0.	0.	3.07
+ HYDROGRAPH AT	S504	75.	4.47	21.	5.	4.	0.33
+ DIVERSION TO	DIV504	75.	4.47	21.	5.	4.	0.33
+ HYDROGRAPH AT	S504O	0.	0.00	0.	0.	0.	0.33
+ 2 COMBINED AT	C505L	0.	0.00	0.	0.	0.	3.39
+ HYDROGRAPH AT	S505	58.	4.33	7.	2.	1.	0.14
+ DIVERSION TO	DIV505	58.	4.33	4.	1.	1.	0.14
+ HYDROGRAPH AT	S505O	51.	4.43	3.	1.	1.	0.14
+ ROUTED TO	C503O	32.	4.60	3.	1.	1.	0.14
+ ROUTED TO	503505	24.	5.47	3.	1.	1.	0.14
+ HYDROGRAPH AT	S506	73.	4.33	10.	3.	2.	0.15
+ DIVERSION TO	DIV506	73.	4.33	10.	3.	2.	0.15
+ HYDROGRAPH AT	S506O	0.	0.00	0.	0.	0.	0.15
+ ROUTED TO	C504O	0.	0.00	0.	0.	0.	0.15
+ ROUTED TO	504505	0.	0.00	0.	0.	0.	0.15
+ HYDROGRAPH AT	S507	180.	4.33	31.	8.	6.	0.67
+ DIVERSION TO	DIV507	180.	4.33	31.	8.	6.	0.67
HYDROGRAPH AT							

+	S507O	0.	0.00	0.	0.	0.	0.67
3 COMBINED AT +	C505R	24.	5.47	3.	1.	1.	0.96
2 COMBINED AT +	C505	2.	6.23	0.	0.	0.	4.35
ROUTED TO +	505509	0.	7.93	0.	0.	0.	4.35
HYDROGRAPH AT +	S508	127.	4.20	17.	4.	3.	0.29
DIVERSION TO +	DIV508	127.	4.20	17.	4.	3.	0.29
HYDROGRAPH AT +	S508O	0.	0.00	0.	0.	0.	0.29
2 COMBINED AT +	C509L	0.	7.93	0.	0.	0.	4.65
HYDROGRAPH AT +	S509	111.	4.10	11.	3.	2.	0.17
DIVERSION TO +	DIV509	111.	4.10	10.	3.	2.	0.17
HYDROGRAPH AT +	S509O	13.	4.73	1.	0.	0.	0.17
ROUTED TO +	C506O	7.	4.90	1.	0.	0.	0.17
ROUTED TO +	506508	4.	5.30	1.	0.	0.	0.17
HYDROGRAPH AT +	S510	80.	4.17	12.	3.	2.	0.13
DIVERSION TO +	DIV510	80.	4.17	12.	3.	2.	0.13
HYDROGRAPH AT +	S510O	0.	0.00	0.	0.	0.	0.13
2 COMBINED AT +	C508R	4.	5.30	1.	0.	0.	0.30
HYDROGRAPH AT +	S511	177.	4.20	25.	6.	5.	0.38
DIVERSION TO +	DIV511	177.	4.20	25.	6.	5.	0.38
HYDROGRAPH AT +	S511O	0.	0.00	0.	0.	0.	0.38
ROUTED TO +	C507O	36.	0.00	0.	0.	0.	0.38
ROUTED TO +	507508	36.	0.00	3.	1.	1.	0.38
HYDROGRAPH AT +	S512	135.	4.20	22.	6.	4.	0.21
DIVERSION TO +	DIV512	135.	4.20	22.	6.	4.	0.21
HYDROGRAPH AT +	S512O	0.	0.00	0.	0.	0.	0.21
2 COMBINED AT +	C508L	36.	0.00	3.	1.	1.	0.60
2 COMBINED AT +	C508	36.	0.00	3.	1.	1.	0.90
ROUTED TO							

+		508509	36.	0.00	8.	2.	1.	0.90
+	HYDROGRAPH AT	S513	155.	4.43	38.	10.	7.	0.78
+	DIVERSION TO	DIV513	155.	4.43	38.	10.	7.	0.78
+	HYDROGRAPH AT	S513O	0.	0.00	0.	0.	0.	0.78
+	2 COMBINED AT	C509R	36.	0.00	8.	2.	1.	1.67
+	2 COMBINED AT	C509	36.	0.00	8.	2.	1.	6.32
+	ROUTED TO	509510	36.	0.00	8.	2.	1.	6.32
+	HYDROGRAPH AT	S514	301.	4.23	53.	13.	10.	0.65
+	DIVERSION TO	DIV514	301.	4.23	53.	13.	10.	0.65
+	HYDROGRAPH AT	S514O	0.	0.00	0.	0.	0.	0.65
+	2 COMBINED AT	C510	36.	0.00	8.	2.	1.	6.97
+	ROUTED TO	510511	36.	0.00	11.	3.	2.	6.97
+	HYDROGRAPH AT	S515	574.	4.23	91.	23.	16.	1.10
+	DIVERSION TO	DIV515	574.	4.23	91.	23.	16.	1.10
+	HYDROGRAPH AT	S515O	0.	0.00	0.	0.	0.	1.10
+	2 COMBINED AT	C511	36.	0.00	11.	3.	2.	8.07
+	ROUTED TO	511512	36.	0.00	14.	3.	3.	8.07
+	HYDROGRAPH AT	S516	217.	4.30	45.	12.	8.	0.54
+	DIVERSION TO	DIV516	217.	4.30	45.	12.	8.	0.54
+	HYDROGRAPH AT	S516O	0.	0.00	0.	0.	0.	0.54
+	2 COMBINED AT	C512	36.	0.00	14.	3.	3.	8.61
+	2 COMBINED AT	WEST-3	400.	6.40	176.	53.	39.	28.22
+	HYDROGRAPH AT	S600	195.	5.13	65.	17.	12.	2.02
+	ROUTED TO	600601	194.	5.27	65.	17.	12.	2.02
+	HYDROGRAPH AT	S601	251.	4.80	66.	17.	12.	0.90
+	2 COMBINED AT	C601	330.	5.07	117.	30.	22.	2.92
+	ROUTED TO	601602	327.	5.27	117.	30.	22.	2.92
	HYDROGRAPH AT							

+	S603	268.	4.53	49.	12.	9.	0.67
+ 2 COMBINED AT	C602L	404.	5.10	154.	40.	29.	3.58
+ HYDROGRAPH AT	S602	270.	5.17	95.	25.	18.	1.88
+ 2 COMBINED AT	C602	610.	5.17	237.	62.	45.	5.47
+ ROUTED TO	602603	562.	5.37	193.	48.	35.	5.47
+ HYDROGRAPH AT	S606	124.	4.93	39.	10.	7.	0.66
+ 2 COMBINED AT	C603L	624.	5.33	221.	56.	40.	6.13
+ HYDROGRAPH AT	S605	170.	5.13	59.	16.	11.	1.09
+ HYDROGRAPH AT	S604	338.	5.20	126.	33.	24.	2.66
+ 3 COMBINED AT	C603	996.	5.30	382.	99.	71.	9.87
+ ROUTED TO	603604	939.	5.63	334.	84.	60.	9.87
+ HYDROGRAPH AT	S609	68.	5.17	27.	7.	5.	0.56
+ DIVERSION TO	DIV609	68.	5.17	20.	5.	4.	0.56
+ HYDROGRAPH AT	S609O	32.	6.60	9.	2.	2.	0.56
+ 2 COMBINED AT	C604R	939.	5.63	334.	84.	60.	10.43
+ HYDROGRAPH AT	S607	129.	5.17	49.	13.	9.	0.82
+ DIVERSION TO	DIV607	104.	4.87	11.	3.	2.	0.82
+ HYDROGRAPH AT	S607O	129.	5.17	41.	10.	7.	0.82
+ 2 COMBINED AT	C604	998.	5.60	357.	90.	65.	11.25
+ ROUTED TO	604605	997.	5.67	357.	90.	65.	11.25
+ HYDROGRAPH AT	S608	182.	4.60	37.	9.	7.	0.51
+ DIVERSION TO	DIV608	182.	4.60	18.	5.	3.	0.51
+ HYDROGRAPH AT	S608O	160.	4.77	19.	5.	3.	0.51
+ 2 COMBINED AT	C605	1027.	5.63	364.	92.	66.	11.76
+ ROUTED TO	605606	1014.	5.77	358.	90.	65.	11.76
+ HYDROGRAPH AT	S610	152.	4.50	43.	11.	8.	0.60
+ 2 COMBINED AT	C606L	1050.	5.77	386.	97.	70.	12.36
HYDROGRAPH AT							

+		S612	163.	4.67	55.	14.	10.	0.81
	2 COMBINED AT							
+		C606	1101.	5.73	421.	107.	77.	13.17
	ROUTED TO							
+		606608	1098.	5.77	418.	106.	76.	13.17
	HYDROGRAPH AT							
+		S611	153.	4.70	35.	9.	6.	0.57
	ROUTED TO							
+		607608	140.	5.13	35.	9.	6.	0.57
	HYDROGRAPH AT							
+		S613	298.	5.13	97.	25.	18.	1.80
	3 COMBINED AT							
+		C608	1311.	5.70	519.	133.	96.	15.53
	ROUTED TO							
+		608609	1296.	5.87	510.	130.	93.	15.53
	HYDROGRAPH AT							
+		S614	174.	5.13	60.	16.	11.	1.08
	2 COMBINED AT							
+		C609	1373.	5.87	553.	142.	102.	16.61
	ROUTED TO							
+		609611	1332.	6.17	525.	132.	95.	16.61
	HYDROGRAPH AT							
+		S617	144.	4.47	35.	9.	6.	0.68
	2 COMBINED AT							
+		C611R	1339.	6.17	541.	137.	99.	17.29
	HYDROGRAPH AT							
+		S615	268.	5.13	89.	23.	17.	1.05
	ROUTED TO							
+		610611	261.	5.37	89.	23.	17.	1.05
	HYDROGRAPH AT							
+		S616	95.	4.87	27.	7.	5.	0.50
	DIVERSION TO							
+		DIV616	95.	4.87	25.	6.	5.	0.50
	HYDROGRAPH AT							
+		S616O	13.	7.20	2.	1.	0.	0.50
	2 COMBINED AT							
+		C611L	257.	5.40	90.	24.	17.	1.56
	2 COMBINED AT							
+		C611	1455.	6.13	606.	155.	112.	18.85
	ROUTED TO							
+		611613	1442.	6.23	596.	151.	109.	18.85
	HYDROGRAPH AT							
+		S618	127.	5.13	43.	11.	8.	0.96
	2 COMBINED AT							
+		C613R	1468.	6.23	618.	158.	114.	19.81
	HYDROGRAPH AT							
+		S619	231.	5.00	60.	15.	11.	0.83
	ROUTED TO							
+		612613	218.	5.27	60.	15.	11.	0.83
	HYDROGRAPH AT							
+		S620	97.	5.00	32.	8.	6.	0.44
	2 COMBINED AT							
+		C613L	264.	5.30	84.	22.	16.	1.27
	2 COMBINED AT							

+		C613	1560.	6.20	673.	173.	125.	21.08
	ROUTED TO							
+		613614	1543.	6.33	662.	169.	122.	21.08
	HYDROGRAPH AT							
+		S621	94.	5.10	23.	6.	4.	0.92
	2 COMBINED AT							
+		C614	1536.	6.33	663.	169.	122.	22.00
	ROUTED TO							
+		614615	1514.	6.50	653.	166.	119.	22.00
	HYDROGRAPH AT							
+		S622	77.	5.13	22.	6.	4.	0.90
	2 COMBINED AT							
+		C615	1507.	6.50	654.	166.	120.	22.90
	2 COMBINED AT							
+		WEST-4	1621.	6.70	747.	200.	144.	51.12
	HYDROGRAPH AT							
+		S700	119.	4.37	24.	6.	4.	0.61
	HYDROGRAPH AT							
+		S701	78.	4.87	33.	9.	6.	0.72
	DIVERSION TO							
+		DIV701	3.	3.10	1.	0.	0.	0.72
	HYDROGRAPH AT							
+		S701O	78.	4.87	33.	9.	6.	0.72
	HYDROGRAPH AT							
+		S702	84.	4.27	16.	4.	3.	0.26
	DIVERSION TO							
+		DIV702	84.	4.27	16.	4.	3.	0.26
	HYDROGRAPH AT							
+		S702O	0.	0.00	0.	0.	0.	0.26
	HYDROGRAPH AT							
+		S703	35.	4.80	8.	2.	1.	0.26
	DIVERSION TO							
+		DIV703	35.	4.80	8.	2.	1.	0.26
	HYDROGRAPH AT							
+		S703O	0.	0.00	0.	0.	0.	0.26
	HYDROGRAPH AT							
+		S704	110.	4.30	19.	5.	3.	0.41
	ROUTED TO							
+		704705	107.	4.70	19.	5.	3.	0.41
	HYDROGRAPH AT							
+		S705	320.	4.23	56.	14.	10.	0.75
	2 COMBINED AT							
+		C705	289.	4.27	66.	17.	12.	1.16
	ROUTED TO							
+		C705O	241.	4.70	66.	17.	12.	1.16
	ROUTED TO							
+		705OAF	241.	4.93	66.	17.	12.	1.16
	HYDROGRAPH AT							
+		S705AF	57.	4.67	12.	3.	2.	0.18
	DIVERSION TO							
+		DIV705	57.	4.67	11.	3.	2.	0.18
	HYDROGRAPH AT							
+		705AFO	7.	6.57	1.	0.	0.	0.18
	2 COMBINED AT							

+	C705AF	241.	4.93	67.	17.	12.	1.34
5 COMBINED AT +	WEST-5	263.	4.83	85.	22.	16.	3.19
HYDROGRAPH AT +	S706	323.	4.20	53.	13.	10.	0.71
DIVERSION TO +	DIV706	323.	4.20	53.	13.	10.	0.71
HYDROGRAPH AT +	S706O	0.	0.00	0.	0.	0.	0.71
HYDROGRAPH AT +	S707	356.	4.20	59.	15.	11.	0.64
DIVERSION TO +	DIV707	356.	4.20	59.	15.	11.	0.64
HYDROGRAPH AT +	S707O	0.	0.00	0.	0.	0.	0.64
HYDROGRAPH AT +	S728	94.	4.37	23.	6.	4.	0.28
DIVERSION TO +	DIV728	94.	4.37	23.	6.	4.	0.28
HYDROGRAPH AT +	S728O	0.	0.00	0.	0.	0.	0.28
5 COMBINED AT +	WEST	1634.	6.70	790.	213.	154.	55.94
HYDROGRAPH AT +	S708	399.	4.20	47.	12.	8.	0.71
DIVERSION TO +	DIV708	399.	4.20	47.	12.	8.	0.71
HYDROGRAPH AT +	S708O	0.	0.00	0.	0.	0.	0.71
HYDROGRAPH AT +	S709	271.	4.23	37.	9.	7.	0.44
DIVERSION TO +	DIV709	271.	4.23	37.	9.	7.	0.44
HYDROGRAPH AT +	S709O	0.	0.00	0.	0.	0.	0.44
ROUTED TO +	C709O	0.	0.00	0.	0.	0.	0.44
ROUTED TO +	709710	0.	0.00	0.	0.	0.	0.44
HYDROGRAPH AT +	S710	120.	4.07	9.	2.	2.	0.11
DIVERSION TO +	DIV710	120.	4.07	9.	2.	2.	0.11
HYDROGRAPH AT +	S710O	0.	0.00	0.	0.	0.	0.11
2 COMBINED AT +	C710I	0.	0.00	0.	0.	0.	0.55
ROUTED TO +	C710O	0.	0.00	0.	0.	0.	0.55
HYDROGRAPH AT +	S711	202.	4.03	15.	4.	3.	0.16
DIVERSION TO +	DIV711	202.	4.03	15.	4.	3.	0.16
HYDROGRAPH AT							

+		S711O	0.	0.00	0.	0.	0.	0.16
	ROUTED TO							
+		C711O	0.	0.00	0.	0.	0.	0.16
	ROUTED TO							
+		711712	0.	0.00	0.	0.	0.	0.16
	HYDROGRAPH AT							
+		S712	93.	4.00	6.	1.	1.	0.07
	DIVERSION TO							
+		DIV712	93.	4.00	6.	1.	1.	0.07
	HYDROGRAPH AT							
+		S712O	0.	0.00	0.	0.	0.	0.07
	2 COMBINED AT							
+		C712I	0.	0.00	0.	0.	0.	0.23
	ROUTED TO							
+		C712O	0.	0.00	0.	0.	0.	0.23
	ROUTED TO							
+		712714	0.	0.00	0.	0.	0.	0.23
	HYDROGRAPH AT							
+		S713	128.	4.03	9.	2.	2.	0.11
	DIVERSION TO							
+		DIV713	128.	4.03	6.	1.	1.	0.11
	HYDROGRAPH AT							
+		S713O	93.	4.13	3.	1.	1.	0.11
	ROUTED TO							
+		C713O	27.	4.33	3.	1.	1.	0.11
	ROUTED TO							
+		713714	27.	4.40	3.	1.	1.	0.11
	HYDROGRAPH AT							
+		S714	44.	4.07	3.	1.	1.	0.06
	3 COMBINED AT							
+		C714	45.	4.23	6.	2.	1.	0.39
	HYDROGRAPH AT							
+		S715	106.	4.27	17.	4.	3.	0.22
	DIVERSION TO							
+		DIV715	106.	4.27	8.	2.	1.	0.22
	HYDROGRAPH AT							
+		S715O	87.	4.53	8.	2.	2.	0.22
	HYDROGRAPH AT							
+		S716	490.	4.33	94.	24.	17.	1.13
	DIVERSION TO							
+		DIV716	490.	4.33	94.	24.	17.	1.13
	HYDROGRAPH AT							
+		S716O	0.	0.00	0.	0.	0.	1.13
	ROUTED TO							
+		C716O	0.	0.00	0.	0.	0.	1.13
	ROUTED TO							
+		716717	0.	0.00	0.	0.	0.	1.13
	HYDROGRAPH AT							
+		S717	282.	4.20	24.	6.	4.	0.29
	DIVERSION TO							
+		DIV717	282.	4.20	16.	4.	3.	0.29
	HYDROGRAPH AT							
+		S717O	181.	4.37	8.	2.	1.	0.29
	2 COMBINED AT							

+	C717	104.	4.50	7.	2.	1.	1.41
ROUTED TO +	717718	39.	4.80	7.	2.	1.	1.41
HYDROGRAPH AT +	S718	90.	5.20	34.	9.	6.	0.44
DIVERSION TO +	DIV718	90.	5.20	27.	7.	5.	0.44
HYDROGRAPH AT +	S718O	34.	7.07	9.	2.	2.	0.44
2 COMBINED AT +	C718	38.	4.83	12.	3.	2.	1.86
HYDROGRAPH AT +	S719	79.	4.27	15.	4.	3.	0.15
DIVERSION TO +	DIV719	79.	4.27	15.	4.	3.	0.15
HYDROGRAPH AT +	S719O	0.	0.00	0.	0.	0.	0.15
6 COMBINED AT +	EAST-1	92.	4.67	19.	5.	4.	3.88
HYDROGRAPH AT +	S720	223.	4.20	33.	8.	6.	0.37
DIVERSION TO +	DIV720	223.	4.20	33.	8.	6.	0.37
HYDROGRAPH AT +	S720O	0.	0.00	0.	0.	0.	0.37
HYDROGRAPH AT +	S721	354.	4.07	34.	8.	6.	0.34
DIVERSION TO +	DIV721	354.	4.07	34.	8.	6.	0.34
HYDROGRAPH AT +	S721O	0.	0.00	0.	0.	0.	0.34
ROUTED TO +	C721O	0.	0.00	0.	0.	0.	0.34
ROUTED TO +	721722	0.	0.00	0.	0.	0.	0.34
HYDROGRAPH AT +	S722	368.	4.37	75.	19.	14.	0.95
DIVERSION TO +	DIV722	368.	4.37	75.	19.	14.	0.95
HYDROGRAPH AT +	S722O	0.	0.00	0.	0.	0.	0.95
2 COMBINED AT +	C722	0.	0.00	0.	0.	0.	1.29
HYDROGRAPH AT +	S723	89.	4.07	8.	2.	1.	0.09
DIVERSION TO +	DIV723	89.	4.07	8.	2.	1.	0.09
HYDROGRAPH AT +	S723O	0.	0.00	0.	0.	0.	0.09
HYDROGRAPH AT +	S724	679.	4.27	128.	32.	23.	1.16
DIVERSION TO +	DIV724	679.	4.27	128.	32.	23.	1.16
HYDROGRAPH AT							

+		S724O	0.	0.00	0.	0.	0.	1.16
+	HYDROGRAPH AT	S725	428.	4.50	117.	30.	22.	1.16
+	DIVERSION TO	DIV725	428.	4.50	117.	30.	22.	1.16
+	HYDROGRAPH AT	S725O	0.	0.00	0.	0.	0.	1.16
+	5 COMBINED AT	EAST-2	0.	0.00	0.	0.	0.	4.06
+	HYDROGRAPH AT	S726	227.	4.10	22.	6.	4.	0.33
+	DIVERSION TO	DIV726	227.	4.10	22.	6.	4.	0.33
+	HYDROGRAPH AT	S726O	0.	0.00	0.	0.	0.	0.33
+	ROUTED TO	726727	0.	0.00	0.	0.	0.	0.33
+	HYDROGRAPH AT	S727	179.	4.33	41.	10.	7.	0.38
+	DIVERSION TO	DIV727	179.	4.33	41.	10.	7.	0.38
+	HYDROGRAPH AT	S727O	0.	0.00	0.	0.	0.	0.38
+	2 COMBINED AT	C727	0.	0.00	0.	0.	0.	0.71
+	4 COMBINED AT	TOTAL	1627.	6.70	790.	213.	154.	64.59

*** NORMAL END OF HEC-1 ***

Future Condition with Retention 2-Year, 24-Hour HEC-1 Model Output

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
* RUN DATE  10AUG01  TIME  10:09:25    *
*                                      *
****************************************
```

```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
****************************************
```

N. Peoria Area Drainage Master Plan
For Maricopa County FCD 99-45
By Stantec Consulting, Inc. P82000146

File: FR2-24.IH1
Original:06-22-01 MCG
Revised:

The N. Peoria ADMP study limits consists of several small tributary watersheds to the Agua Fria River. This model is for the future condition 2-year, 24-hour storm event with 100-year, 2-hour retention. A companion model is also created for the future condition 2-year, 6-hour storm event. Both models (2-year, 6- and 24-hour) should be referenced for the determination of storm event produces the highest peak discharge.

Modeling of the watersheds is performed using the following:
- 2-year, 24-hour rainfall with FCDMC design rainfall distributions
- 100-year, 2-hour retention
- Green & Ampt Loss Rate Method
- NMIN = 2 minutes
- Clark Unit Hydrograph
- Modified Puls channel storage routing
- 100-year, 2-hour retention volume diversions

Watershed delineation performed using USGS 7.5 Minute Series Quadrangles

```
24 IO          OUTPUT CONTROL VARIABLES
                     IPRNT .          5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           2  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2    0  ENDING DATE
                    NDTIME        0918  ENDING TIME
                     ICENT          19  CENTURY MARK

               COMPUTATION INTERVAL    0.03 HOURS
                    TOTAL TIME BASE   33.30 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

26 JD          INDEX STORM NO. 1
                     STRM        1.70  PRECIPITATION DEPTH
                     TRDA        0.01  TRANSPOSITION DRAINAGE AREA

27 PI            PRECIPITATION PATTERN
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
                   0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00      0.00
```

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

37 JD INDEX STORM NO. 2

STRM	1.69	PRECIPITATION DEPTH
TRDA	1.00	TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

38 JD INDEX STORM NO. 3

STRM 1.65 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

39 JD INDEX STORM NO. 4

STRM	1.60	PRECIPITATION DEPTH
TRDA	10.00	TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

40 JD INDEX STORM NO. 5

STRM 1.54 PRECIPITATION DEPTH

TRDA 25.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

41 JD INDEX STORM NO. 6

STRM 1.46 PRECIPITATION DEPTH

TRDA 70.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03
0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WARNING EXCESS AT PONDING LESS THAN ZERO FOR PERIOD. EXCESS SET TO ZERO
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S100	52.	13.10	21.	7.	5.	0.57		
+	DIVERSION TO	DIV100	52.	13.10	11.	3.	2.	0.57		
+	HYDROGRAPH AT	S100O	47.	13.40	15.	4.	3.	0.57		
+	ROUTED TO	100102	41.	14.00	14.	4.	3.	0.57		
+	HYDROGRAPH AT	S101	51.	12.90	16.	5.	4.	0.63		
+	2 COMBINED AT	C102R	62.	14.00	28.	9.	7.	1.20		
+	HYDROGRAPH AT	S102	52.	12.53	20.	7.	5.	0.45		
+	DIVERSION TO	DIV102	52.	12.53	20.	7.	5.	0.45		

+	HYDROGRAPH AT S102O	0.	0.00	0.	0.	0.	0.45
+	ROUTED TO 101102	0.	0.00	0.	0.	0.	0.45
+	HYDROGRAPH AT S103	31.	13.13	12.	4.	3.	0.40
+	2 COMBINED AT C102L	30.	13.13	12.	4.	3.	0.84
+	2 COMBINED AT C102	78.	14.03	39.	13.	10.	2.05
+	ROUTED TO 102103	74.	13.50	39.	13.	10.	2.05
+	HYDROGRAPH AT S104	117.	12.93	36.	12.	8.	0.90
+	DIVERSION TO DIV104	117.	12.93	36.	10.	7.	0.90
+	HYDROGRAPH AT S104O	10.	16.17	5.	2.	1.	0.90
+	2 COMBINED AT C103R	74.	13.50	40.	14.	10.	2.95
+	HYDROGRAPH AT S105	52.	12.77	23.	8.	6.	0.59
+	DIVERSION TO DIV105	52.	12.77	23.	8.	6.	0.59
+	HYDROGRAPH AT S105O	0.	0.00	0.	0.	0.	0.59
+	2 COMBINED AT C103	74.	13.50	40.	14.	10.	3.54
+	ROUTED TO 103104	70.	14.03	39.	14.	10.	3.54
+	HYDROGRAPH AT S106	42.	12.57	14.	4.	3.	0.57
+	2 COMBINED AT C104	86.	14.00	48.	18.	13.	4.11
+	ROUTED TO 104105	83.	14.57	48.	18.	13.	4.11
+	HYDROGRAPH AT S107	43.	13.10	14.	4.	3.	0.94
+	2 COMBINED AT C105L	96.	14.57	59.	21.	15.	5.05
+	HYDROGRAPH AT S200	127.	12.87	43.	15.	11.	0.96
+	ROUTED TO 200201	126.	12.97	43.	15.	11.	0.96
+	HYDROGRAPH AT S201	46.	12.73	16.	6.	4.	0.35
+	2 COMBINED AT C201	166.	12.93	58.	21.	15.	1.31
+	ROUTED TO 201203	165.	13.10	58.	21.	15.	1.31
+	HYDROGRAPH AT S202	21.	12.43	6.	2.	1.	0.13
+	ROUTED TO 202203	21.	12.60	6.	2.	1.	0.13

+	HYDROGRAPH AT	S203	38.	12.70	18.	6.	5.	0.37
+	DIVERSION TO	DIV203	38.	12.70	18.	6.	5.	0.37
+	HYDROGRAPH AT	S203O	0.	0.00	0.	0.	0.	0.37
+	3 COMBINED AT	C203R	178.	13.07	63.	22.	16.	1.81
+	HYDROGRAPH AT	S204	95.	13.07	38.	14.	10.	0.95
+	DIVERSION TO	DIV204	5.	6.27	3.	1.	1.	0.95
+	HYDROGRAPH AT	S204O	95.	13.07	38.	13.	9.	0.95
+	2 COMBINED AT	C203	270.	13.07	101.	35.	25.	2.76
+	ROUTED TO	203204	269.	13.13	101.	35.	25.	2.76
+	HYDROGRAPH AT	S205	67.	12.60	20.	7.	5.	0.41
+	DIVERSION TO	DIV205	67.	12.60	20.	7.	5.	0.41
+	HYDROGRAPH AT	S205O	0.	0.00	0.	0.	0.	0.41
+	2 COMBINED AT	C204	269.	13.13	101.	35.	25.	3.17
+	ROUTED TO	204205	265.	13.33	100.	35.	25.	3.17
+	HYDROGRAPH AT	S206	81.	12.77	36.	13.	9.	0.85
+	DIVERSION TO	DIV206	81.	12.77	36.	13.	9.	0.85
+	HYDROGRAPH AT	S206O	0.	0.00	0.	0.	0.	0.85
+	2 COMBINED AT	C205L	265.	13.33	100.	35.	25.	4.03
+	HYDROGRAPH AT	S207	101.	13.10	43.	15.	11.	0.96
+	DIVERSION TO	DIV207	101.	13.10	35.	10.	7.	0.96
+	HYDROGRAPH AT	S207O	49.	14.57	17.	5.	4.	0.96
+	2 COMBINED AT	C205	265.	13.33	113.	40.	29.	4.98
+	ROUTED TO	205206	256.	13.90	111.	40.	29.	4.98
+	HYDROGRAPH AT	S208	132.	13.07	49.	17.	12.	1.10
+	DIVERSION TO	DIV208	132.	13.07	22.	7.	5.	1.10
+	HYDROGRAPH AT	S208O	128.	13.23	35.	10.	7.	1.10
+	2 COMBINED AT	C206	335.	13.83	142.	48.	35.	6.09

+	ROUTED TO 206207	332.	14.00	142.	48.	35.	6.09
+	HYDROGRAPH AT S209	54.	13.03	18.	6.	4.	0.65
+	2 COMBINED AT C207R	355.	13.97	153.	53.	39.	6.74
+	HYDROGRAPH AT S210	28.	12.53	8.	2.	2.	0.48
+	2 COMBINED AT C207	361.	13.97	157.	55.	40.	7.22
+	ROUTED TO 207105	357.	14.17	156.	55.	40.	7.22
+	HYDROGRAPH AT S211	32.	12.57	10.	3.	2.	0.49
+	2 COMBINED AT C105R	364.	14.17	161.	57.	41.	7.70
+	2 COMBINED AT C105	404.	14.33	203.	73.	53.	12.75
+	HYDROGRAPH AT S300	98.	12.30	27.	9.	7.	0.62
+	DIVERSION TO DIV300	98.	12.30	27.	9.	7.	0.62
+	HYDROGRAPH AT S300O	0.	0.00	0.	0.	0.	0.62
+	HYDROGRAPH AT S301	229.	12.23	55.	19.	14.	0.99
+	DIVERSION TO DIV301	229.	12.23	55.	19.	14.	0.99
+	HYDROGRAPH AT S301O	5.	24.07	0.	0.	0.	0.99
+	2 COMBINED AT C300	4.	24.07	0.	0.	0.	1.61
+	ROUTED TO 300301	2.	24.57	0.	0.	0.	1.61
+	HYDROGRAPH AT S302	66.	12.70	19.	6.	5.	0.47
+	DIVERSION TO DIV302	66.	12.70	15.	4.	3.	0.47
+	HYDROGRAPH AT S302O	31.	13.50	7.	2.	2.	0.47
+	2 COMBINED AT C301	27.	13.63	7.	2.	2.	2.07
+	ROUTED TO 301302	20.	14.93	7.	2.	2.	2.07
+	HYDROGRAPH AT S303	37.	13.10	13.	4.	3.	0.71
+	2 COMBINED AT C302	35.	13.10	18.	6.	5.	2.78
+	ROUTED TO 302303	34.	13.70	18.	6.	5.	2.78
+	HYDROGRAPH AT S304	48.	12.63	17.	5.	4.	0.82
+	DIVERSION TO DIV304	48.	12.63	17.	5.	4.	0.82

+	HYDROGRAPH AT	S304O	0.	0.00	0.	0.	0.	0.82
+	2 COMBINED AT	C303	34.	13.70	18.	6.	5.	3.60
+	2 COMBINED AT	WEST-1	416.	14.30	211.	76.	55.	16.36
+	HYDROGRAPH AT	S400	278.	12.50	60.	20.	14.	1.05
+	DIVERSION TO	DIV400	278.	12.50	60.	20.	14.	1.05
+	HYDROGRAPH AT	S400O	0.	0.00	0.	0.	0.	1.05
+	ROUTED TO	C400O	0.	0.00	0.	0.	0.	1.05
+	ROUTED TO	400401	0.	0.00	0.	0.	0.	1.05
+	HYDROGRAPH AT	S401	83.	12.33	18.	6.	4.	0.65
+	DIVERSION TO	DIV401	83.	12.33	18.	6.	4.	0.65
+	HYDROGRAPH AT	S401O	0.	0.00	0.	0.	0.	0.65
+	2 COMBINED AT	C401	0.	0.00	0.	0.	0.	1.69
+	ROUTED TO	401402	0.	0.00	0.	0.	0.	1.69
+	HYDROGRAPH AT	S402	210.	12.23	40.	13.	10.	0.74
+	DIVERSION TO	DIV402	210.	12.23	40.	13.	10.	0.74
+	HYDROGRAPH AT	S402O	0.	0.00	0.	0.	0.	0.74
+	2 COMBINED AT	C402	0.	0.00	0.	0.	0.	2.43
+	ROUTED TO	402403	0.	0.00	0.	0.	0.	2.43
+	HYDROGRAPH AT	S403	254.	12.17	43.	13.	10.	0.56
+	DIVERSION TO	DIV403	254.	12.17	43.	13.	10.	0.56
+	HYDROGRAPH AT	S403O	0.	0.00	0.	0.	0.	0.56
+	2 COMBINED AT	C403	0.	0.00	0.	0.	0.	2.99
+	ROUTED TO	403404	0.	0.00	0.	0.	0.	2.99
+	HYDROGRAPH AT	S404	56.	12.43	8.	2.	2.	0.26
+	DIVERSION TO	DIV404	56.	12.43	6.	1.	1.	0.26
+	HYDROGRAPH AT	S404O	33.	12.73	3.	1.	1.	0.26
+	2 COMBINED AT	C404	27.	12.80	3.	1.	1.	3.26

+	2 COMBINED AT	WEST-2	416.	14.30	211.	76.	55.	19.61
+	HYDROGRAPH AT	S500	116.	12.73	53.	19.	14.	1.05
+	DIVERSION TO	DIV500	116.	12.73	53.	19.	14.	1.05
+	HYDROGRAPH AT	S500O	0.	0.00	0.	0.	0.	1.05
+	ROUTED TO	500501	0.	0.00	0.	0.	0.	1.05
+	HYDROGRAPH AT	S501	77.	12.40	23.	8.	6.	0.61
+	DIVERSION TO	DIV501	77.	12.40	23.	8.	6.	0.61
+	HYDROGRAPH AT	S501O	0.	0.00	0.	0.	0.	0.61
+	2 COMBINED AT	C501	0.	0.00	0.	0.	0.	1.67
+	ROUTED TO	501502	0.	0.00	0.	0.	0.	1.67
+	HYDROGRAPH AT	S502	46.	12.70	13.	4.	3.	0.40
+	DIVERSION TO	DIV502	46.	12.70	13.	4.	3.	0.40
+	HYDROGRAPH AT	S502O	0.	0.00	0.	0.	0.	0.40
+	2 COMBINED AT	C502L	0.	0.00	0.	0.	0.	2.07
+	HYDROGRAPH AT	S503	110.	12.70	44.	15.	11.	0.99
+	DIVERSION TO	DIV503	110.	12.70	44.	13.	9.	0.99
+	HYDROGRAPH AT	S503O	16.	16.10	8.	2.	2.	0.99
+	2 COMBINED AT	C502I	11.	17.07	6.	2.	1.	3.07
+	ROUTED TO	C502O	11.	17.23	6.	2.	1.	3.07
+	ROUTED TO	502505	1.	17.23	0.	0.	0.	3.07
+	HYDROGRAPH AT	S504	42.	12.47	15.	5.	4.	0.33
+	DIVERSION TO	DIV504	42.	12.47	15.	5.	4.	0.33
+	HYDROGRAPH AT	S504O	0.	0.00	0.	0.	0.	0.33
+	2 COMBINED AT	C505L	1.	17.23	0.	0.	0.	3.39
+	HYDROGRAPH AT	S505	23.	12.33	4.	1.	1.	0.14
+	DIVERSION TO	DIV505	23.	12.33	3.	1.	1.	0.14
+	HYDROGRAPH AT	S505O	10.	12.73	2.	1.	0.	0.14

+	ROUTED TO C503O	7.	12.93	2.	1.	0.	0.14
+	ROUTED TO 503505	5.	13.80	1.	0.	0.	0.14
+	HYDROGRAPH AT S506	42.	12.30	7.	2.	2.	0.15
+	DIVERSION TO DIV506	42.	12.30	7.	2.	2.	0.15
+	HYDROGRAPH AT S506O	0.	0.00	0.	0.	0.	0.15
+	ROUTED TO C504O	0.	0.00	0.	0.	0.	0.15
+	ROUTED TO 504505	0.	0.00	0.	0.	0.	0.15
+	HYDROGRAPH AT S507	121.	12.27	22.	7.	5.	0.67
+	DIVERSION TO DIV507	121.	12.27	22.	7.	5.	0.67
+	HYDROGRAPH AT S507O	0.	0.00	0.	0.	0.	0.67
+	3 COMBINED AT C505R	5.	13.80	1.	0.	0.	0.96
+	2 COMBINED AT C505	4.	13.93	1.	0.	0.	4.35
+	ROUTED TO 505509	0.	18.13	0.	0.	0.	4.35
+	HYDROGRAPH AT S508	69.	12.17	12.	4.	3.	0.29
+	DIVERSION TO DIV508	69.	12.17	12.	4.	3.	0.29
+	HYDROGRAPH AT S508O	0.	0.00	0.	0.	0.	0.29
+	2 COMBINED AT C509L	0.	18.13	0.	0.	0.	4.65
+	HYDROGRAPH AT S509	52.	12.10	8.	3.	2.	0.17
+	DIVERSION TO DIV509	52.	12.10	8.	3.	2.	0.17
+	HYDROGRAPH AT S509O	1.	19.17	1.	0.	0.	0.17
+	ROUTED TO C506O	1.	19.87	1.	0.	0.	0.17
+	ROUTED TO 506508	1.	20.13	1.	0.	0.	0.17
+	HYDROGRAPH AT S510	56.	12.13	10.	3.	2.	0.13
+	DIVERSION TO DIV510	56.	12.13	10.	3.	2.	0.13
+	HYDROGRAPH AT S510O	0.	0.00	0.	0.	0.	0.13
+	2 COMBINED AT C508R	1.	20.13	1.	0.	0.	0.30
+	HYDROGRAPH AT S511	102.	12.17	18.	6.	4.	0.38

+	DIVERSION TO	DIV511	102.	12.17	18.	6.	4.	0.38
+	HYDROGRAPH AT	S511O	0.	0.00	0.	0.	0.	0.38
+	ROUTED TO	C507O	36.	0.00	0.	0.	0.	0.38
+	ROUTED TO	507508	36.	0.00	3.	1.	1.	0.38
+	HYDROGRAPH AT	S512	99.	12.17	19.	6.	4.	0.21
+	DIVERSION TO	DIV512	99.	12.17	19.	6.	4.	0.21
+	HYDROGRAPH AT	S512O	0.	0.00	0.	0.	0.	0.21
+	2 COMBINED AT	C508L	36.	0.00	3.	1.	1.	0.60
+	2 COMBINED AT	C508	36.	0.00	3.	1.	1.	0.90
+	ROUTED TO	508509	36.	0.00	8.	2.	1.	0.90
+	HYDROGRAPH AT	S513	108.	12.37	29.	9.	7.	0.78
+	DIVERSION TO	DIV513	108.	12.37	29.	9.	7.	0.78
+	HYDROGRAPH AT	S513O	0.	0.00	0.	0.	0.	0.78
+	2 COMBINED AT	C509R	36.	0.00	8.	2.	1.	1.67
+	2 COMBINED AT	C509	36.	0.00	8.	2.	1.	6.32
+	ROUTED TO	509510	36.	0.00	8.	2.	1.	6.32
+	HYDROGRAPH AT	S514	246.	12.20	46.	14.	10.	0.65
+	DIVERSION TO	DIV514	246.	12.20	46.	14.	10.	0.65
+	HYDROGRAPH AT	S514O	0.	0.00	0.	0.	0.	0.65
+	2 COMBINED AT	C510	36.	0.00	8.	2.	1.	6.97
+	ROUTED TO	510511	36.	0.00	11.	3.	2.	6.97
+	HYDROGRAPH AT	S515	531.	12.17	81.	24.	18.	1.10
+	DIVERSION TO	DIV515	531.	12.17	81.	24.	18.	1.10
+	HYDROGRAPH AT	S515O	0.	0.00	0.	0.	0.	1.10
+	2 COMBINED AT	C511	36.	0.00	11.	3.	2.	8.07
+	ROUTED TO	511512	36.	0.00	14.	3.	3.	8.07
+	HYDROGRAPH AT	S516	139.	12.27	36.	12.	9.	0.54

+	DIVERSION TO	DIV516	139.	12.27	36.	12.	9.	0.54
+	HYDROGRAPH AT	S516O	0.	0.00	0.	0.	0.	0.54
+	2 COMBINED AT	C512	36.	0.00	14.	3.	3.	8.61
+	2 COMBINED AT	WEST-3	417.	14.20	212.	76.	58.	28.22
+	HYDROGRAPH AT	S600	147.	13.03	56.	20.	14.	2.02
+	ROUTED TO	600601	146.	13.17	56.	20.	14.	2.02
+	HYDROGRAPH AT	S601	185.	12.73	56.	19.	14.	0.90
+	2 COMBINED AT	C601	293.	12.97	109.	38.	28.	2.92
+	ROUTED TO	601602	291.	13.17	109.	38.	28.	2.92
+	HYDROGRAPH AT	S603	174.	12.50	39.	13.	10.	0.67
+	2 COMBINED AT	C602L	369.	13.00	147.	51.	37.	3.58
+	HYDROGRAPH AT	S602	211.	13.07	83.	30.	21.	1.88
+	2 COMBINED AT	C602	568.	13.03	226.	80.	58.	5.47
+	ROUTED TO	602603	519.	13.27	182.	46.	33.	5.47
+	HYDROGRAPH AT	S606	76.	12.87	30.	11.	8.	0.66
+	2 COMBINED AT	C603L	579.	13.23	209.	56.	41.	6.13
+	HYDROGRAPH AT	S605	117.	13.07	48.	17.	12.	1.09
+	HYDROGRAPH AT	S604	288.	13.07	116.	41.	30.	2.66
+	3 COMBINED AT	C603	934.	13.17	358.	110.	80.	9.87
+	ROUTED TO	603604	875.	13.50	310.	78.	56.	9.87
+	HYDROGRAPH AT	S609	39.	13.13	19.	7.	5.	0.56
+	DIVERSION TO	DIV609	39.	13.13	17.	5.	4.	0.56
+	HYDROGRAPH AT	S609O	14.	15.73	6.	2.	1.	0.56
+	2 COMBINED AT	C604R	875.	13.50	312.	80.	58.	10.43
+	HYDROGRAPH AT	S607	91.	13.10	40.	14.	10.	0.82
+	DIVERSION TO	DIV607	26.	12.27	8.	3.	2.	0.82
+	HYDROGRAPH AT	S607O	91.	13.10	39.	11.	8.	0.82

+	2 COMBINED AT	C604	940.	13.50	342.	89.	64.	11.25
+	ROUTED TO	604605	939.	13.53	342.	89.	64.	11.25
+	HYDROGRAPH AT	S608	109.	12.57	28.	10.	7.	0.51
+	DIVERSION TO	DIV608	109.	12.57	16.	5.	3.	0.51
+	HYDROGRAPH AT	S608O	92.	12.80	17.	5.	4.	0.51
+	2 COMBINED AT	C605	972.	13.50	354.	93.	67.	11.76
+	ROUTED TO	605606	960.	13.67	348.	89.	64.	11.76
+	HYDROGRAPH AT	S610	98.	12.47	34.	12.	9.	0.60
+	2 COMBINED AT	C606L	999.	13.63	376.	100.	72.	12.36
+	HYDROGRAPH AT	S612	128.	12.53	47.	16.	11.	0.81
+	2 COMBINED AT	C606	1059.	13.63	415.	113.	82.	13.17
+	ROUTED TO	606608	1055.	13.67	413.	111.	80.	13.17
+	HYDROGRAPH AT	S611	85.	12.67	26.	9.	7.	0.57
+	ROUTED TO	607608	80.	13.33	26.	9.	7.	0.57
+	HYDROGRAPH AT	S613	242.	13.03	87.	30.	22.	1.80
+	3 COMBINED AT	C608	1270.	13.57	509.	145.	105.	15.53
+	ROUTED TO	608609	1254.	13.77	500.	137.	99.	15.53
+	HYDROGRAPH AT	S614	121.	13.07	49.	17.	13.	1.08
+	2 COMBINED AT	C609	1329.	13.73	541.	152.	110.	16.61
+	ROUTED TO	609611	1290.	14.03	514.	132.	95.	16.61
+	HYDROGRAPH AT	S617	84.	12.43	25.	8.	6.	0.68
+	2 COMBINED AT	C611R	1304.	14.03	528.	139.	100.	17.29
+	HYDROGRAPH AT	S615	209.	13.07	80.	28.	20.	1.05
+	ROUTED TO	610611	205.	13.40	80.	28.	20.	1.05
+	HYDROGRAPH AT	S616	51.	12.87	18.	6.	4.	0.50
+	DIVERSION TO	DIV616	51.	12.87	18.	6.	4.	0.50
+	HYDROGRAPH AT	S616O	0.	0.00	0.	0.	0.	0.50

+	2 COMBINED AT C611L	205.	13.40	80.	28.	20.	1.56
+	2 COMBINED AT C611	1433.	14.00	596.	163.	118.	18.85
+	ROUTED TO 611613	1417.	14.10	586.	154.	111.	18.85
+	HYDROGRAPH AT S618	85.	13.10	33.	11.	8.	0.96
+	2 COMBINED AT C613R	1453.	14.10	611.	163.	117.	19.81
+	HYDROGRAPH AT S619	175.	12.90	51.	17.	12.	0.83
+	ROUTED TO 612613	168.	13.43	51.	17.	12.	0.83
+	HYDROGRAPH AT S620	63.	12.97	25.	9.	6.	0.44
+	2 COMBINED AT C613L	220.	13.40	76.	25.	18.	1.27
+	2 COMBINED AT C613	1562.	14.10	673.	184.	133.	21.08
+	ROUTED TO 613614	1538.	14.23	661.	174.	126.	21.08
+	HYDROGRAPH AT S621	53.	12.93	13.	4.	3.	0.92
+	2 COMBINED AT C614	1541.	14.23	667.	176.	127.	22.00
+	ROUTED TO 614615	1509.	14.50	656.	170.	123.	22.00
+	HYDROGRAPH AT S622	36.	13.10	11.	3.	2.	0.90
+	2 COMBINED AT C615	1513.	14.50	660.	172.	124.	22.90
+	2 COMBINED AT WEST-4	1760.	14.57	796.	226.	166.	51.12
+	HYDROGRAPH AT S700	65.	12.33	15.	4.	3.	0.61
+	HYDROGRAPH AT S701	52.	12.83	25.	8.	6.	0.72
+	DIVERSION TO DIV701	2.	4.93	1.	0.	0.	0.72
+	HYDROGRAPH AT S701O	52.	12.83	25.	8.	6.	0.72
+	HYDROGRAPH AT S702	48.	12.23	11.	4.	3.	0.26
+	DIVERSION TO DIV702	48.	12.23	11.	4.	3.	0.26
+	HYDROGRAPH AT S702O	0.	0.00	0.	0.	0.	0.26
+	HYDROGRAPH AT S703	11.	12.83	3.	1.	1.	0.26
+	DIVERSION TO DIV703	11.	12.83	3.	1.	1.	0.26
+	HYDROGRAPH AT S703O	0.	0.00	0.	0.	0.	0.26

+	HYDROGRAPH AT S704	51.	12.27	11.	3.	2.	0.41
+	ROUTED TO 704705	28.	12.83	11.	3.	2.	0.41
+	HYDROGRAPH AT S705	257.	12.20	48.	15.	11.	0.75
+	2 COMBINED AT C705	269.	12.20	58.	19.	13.	1.16
+	ROUTED TO C705O	209.	12.43	58.	19.	13.	1.16
+	ROUTED TO 705OAF	207.	12.73	58.	19.	13.	1.16
+	HYDROGRAPH AT S705AF	48.	12.57	10.	2.	2.	0.18
+	DIVERSION TO DIV705	48.	12.57	10.	2.	2.	0.18
+	HYDROGRAPH AT 705AFO	0.	0.00	0.	0.	0.	0.18
+	2 COMBINED AT C705AF	207.	12.73	58.	19.	13.	1.34
+	5 COMBINED AT WEST-5	297.	12.67	93.	30.	22.	3.19
+	HYDROGRAPH AT S706	232.	12.17	43.	14.	10.	0.71
+	DIVERSION TO DIV706	232.	12.17	43.	14.	10.	0.71
+	HYDROGRAPH AT S706O	0.	0.00	0.	0.	0.	0.71
+	HYDROGRAPH AT S707	258.	12.17	51.	17.	12.	0.64
+	DIVERSION TO DIV707	258.	12.17	51.	17.	12.	0.64
+	HYDROGRAPH AT S707O	0.	0.00	0.	0.	0.	0.64
+	HYDROGRAPH AT S728	62.	12.33	19.	6.	5.	0.28
+	DIVERSION TO DIV728	62.	12.33	19.	6.	5.	0.28
+	HYDROGRAPH AT S728O	0.	0.00	0.	0.	0.	0.28
+	5 COMBINED AT WEST	1788.	14.57	851.	247.	182.	55.94
+	HYDROGRAPH AT S708	330.	12.13	40.	11.	8.	0.71
+	DIVERSION TO DIV708	330.	12.13	40.	11.	8.	0.71
+	HYDROGRAPH AT S708O	0.	0.00	0.	0.	0.	0.71
+	HYDROGRAPH AT S709	213.	12.17	33.	9.	6.	0.44
+	DIVERSION TO DIV709	213.	12.17	33.	9.	6.	0.44
+	HYDROGRAPH AT S709O	0.	0.00	0.	0.	0.	0.44

+	ROUTED TO	C709O	0.	0.00	0.	0.	0.	0.44
+	ROUTED TO	709710	0.	0.00	0.	0.	0.	0.44
+	HYDROGRAPH AT	S710	70.	12.03	8.	2.	2.	0.11
+	DIVERSION TO	DIV710	70.	12.03	8.	2.	2.	0.11
+	HYDROGRAPH AT	S710O	0.	0.00	0.	0.	0.	0.11
+	2 COMBINED AT	C710I	0.	0.00	0.	0.	0.	0.55
+	ROUTED TO	C710O	0.	0.00	0.	0.	0.	0.55
+	HYDROGRAPH AT	S711	114.	12.03	13.	4.	3.	0.16
+	DIVERSION TO	DIV711	114.	12.03	13.	4.	3.	0.16
+	HYDROGRAPH AT	S711O	0.	0.00	0.	0.	0.	0.16
+	ROUTED TO	C711O	0.	0.00	0.	0.	0.	0.16
+	ROUTED TO	711712	0.	0.00	0.	0.	0.	0.16
+	HYDROGRAPH AT	S712	49.	12.00	5.	1.	1.	0.07
+	DIVERSION TO	DIV712	49.	12.00	5.	1.	1.	0.07
+	HYDROGRAPH AT	S712O	0.	0.00	0.	0.	0.	0.07
+	2 COMBINED AT	C712I	0.	0.00	0.	0.	0.	0.23
+	ROUTED TO	C712O	0.	0.00	0.	0.	0.	0.23
+	ROUTED TO	712714	0.	0.00	0.	0.	0.	0.23
+	HYDROGRAPH AT	S713	72.	12.03	8.	2.	1.	0.11
+	DIVERSION TO	DIV713	72.	12.03	6.	1.	1.	0.11
+	HYDROGRAPH AT	S713O	41.	12.20	2.	1.	0.	0.11
+	ROUTED TO	C713O	13.	12.47	2.	1.	0.	0.11
+	ROUTED TO	713714	13.	12.50	2.	1.	0.	0.11
+	HYDROGRAPH AT	S714	24.	12.07	2.	1.	0.	0.06
+	3 COMBINED AT	C714	24.	12.07	4.	1.	1.	0.39
+	HYDROGRAPH AT	S715	87.	12.20	15.	4.	3.	0.22
+	DIVERSION TO	DIV715	87.	12.20	8.	2.	1.	0.22

+	HYDROGRAPH AT	S715O	66.	12.50	7.	2.	1.	0.22
+	HYDROGRAPH AT	S716	460.	12.23	84.	24.	18.	1.13
+	DIVERSION TO	DIV716	460.	12.23	84.	24.	18.	1.13
+	HYDROGRAPH AT	S716O	0.	0.00	0.	0.	0.	1.13
+	ROUTED TO	C716O	0.	0.00	0.	0.	0.	1.13
+	ROUTED TO	716717	0.	0.00	0.	0.	0.	1.13
+	HYDROGRAPH AT	S717	180.	12.17	21.	6.	4.	0.29
+	DIVERSION TO	DIV717	180.	12.17	16.	4.	3.	0.29
+	HYDROGRAPH AT	S717O	90.	12.43	6.	2.	1.	0.29
+	2 COMBINED AT	C717	82.	12.43	6.	2.	1.	1.41
+	ROUTED TO	717718	28.	12.80	5.	1.	1.	1.41
+	HYDROGRAPH AT	S718	88.	12.93	31.	8.	6.	0.44
+	DIVERSION TO	DIV718	88.	12.93	26.	7.	5.	0.44
+	HYDROGRAPH AT	S718O	24.	15.03	6.	2.	1.	0.44
+	2 COMBINED AT	C718	28.	12.80	10.	3.	2.	1.86
+	HYDROGRAPH AT	S719	64.	12.20	14.	4.	3.	0.15
+	DIVERSION TO	DIV719	64.	12.20	14.	4.	3.	0.15
+	HYDROGRAPH AT	S719O	0.	0.00	0.	0.	0.	0.15
+	6 COMBINED AT	EAST-1	90.	12.53	19.	5.	4.	3.88
+	HYDROGRAPH AT	S720	172.	12.17	28.	8.	6.	0.37
+	DIVERSION TO	DIV720	172.	12.17	28.	8.	6.	0.37
+	HYDROGRAPH AT	S720O	0.	0.00	0.	0.	0.	0.37
+	HYDROGRAPH AT	S721	208.	12.07	29.	9.	7.	0.34
+	DIVERSION TO	DIV721	208.	12.07	29.	9.	7.	0.34
+	HYDROGRAPH AT	S721O	0.	0.00	0.	0.	0.	0.34
+	ROUTED TO	C721O	0.	0.00	0.	0.	0.	0.34
+	ROUTED TO	721722	0.	0.00	0.	0.	0.	0.34

+	HYDROGRAPH AT	S722	336.	12.27	67.	20.	14.	0.95
+	DIVERSION TO	DIV722	336.	12.27	67.	20.	14.	0.95
+	HYDROGRAPH AT	S722O	0.	0.00	0.	0.	0.	0.95
+	2 COMBINED AT	C722	0.	0.00	0.	0.	0.	1.29
+	HYDROGRAPH AT	S723	53.	12.07	7.	2.	1.	0.09
+	DIVERSION TO	DIV723	53.	12.07	7.	2.	1.	0.09
+	HYDROGRAPH AT	S723O	0.	0.00	0.	0.	0.	0.09
+	HYDROGRAPH AT	S724	594.	12.20	115.	36.	26.	1.16
+	DIVERSION TO	DIV724	594.	12.20	115.	36.	26.	1.16
+	HYDROGRAPH AT	S724O	0.	0.00	0.	0.	0.	1.16
+	HYDROGRAPH AT	S725	368.	12.37	105.	34.	24.	1.16
+	DIVERSION TO	DIV725	368.	12.37	105.	34.	24.	1.16
+	HYDROGRAPH AT	S725O	0.	0.00	0.	0.	0.	1.16
+	5 COMBINED AT	EAST-2	0.	0.00	0.	0.	0.	4.06
+	HYDROGRAPH AT	S726	116.	12.10	17.	5.	4.	0.33
+	DIVERSION TO	DIV726	116.	12.10	17.	5.	4.	0.33
+	HYDROGRAPH AT	S726O	0.	0.00	0.	0.	0.	0.33
+	ROUTED TO	726727	0.	0.00	0.	0.	0.	0.33
+	HYDROGRAPH AT	S727	133.	12.27	36.	12.	8.	0.38
+	DIVERSION TO	DIV727	133.	12.27	36.	12.	8.	0.38
+	HYDROGRAPH AT	S727O	0.	0.00	0.	0.	0.	0.38
+	2 COMBINED AT	C727	0.	0.00	0.	0.	0.	0.71
+	4 COMBINED AT	TOTAL	1785.	14.57	855.	248.	183.	64.59

*** NORMAL END OF HEC-1 ***