EAST MESA AREA DRAINAGE MASTER PLAN

HYDROLOGIC ANALYSIS

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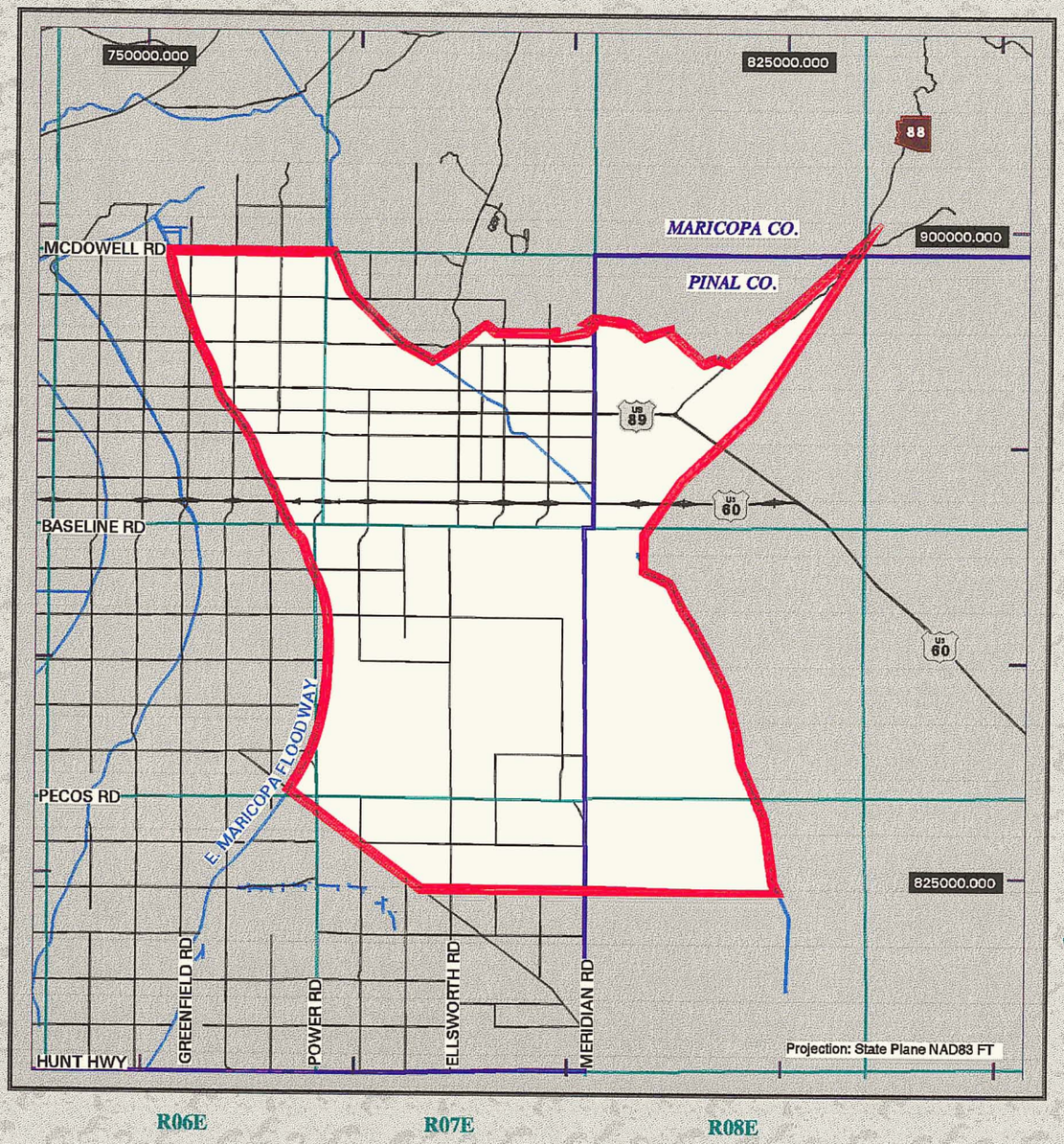

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
ENGINEERING DIVISION

FLOOD CONTROL DISTRICT of MARICOPA COUNTY

APPENDIX F

SUBBASIN PREPARATION REPORTS
EXISTING CONDITIONS

APPENDIX F

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SUBBASIN PREPARATION REPORTS
EXISTING CONDITIONS
NORTH EAST MESA AREA

SUBBASIN REPORT
NORTHEAST MESA AREA
EXISTING CONDITIONS

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 42

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
3	133.000	11.9	0.58	0
10	24.000	2.1	0.94	0
12	38.000	3.4	0.01	0
44	194.000	17.4	0.03	0
68	69.000	6.2	0.63	0
98	603.000	53.9	0.37	0
113	12.000	1.1	0.39	0
115	14.000	1.3	0.39	0
116	31.000	2.8	0.23	0

TOTAL = 1118.000 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
560.000	LLotRes	50.1	NORMAL	50	15	0.30	0.05	Low	0.04
81.000	SLotRes	7.2	NORMAL	50	30	0.25	0.05	Low	0.05
9.000	MDensRes	0.8	NORMAL	50	45	0.25	0.05	Low	0.07
1.000	N.Retail	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
2.000	Instit.	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
1.000	PubFac	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
17.000	Ag/Orch	1.5	NORMAL	90	0	0.50	0.10	Hi	0.12
447.000	Vacant	40.0	DRY	10	0	0.35	0.09	Hi	0.08

1118.0 = Total Area Avg. = 33 10% 0.320

PERCENT OF SUBBASIN DRY = 40.0 %
NORMAL = 60.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.29

IMPERVIOUS AREA: URBAN @ 100 % effective = 10
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 10

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
42	1.747	3.12	1.55	0.07	60.9	0.32	0.29	5.00	0.29	10	54

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 51

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
12	24.000	3.0	0.01	0
44	45.000	5.7	0.03	0
78	16.000	2.0	0.05	0
98	250.000	31.4	0.37	0
113	350.000	44.0	0.39	0
115	111.000	13.9	0.39	0

TOTAL = 796.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
34.000	LLotRes	4.3	NORMAL	50	15	0.30	0.05	Low	0.06
295.000	SLotRes	37.1	NORMAL	50	30	0.25	0.05	Low	0.05
7.000	MDensRes	0.9	NORMAL	50	45	0.25	0.05	Low	0.07
26.000	C.Retail	3.3	NORMAL	75	80	0.10	0.02	Min	0.03
17.000	Hotel	2.1	NORMAL	75	80	0.10	0.02	Min	0.03
4.000	Bus.Park	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
3.000	Instit.	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
5.000	PubFac	0.6	NORMAL	75	80	0.10	0.02	Min	0.04
10.000	Rec.Open	1.3	NORMAL	90	0	0.10	0.10	Hi	0.12
395.000	Vacant	49.6	DRY	10	0	0.35	0.09	Hi	0.09

796.00 = Total Area Avg. = 27 18% 0.290

PERCENT OF SUBBASIN DRY = 50.0 %
NORMAL = 50.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.33

IMPERVIOUS AREA: URBAN @ 100 % effective = 18
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 18

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
51	1.244	1.47	0.75	0.07	54.4	0.29	0.30	4.60	0.33	18	27

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 44A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
12	54.000	5.3	0.01	0
78	30.000	2.9	0.05	0
98	51.000	5.0	0.37	0
113	740.000	72.5	0.39	0
115	137.000	13.4	0.39	0
118	8.000	0.8	0.42	0

TOTAL = 1020.000 Acres XKSAT = 0.30 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.50
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
41.000	LLotRes	4.0	NORMAL	50	15	0.30	0.05	Low	0.06
359.000	SLotRes	35.2	NORMAL	50	30	0.25	0.05	Low	0.04
109.000	MDensRes	10.7	NORMAL	50	45	0.25	0.05	Low	0.05
1.000	HDensRes	0.1	NORMAL	50	45	0.25	0.05	Low	0.08
5.000	N.Retail	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
20.000	C.Retail	2.0	NORMAL	75	80	0.10	0.02	Min	0.03
3.000	Hotel	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
10.000	Bus.Park	1.0	NORMAL	75	80	0.10	0.02	Min	0.03
6.000	Educ.	0.6	NORMAL	80	45	0.29	0.05	Hi	0.13
4.000	Instit.	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
1.000	PubFac	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
25.000	Transp.	2.5	NORMAL	75	80	0.10	0.02	Min	0.03
436.000	Airport	42.7	NORMAL	60	55	0.15	0.03	Min	0.02

1020.0 = Total Area Avg. = 54 45% 0.200

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 45
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 45

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
44A	1.594	2.75	1.38	0.04	54.5	0.20	0.25	4.50	0.45	45	45

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 43

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
3	5.000	0.5	0.58	0
12	21.000	2.3	0.01	0
44	105.000	11.5	0.03	0
68	3.000	0.3	0.63	0
98	601.000	65.9	0.37	0
113	177.000	19.4	0.39	0

TOTAL = 912.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
125.000	LLotRes	13.7	NORMAL	50	15	0.30	0.05	Low	0.05
186.000	SLotRes	20.4	NORMAL	50	30	0.25	0.05	Low	0.05
6.000	N.Retail	0.7	NORMAL	75	80	0.10	0.02	Min	0.04
48.000	C.Retail	5.3	NORMAL	75	80	0.10	0.02	Min	0.03
4.000	Warehous	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
4.000	Office	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
1.000	Educ.	0.1	NORMAL	80	45	0.29	0.05	Hi	0.15
5.000	Instit.	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
15.000	PubFac	1.6	NORMAL	75	80	0.10	0.02	Min	0.03
31.000	Transp.	3.4	NORMAL	75	80	0.10	0.02	Min	0.03
487.000	Vacant	53.4	DRY	10	0	0.35	0.09	Hi	0.08

912.00 = Total Area Avg. = 25 18% 0.290

PERCENT OF SUBBASIN DRY = 53.0 %
NORMAL = 46.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.30

IMPERVIOUS AREA: URBAN @ 100 % effective = 18
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 18

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
43	1.425	1.89	0.94	0.07	58.2	0.29	0.30	4.70	0.30	18	30

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 53

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
12	10.000	2.0	0.01	0
78	139.000	27.7	0.05	0
98	6.000	1.2	0.37	0
113	319.000	63.5	0.39	0
115	28.000	5.6	0.39	0

TOTAL = 502.000 Acres XKSAT = 0.21 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.20
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
223.000	SLotRes	44.4	NORMAL	50	30	0.25	0.05	Low	0.05
15.000	MDensRes	3.0	NORMAL	50	45	0.25	0.05	Low	0.06
2.000	N.Retail	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
8.000	C.Retail	1.6	NORMAL	75	80	0.10	0.02	Min	0.03
6.000	Hotel	1.2	NORMAL	75	80	0.10	0.02	Min	0.04
8.000	Office	1.6	NORMAL	75	80	0.10	0.02	Min	0.03
8.000	Educ.	1.6	NORMAL	80	45	0.29	0.05	Hi	0.13
7.000	Instit.	1.4	NORMAL	75	80	0.10	0.02	Min	0.03
225.000	Vacant	44.8	DRY	10	0	0.35	0.09	Hi	0.09

502.00 = Total Area Avg. = 28 20% 0.290

PERCENT OF SUBBASIN DRY = 45.0 %
NORMAL = 55.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.25

IMPERVIOUS AREA: URBAN @ 100 % effective = 20
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 20

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
53	0.784	1.89	0.94	0.07	63.5	0.29	0.30	5.20	0.25	20	32

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 54

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	18.000	5.8	0.05	0
78	93.000	29.8	0.05	0
98	2.000	0.6	0.37	0
113	199.000	63.8	0.39	0

TOTAL = 312.000 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
124.000	LLotRes	39.7	NORMAL	50	15	0.30	0.05	Low	0.05
48.000	SLotRes	15.4	NORMAL	50	30	0.25	0.05	Low	0.06
42.000	MDensRes	13.5	NORMAL	50	45	0.25	0.05	Low	0.06
1.000	Bus.Park	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
97.000	Vacant	31.1	DRY	10	0	0.35	0.09	Hi	0.10

312.00 = Total Area Avg. = 35 17% 0.300

PERCENT OF SUBBASIN DRY = 31.0 %
NORMAL = 69.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.24

IMPERVIOUS AREA: URBAN @ 100 % effective = 17
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 17

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
54	0.488	1.52	0.76	0.06	42.8	0.30	0.29	5.40	0.24	17	33

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 57

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	39.000	34.2	0.05	0
75	3.000	2.6	0.23	0
113	72.000	63.2	0.39	0

TOTAL = 114.000 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
7.000	LLotRes	6.1	NORMAL	50	15	0.30	0.05	Low	0.07
1.000	Transp.	0.9	NORMAL	75	80	0.10	0.02	Min	0.04
21.000	Ag/Orch	18.4	NORMAL	90	0	0.50	0.10	Hi	0.12
85.000	Vacant	74.6	DRY	10	0	0.35	0.09	Hi	0.10

114.00 = Total Area Avg. = 27 2% 0.370

PERCENT OF SUBBASIN DRY = 75.0 %
NORMAL = 25.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.23

IMPERVIOUS AREA: URBAN @ 100 % effective = 2
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 2

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
57	0.178	0.28	0.14	0.09	35.7	0.37	0.35	5.40	0.23	2	13

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 36A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	21.000	33.9	0.05	0
75	28.000	45.2	0.23	0
113	13.000	21.0	0.39	0

TOTAL = 62.000 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2.000	LLotRes	3.2	NORMAL	50	15	0.30	0.05	Low	0.08
21.000	Transp.	33.9	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	Ag/Orch	1.6	NORMAL	90	0	0.50	0.10	Hi	0.15
38.000	Vacant	61.3	DRY	10	0	0.35	0.09	Hi	0.11

62.000 = Total Area Avg. = 19 28% 0.270

PERCENT OF SUBBASIN DRY = 61.0 %
NORMAL = 39.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.34

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.17

IMPERVIOUS AREA: URBAN @ 100 % effective = 28
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 28

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
36A	0.097	0.34	0.17	0.06	44.1	0.27	0.34	6.00	0.17	28	7

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 52

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	155.000	56.0	0.05	0
113	101.000	36.5	0.39	0
115	21.000	7.6	0.39	0

TOTAL = 277.000 Acres XKSAT = 0.12 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 6.60
Normal = 0.19
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
4.000	LLotRes	1.4	NORMAL	50	15	0.30	0.05	Low	0.07
57.000	SLotRes	20.6	NORMAL	50	30	0.25	0.05	Low	0.06
12.000	MDensRes	4.3	NORMAL	50	45	0.25	0.05	Low	0.07
4.000	N.Retail	1.4	NORMAL	75	80	0.10	0.02	Min	0.04
3.000	Educ.	1.1	NORMAL	80	45	0.29	0.05	Hi	0.14
3.000	Instit.	1.1	NORMAL	75	80	0.10	0.02	Min	0.04
5.000	PubFac	1.8	NORMAL	75	80	0.10	0.02	Min	0.04
189.000	Vacant	68.2	DRY	10	0	0.35	0.09	Hi	0.09

277.00 = Total Area Avg. = 19 12% 0.310

PERCENT OF SUBBASIN DRY = 68.0 %
NORMAL = 32.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.31

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.13

IMPERVIOUS AREA: URBAN @ 100 % effective = 12
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 12

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
52	0.433	1.64	0.74	0.08	54.9	0.31	0.31	6.60	0.13	12	52

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 56

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	14.000	4.0	0.05	0
78	238.000	68.0	0.05	0
113	98.000	28.0	0.39	0

TOTAL = 350.000 Acres XKSAT = 0.09 %Rock = 0

DTHETA

Dry = 0.33 PSIF = 7.30
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
77.000	SLotRes	22.0	NORMAL	50	30	0.25	0.05	Low	0.05
104.000	Educ.	29.7	NORMAL	80	45	0.29	0.05	Hi	0.10
169.000	Vacant	48.3	DRY	10	0	0.35	0.09	Hi	0.09

350.00 = Total Area Avg. = 32 20% 0.310

PERCENT OF SUBBASIN DRY = 48.0 %
NORMAL = 52.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.11

IMPERVIOUS AREA: URBAN @ 100 % effective = 20
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 20

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
56	0.547	0.95	0.51	0.07	57.9	0.31	0.24	7.30	0.11	20	35

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 58

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	2.000	0.3	0.05	0
78	173.000	28.5	0.05	0
75	206.000	33.9	0.23	0
113	227.000	37.3	0.39	0

TOTAL = 608.000 Acres XKSAT = 0.18 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
74.000	SLotRes	12.2	NORMAL	50	30	0.25	0.05	Low	0.05
3.000	Ag/Orch	0.5	NORMAL	90	0	0.50	0.10	Hi	0.14
531.000	Vacant	87.3	DRY	10	0	0.35	0.09	Hi	0.08

608.00 = Total Area Avg. = 14 4% 0.340

PERCENT OF SUBBASIN DRY = 87.0 %
NORMAL = 13.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.19

IMPERVIOUS AREA: URBAN @ 100 % effective = 4
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 4

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
58	0.950	1.13	0.51	0.09	50.4	0.34	0.36	5.60	0.19	4	46

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 44B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	17.000	2.5	0.05	0
78	373.000	55.2	0.05	0
98	3.000	0.4	0.37	0
114	283.000	41.9	0.39	0

TOTAL = 676.000 Acres XKSAT = 0.12 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 6.60
Normal = 0.19
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
10.000	LLotRes	1.5	NORMAL	50	15	0.30	0.05	Low	0.07
310.000	SLotRes	45.9	NORMAL	50	30	0.25	0.05	Low	0.05
94.000	MDensRes	13.9	NORMAL	50	45	0.25	0.05	Low	0.05
1.000	N.Retail	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
55.000	C.Retail	8.1	NORMAL	75	80	0.10	0.02	Min	0.03
10.000	Hotel	1.5	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	Bus.Park	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
15.000	Instit.	2.2	NORMAL	75	80	0.10	0.02	Min	0.03
180.000	Vacant	26.6	DRY	10	0	0.35	0.09	Hi	0.09

676.00 = Total Area Avg. = 36 30% 0.260

PERCENT OF SUBBASIN DRY = 27.0 %
NORMAL = 73.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.15

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
44B	1.056	1.08	0.88	0.06	64.8	0.26	0.24	6.60	0.15	30	26

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 36B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	71.000	35.0	0.05	0
78	72.000	35.5	0.05	0
75	23.000	11.3	0.23	0
113	36.000	17.7	0.39	0
112	1.000	0.5	0.39	0

TOTAL = 203.000 Acres XKSAT = 0.09 %Rock = 0

DTHETA

Dry = 0.33 PSIF = 7.30
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2.000	LLotRes	1.0	NORMAL	50	15	0.30	0.05	Low	0.08
39.000	Transp.	19.2	NORMAL	75	80	0.10	0.02	Min	0.03
162.000	Vacant	79.8	DRY	10	0	0.35	0.09	Hi	0.09

203.00 = Total Area Avg. = 13 16% 0.300

PERCENT OF SUBBASIN DRY = 80.0 %
NORMAL = 20.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.09

IMPERVIOUS AREA: URBAN @ 100 % effective = 16
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 16

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
36B	0.317	1.00	0.50	0.08	45.0	0.30	0.29	7.30	0.09	16	16

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 46B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	84.000	36.7	0.41	0
78	3.000	1.3	0.05	0
113	18.000	7.9	0.39	0
115	124.000	54.1	0.39	0

TOTAL = 229.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
7.000	LLotRes	3.1	NORMAL	50	15	0.30	0.05	Low	0.07
135.000	SLotRes	59.0	NORMAL	50	30	0.25	0.05	Low	0.05
39.000	MDensRes	17.0	NORMAL	50	45	0.25	0.05	Low	0.06
11.000	C.Retail	4.8	NORMAL	75	80	0.10	0.02	Min	0.03
37.000	Vacant	16.2	DRY	10	0	0.35	0.09	Hi	0.11

229.00 = Total Area Avg. = 41 30% 0.260

PERCENT OF SUBBASIN DRY = 16.0 %
NORMAL = 84.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.27

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.52

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
46B	0.358	1.40	0.70	0.05	42.9	0.26	0.27	4.00	0.52	30	29

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 29A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	26.000	22.4	0.41	0
113	87.000	75.0	0.39	0
115	3.000	2.6	0.39	0

TOTAL = 116.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.000	Rural	0.0	NORMAL	30	5	0.30	0.05	Low	
6.000	LLotRes	5.2	NORMAL	50	15	0.30	0.05	Low	0.07
25.000	SLotRes	21.6	NORMAL	50	30	0.25	0.05	Low	0.06
85.000	Vacant	73.3	DRY	10	0	0.35	0.09	Hi	0.10

116.00 = Total Area Avg. = 18 7% 0.330

PERCENT OF SUBBASIN DRY = 73.0 %
NORMAL = 27.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 7
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 7

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
29A	0.181	0.85	0.38	0.08	41.2	0.33	0.32	4.00	0.42	7	15

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 45A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	33.000	8.4	0.37	0
112	249.000	63.0	0.39	0
115	113.000	28.6	0.39	0

TOTAL = 395.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
51.000	LLotRes	12.9	NORMAL	50	15	0.30	0.05	Low	0.06
77.000	SLotRes	19.5	NORMAL	50	30	0.25	0.05	Low	0.05
1.000	MDensRes	0.3	NORMAL	50	45	0.25	0.05	Low	0.08
7.000	Transp.	1.8	NORMAL	75	80	0.10	0.02	Min	0.03
259.000	Vacant	65.6	DRY	10	0	0.35	0.09	Hi	0.09

395.00 = Total Area Avg. = 21 9% 0.320

PERCENT OF SUBBASIN DRY = 66.0 %
NORMAL = 34.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 9
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 9

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
45A	0.617	1.99	1.01	0.08	70.3	0.32	0.32	4.00	0.44	9	30

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 55B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	3.000	0.3	0.41	0
3	4.000	0.3	0.58	0
78	14.000	1.2	0.05	0
98	327.000	27.5	0.37	0
113	578.000	48.5	0.39	0
115	265.000	22.3	0.39	0

TOTAL = 1191.000 Acres XKSAT = 0.38 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
38.000	LLotRes	3.2	NORMAL	50	15	0.30	0.05	Low	0.06
145.000	SLotRes	12.2	NORMAL	50	30	0.25	0.05	Low	0.05
100.000	MDensRes	8.4	NORMAL	50	45	0.25	0.05	Low	0.05
1.000	N.Retail	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
20.000	C.Retail	1.7	NORMAL	75	80	0.10	0.02	Min	0.03
10.000	Educ.	0.8	NORMAL	80	45	0.29	0.05	Hi	0.12
5.000	Instit.	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
6.000	Transp.	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
866.000	Vacant	72.7	DRY	10	0	0.35	0.09	Hi	0.08

1191.0 = Total Area Avg. = 18 10% 0.320

PERCENT OF SUBBASIN DRY = 73.0 %
NORMAL = 27.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 10
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 10

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
55B	1.861	3.50	1.75	0.08	48.6	0.32	0.32	4.10	0.41	10	48

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 29B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
113	30.000	58.8	0.39	0
115	21.000	41.2	0.39	0

TOTAL = 51.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.000	LLotRes	2.0	NORMAL	50	15	0.30	0.05	Low	0.08
50.000	Vacant	98.0	DRY	10	0	0.35	0.09	Hi	0.11

51.000 = Total Area Avg. = 11 0% 0.350

PERCENT OF SUBBASIN DRY = 98.0 %
NORMAL = 2.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
29B	0.080	0.76	0.47	0.09	52.6	0.35	0.35	4.00	0.39	0	14

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 45B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	195.000	46.4	0.05	0
113	207.000	49.3	0.39	0
115	18.000	4.3	0.39	0

TOTAL = 420.000 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.000	Rural	0.2	NORMAL	30	5	0.30	0.05	Low	0.08
3.000	LLotRes	0.7	NORMAL	50	15	0.30	0.05	Low	0.07
56.000	SLotRes	13.3	NORMAL	50	30	0.25	0.05	Low	0.06
150.000	MDensRes	35.7	NORMAL	50	45	0.25	0.05	Low	0.05
9.000	N.Retail	2.1	NORMAL	75	80	0.10	0.02	Min	0.03
13.000	C.Retail	3.1	NORMAL	75	80	0.10	0.02	Min	0.03
10.000	Hotel	2.4	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	Instit.	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
177.000	Vacant	42.1	DRY	10	0	0.35	0.09	Hi	0.09

420.00 = Total Area Avg. = 28 26% 0.280

PERCENT OF SUBBASIN DRY = 42.0 %
NORMAL = 58.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.31

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.18

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 26

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
45B	0.656	1.89	0.94	0.06	45.0	0.28	0.31	6.00	0.18	26	34

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 29C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	62.000	41.6	0.05	0
113	85.000	57.0	0.39	0
115	2.000	1.3	0.39	0

TOTAL = 149.000 Acres XKSAT = 0.17 %Rock = 0

DTHETA

Dry = 0.39 PSIF = 5.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
3.000	LLotRes	2.0	NORMAL	50	15	0.30	0.05	Low	0.07
146.000	Vacant	98.0	DRY	10	0	0.35	0.09	Hi	0.10

149.00 = Total Area Avg. = 11 0% 0.350

PERCENT OF SUBBASIN DRY = 98.0 %
NORMAL = 2.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.39

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.17

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
29C	0.233	0.85	0.47	0.09	58.8	0.35	0.39	5.70	0.17	0	14

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 55

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	14.000	15.6	0.05	0
113	76.000	84.4	0.39	0

TOTAL = 90.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
7.000	Rural	7.8	NORMAL	30	5	0.30	0.05	Low	0.07
3.000	LLotRes	3.3	NORMAL	50	15	0.30	0.05	Low	0.07
32.000	SLotRes	35.6	NORMAL	50	30	0.25	0.05	Low	0.06
48.000	Vacant	53.3	DRY	10	0	0.35	0.09	Hi	0.11

90.000 = Total Area Avg. = 24 12% 0.310

PERCENT OF SUBBASIN DRY = 53.0 %
NORMAL = 47.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.32

IMPERVIOUS AREA: URBAN @ 100 % effective = 12
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 12

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
55	0.141	0.47	0.23	0.07	72.3	0.31	0.30	4.60	0.32	12	10

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 29D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	4.000	1.0	0.05	0
78	86.000	20.7	0.05	0
75	31.000	7.5	0.23	0
112	294.000	70.8	0.39	0

TOTAL = 415.000 Acres XKSAT = 0.24 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.90
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
10.000	LLotRes	2.4	NORMAL	50	15	0.30	0.05	Low	0.07
31.000	SLotRes	7.5	NORMAL	50	30	0.25	0.05	Low	0.06
374.000	Vacant	90.1	DRY	10	0	0.35	0.09	Hi	0.09

415.00 = Total Area Avg. = 13 3% 0.340

PERCENT OF SUBBASIN DRY = 90.0 %
NORMAL = 10.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.34

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.25

IMPERVIOUS AREA: URBAN @ 100 % effective = 3
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 3

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
29D	0.648	1.23	0.85	0.09	40.7	0.34	0.34	4.90	0.25	3	23

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 36C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	3.000	1.1	0.41	0
12	15.000	5.3	0.01	0
77	9.000	3.2	0.05	0
78	7.000	2.5	0.05	0
75	21.000	7.4	0.23	0
113	206.000	72.3	0.39	0
115	24.000	8.4	0.39	0

TOTAL = 285.000 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
38.000	Transp.	13.3	NORMAL	75	80	0.10	0.02	Min	0.03
247.000	Vacant	86.7	DRY	10	0	0.35	0.09	Hi	0.09

285.00 = Total Area Avg. = 12 11% 0.320

PERCENT OF SUBBASIN DRY = 87.0 %
NORMAL = 13.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.34

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.28

IMPERVIOUS AREA: URBAN @ 100 % effective = 11
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 11

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
36C	0.445	1.20	0.60	0.08	44.2	0.32	0.34	4.65	0.28	11	19

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 30

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
112	211.000	29.3	0.39	0
55	4.000	0.6	0.27	0
98	36.000	5.0	0.37	0
113	355.000	49.4	0.39	0
112	3.000	0.4	0.39	0
115	110.000	15.3	0.39	0

TOTAL = 719.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.000	LLotRes	0.1	NORMAL	50	15	0.30	0.05	Low	0.08
375.000	SLotRes	52.2	NORMAL	50	30	0.25	0.05	Low	0.04
135.000	MDensRes	18.8	NORMAL	50	45	0.25	0.05	Low	0.05
2.000	HDensRes	0.3	NORMAL	50	45	0.25	0.05	Low	0.08
1.000	N.Retail	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
4.000	C.Retail	0.6	NORMAL	75	80	0.10	0.02	Min	0.04
7.000	Ind.	1.0	NORMAL	60	55	0.15	0.03	Min	0.03
6.000	Educ.	0.8	NORMAL	80	45	0.29	0.05	Hi	0.13
1.000	PubFac	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
10.000	Rec.Open	1.4	NORMAL	90	0	0.10	0.10	Hi	0.12
177.000	Vacant	24.6	DRY	10	0	0.35	0.09	Hi	0.09

719.00 = Total Area Avg. = 38 26% 0.270

PERCENT OF SUBBASIN DRY = 25.0 %
NORMAL = 75.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.28

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.51

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 26

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
30	1.123	2.00	1.00	0.06	40.0	0.27	0.28	4.00	0.51	26	56

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 37

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	0.000	0.0	0.41	0
1	11.000	3.7	0.41	0
55	6.000	2.0	0.27	0
113	135.000	45.3	0.39	0
112	8.000	2.7	0.39	0
115	138.000	46.3	0.39	0

TOTAL = 298.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
51.000	Transp.	17.1	NORMAL	75	80	0.10	0.02	Min	0.03
247.000	Vacant	82.9	DRY	10	0	0.35	0.09	Hi	0.09

298.00 = Total Area Avg. = 13 14% 0.310

PERCENT OF SUBBASIN DRY = 83.0 %
NORMAL = 17.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.33

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 14
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 14

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
37	0.466	1.00	0.50	0.08	45.0	0.31	0.33	4.00	0.40	14	43

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 17A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	1.000	0.9	0.37	0
113	113.000	98.3	0.39	0
115	1.000	0.9	0.39	0

TOTAL = 115.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
5.000	LLotRes	4.3	NORMAL	50	15	0.30	0.05	Low	0.07
62.000	MDensRes	53.9	NORMAL	50	45	0.25	0.05	Low	0.06
1.000	N.Retail	0.9	NORMAL	75	80	0.10	0.02	Min	0.04
11.000	C.Retail	9.6	NORMAL	75	80	0.10	0.02	Min	0.03
3.000	Rec.Open	2.6	NORMAL	90	0	0.10	0.10	Hi	0.14
33.000	Vacant	28.7	DRY	10	0	0.35	0.09	Hi	0.11

115.00 = Total Area Avg. = 35 33% 0.260

PERCENT OF SUBBASIN DRY = 29.0 %
NORMAL = 71.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.28

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.50

IMPERVIOUS AREA: URBAN @ 100 % effective = 33
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 33

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
17A	0.180	0.66	0.52	0.06	60.6	0.26	0.28	4.00	0.50	33	17

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 23

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	4.000	2.2	0.27	0
113	152.000	85.4	0.39	0
115	22.000	12.4	0.39	0

TOTAL = 178.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
64.000	SLotRes	36.0	NORMAL	50	30	0.25	0.05	Low	0.06
20.000	C.Retail	11.2	NORMAL	75	80	0.10	0.02	Min	0.03
6.000	Rec.Open	3.4	NORMAL	90	0	0.10	0.10	Hi	0.13
88.000	Vacant	49.4	DRY	10	0	0.35	0.09	Hi	0.10

178.00 = Total Area Avg. = 28 20% 0.280

PERCENT OF SUBBASIN DRY = 49.0 %
NORMAL = 51.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 20
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 20

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
23	0.278	1.00	0.33	0.07	65.0	0.28	0.30	4.00	0.47	20	30

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 48

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	253.000	51.2	0.37	0
113	155.000	31.4	0.39	0
115	86.000	17.4	0.39	0

TOTAL = 494.000 Acres XKSAT = 0.38 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
18.000	LLotRes	3.6	NORMAL	50	15	0.30	0.05	Low	0.06
167.000	SLotRes	33.8	NORMAL	50	30	0.25	0.05	Low	0.05
7.000	Educ.	1.4	NORMAL	80	45	0.29	0.05	Hi	0.13
3.000	Instit.	0.6	NORMAL	75	80	0.10	0.02	Min	0.04
2.000	PubFac	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
5.000	Rec.Open	1.0	NORMAL	90	0	0.10	0.10	Hi	0.13
292.000	Vacant	59.1	DRY	10	0	0.35	0.09	Hi	0.09

494.00 = Total Area Avg. = 24 12% 0.310

PERCENT OF SUBBASIN DRY = 59.0 %
NORMAL = 41.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.31

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 12
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 12

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
48	0.772	1.62	0.81	0.07	80.2	0.31	0.31	4.10	0.44	12	27

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 17B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
113	77.000	54.2	0.39	0
115	65.000	45.8	0.39	0

TOTAL = 142.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
5.000	LLotRes	3.5	NORMAL	50	15	0.30	0.05	Low	0.07
51.000	SLotRes	35.9	NORMAL	50	30	0.25	0.05	Low	0.06
35.000	MDensRes	24.6	NORMAL	50	45	0.25	0.05	Low	0.06
3.000	N.Retail	2.1	NORMAL	75	80	0.10	0.02	Min	0.04
10.000	C.Retail	7.0	NORMAL	75	80	0.10	0.02	Min	0.03
38.000	Vacant	26.8	DRY	10	0	0.35	0.09	Hi	0.11

142.00 = Total Area Avg. = 35 30% 0.260

PERCENT OF SUBBASIN DRY = 27.0 %
NORMAL = 73.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.28

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.50

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
17B	0.222	0.80	0.56	0.06	50.0	0.26	0.28	4.00	0.50	30	20

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 47

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	1.000	0.1	0.41	0
3	69.000	6.4	0.58	0
98	526.000	49.1	0.37	0
100	12.000	1.1	0.40	20
113	308.000	28.7	0.39	0
115	156.000	14.6	0.39	0

TOTAL = 1072.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
81.000	LLotRes	7.6	NORMAL	50	15	0.30	0.05	Low	0.05
216.000	SLotRes	20.1	NORMAL	50	30	0.25	0.05	Low	0.05
5.000	MDensRes	0.5	NORMAL	50	45	0.25	0.05	Low	0.07
2.000	N.Retail	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
5.000	Instit.	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
3.000	PubFac	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
2.000	Transp.	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
17.000	Rec.Open	1.6	NORMAL	90	0	0.10	0.10	Hi	0.12
741.000	Vacant	69.1	DRY	10	0	0.35	0.09	Hi	0.08

1072.0 = Total Area Avg. = 21 8% 0.320

PERCENT OF SUBBASIN DRY = 69.0 %
NORMAL = 31.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 8
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 8

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
47	1.675	3.03	1.50	0.08	51.2	0.32	0.32	4.00	0.44	8	44

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 22

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	30.000	11.6	0.41	0
55	6.000	2.3	0.27	0
113	64.000	24.7	0.39	0
115	159.000	61.4	0.39	0

TOTAL = 259.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.000	LLotRes	0.4	NORMAL	50	15	0.30	0.05	Low	0.08
58.000	SLotRes	22.4	NORMAL	50	30	0.25	0.05	Low	0.06
92.000	MDensRes	35.5	NORMAL	50	45	0.25	0.05	Low	0.05
10.000	N.Retail	3.9	NORMAL	75	80	0.10	0.02	Min	0.03
11.000	C.Retail	4.2	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	Rec.Open	0.4	NORMAL	90	0	0.10	0.10	Hi	0.15
86.000	Vacant	33.2	DRY	10	0	0.35	0.09	Hi	0.10

259.00 = Total Area Avg. = 32 29% 0.270

PERCENT OF SUBBASIN DRY = 33.0 %
NORMAL = 67.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.28

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.49

IMPERVIOUS AREA: URBAN @ 100 % effective = 29
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 29

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
22	0.405	1.17	0.33	0.06	51.3	0.27	0.28	4.00	0.49	29	28

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 49

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
61	4.000	0.8	0.15	0
98	369.000	73.1	0.37	0
113	32.000	6.3	0.39	0
115	100.000	19.8	0.39	0

TOTAL = 505.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.15
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
24.000	LLotRes	4.8	NORMAL	50	15	0.30	0.05	Low	0.06
195.000	SLotRes	38.6	NORMAL	50	30	0.25	0.05	Low	0.05
4.000	N.Retail	0.8	NORMAL	75	80	0.10	0.02	Min	0.04
4.000	Instit.	0.8	NORMAL	75	80	0.10	0.02	Min	0.04
7.000	Rec.Open	1.4	NORMAL	90	0	0.10	0.10	Hi	0.13
271.000	Vacant	53.7	DRY	10	0	0.35	0.09	Hi	0.09

505.00 = Total Area Avg. = 26 14% 0.300

PERCENT OF SUBBASIN DRY = 54.0 %
NORMAL = 46.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 14
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 14

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
49	0.789	1.63	0.82	0.07	73.6	0.30	0.30	4.15	0.44	14	27

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 50

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	41.000	23.3	0.37	0
113	44.000	25.0	0.39	0
115	91.000	51.7	0.39	0

TOTAL = 176.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
63.000	LLotRes	35.8	NORMAL	50	15	0.30	0.05	Low	0.06
113.000	Vacant	64.2	DRY	10	0	0.35	0.09	Hi	0.10

176.00 = Total Area Avg. = 23 5% 0.330

PERCENT OF SUBBASIN DRY = 64.0 %
NORMAL = 36.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.31

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 5
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 5

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
50	0.275	0.86	0.43	0.08	81.4	0.33	0.31	4.00	0.45	5	14

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 18A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
44	1.000	0.2	0.03	0
75	12.000	1.9	0.23	0
98	14.000	2.2	0.37	0
100	18.000	2.8	0.40	20
113	415.000	64.3	0.39	0
115	185.000	28.7	0.39	0

TOTAL = 645.000 Acres XKSAT = 0.38 %Rock = 1

DTHETA

Dry = 0.35 PSIF = 4.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
34.000	LLotRes	5.3	NORMAL	50	15	0.30	0.05	Low	0.06
158.000	SLotRes	24.5	NORMAL	50	30	0.25	0.05	Low	0.05
98.000	MDensRes	15.2	NORMAL	50	45	0.25	0.05	Low	0.05
21.000	C.Retail	3.3	NORMAL	75	80	0.10	0.02	Min	0.03
50.000	Rec.Open	7.8	NORMAL	90	0	0.10	0.10	Hi	0.11
284.000	Vacant	44.0	DRY	10	0	0.35	0.09	Hi	0.09

645.00 = Total Area Avg. = 33 18% 0.280

PERCENT OF SUBBASIN DRY = 44.0 %
NORMAL = 56.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

IMPERVIOUS AREA: URBAN @ 100 % effective = 18
ROCK OUTCROP @ 100 % effective = 1
% EFFECTIVE IMP. = 19

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
18A	1.008	0.99	0.52	0.07	60.6	0.28	0.29	4.10	0.48	19	24

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 24

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	3.000	1.6	0.26	0
113	184.000	98.4	0.39	0

TOTAL = 187.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
69.000	SLotRes	36.9	NORMAL	50	30	0.25	0.05	Low	0.05
69.000	MDensRes	36.9	NORMAL	50	45	0.25	0.05	Low	0.05
1.000	HDensRes	0.5	NORMAL	50	45	0.25	0.05	Low	0.08
24.000	C.Retail	12.8	NORMAL	75	80	0.10	0.02	Min	0.03
10.000	Rec.Open	5.3	NORMAL	90	0	0.10	0.10	Hi	0.12
14.000	Vacant	7.5	DRY	10	0	0.35	0.09	Hi	0.12

187.00 = Total Area Avg. = 50 38% 0.230

PERCENT OF SUBBASIN DRY = 8.0 %
NORMAL = 92.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.56

IMPERVIOUS AREA: URBAN @ 100 % effective = 38
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 38

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
24	0.292	0.92	0.50	0.05	43.5	0.23	0.26	4.00	0.56	38	30

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 31B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	7.000	2.3	0.41	0
1	7.000	2.3	0.41	0
50	8.000	2.6	0.26	0
55	170.000	56.3	0.27	0
75	14.000	4.6	0.23	0
112	27.000	8.9	0.39	0
115	69.000	22.8	0.39	0

TOTAL = 302.000 Acres XKSAT = 0.31 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.45
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
79.000	SLotRes	26.2	NORMAL	50	30	0.25	0.05	Low	0.05
19.000	HDensRes	6.3	NORMAL	50	45	0.25	0.05	Low	0.06
6.000	Rec.Open	2.0	NORMAL	90	0	0.10	0.10	Hi	0.13
198.000	Vacant	65.6	DRY	10	0	0.35	0.09	Hi	0.09

302.00 = Total Area Avg. = 22 11% 0.310

PERCENT OF SUBBASIN DRY = 66.0 %
NORMAL = 34.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 11
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 11

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
31B	0.472	1.18	0.52	0.08	29.7	0.31	0.32	4.45	0.35	11	23

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 31A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	92.000	26.9	0.41	0
1	19.000	5.6	0.41	0
55	59.000	17.3	0.27	0
112	113.000	33.0	0.39	0
115	59.000	17.3	0.39	0

TOTAL = 342.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.15
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
80.000	LLotRes	23.4	NORMAL	50	15	0.30	0.05	Low	0.05
93.000	SLotRes	27.2	NORMAL	50	30	0.25	0.05	Low	0.05
29.000	MDensRes	8.5	NORMAL	50	45	0.25	0.05	Low	0.06
10.000	Instit.	2.9	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	Rec.Open	0.3	NORMAL	90	0	0.10	0.10	Hi	0.15
129.000	Vacant	37.7	DRY	10	0	0.35	0.09	Hi	0.10

342.00 = Total Area Avg. = 32 18% 0.290

PERCENT OF SUBBASIN DRY = 38.0 %
NORMAL = 62.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 18
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 18

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
31A	0.534	1.04	0.47	0.06	43.3	0.29	0.29	4.15	0.46	18	23

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 38

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	194.000	64.7	0.41	0
55	106.000	35.3	0.27	0

TOTAL = 300.000 Acres XKSAT = 0.35 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.25
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.000	LLotRes	0.3	NORMAL	50	15	0.30	0.05	Low	0.08
118.000	MDensRes	39.3	NORMAL	50	45	0.25	0.05	Low	0.05
50.000	Transp.	16.7	NORMAL	75	80	0.10	0.02	Min	0.03
18.000	Rec.Open	6.0	NORMAL	90	0	0.10	0.10	Hi	0.12
113.000	Vacant	37.7	DRY	10	0	0.35	0.09	Hi	0.10

300.00 = Total Area Avg. = 33 31% 0.250

PERCENT OF SUBBASIN DRY = 38.0 %
NORMAL = 62.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
38	0.469	1.08	0.83	0.06	37.0	0.25	0.29	4.25	0.44	31	51

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 32

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	33.000	13.8	0.41	0
55	207.000	86.2	0.27	0

TOTAL = 240.000 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.55
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
215.000	SLotRes	89.6	NORMAL	50	30	0.25	0.05	Low	0.05
25.000	Rec.Open	10.4	NORMAL	90	0	0.10	0.10	Hi	0.12

240.00 = Total Area Avg. = 56 27% 0.230

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 27
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 27

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
32	0.375	0.95	0.47	0.05	38.9	0.23	0.25	4.55	0.44	27	29

Table F-1
Northeast Mesa Area
Existing Conditions
Subbasin Parameters
(continued)

LOSS PARAMETERS FOR SUBBASIN: 39

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	24.000	10.5	0.41	0
55	204.000	89.5	0.27	0

TOTAL = 228.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
35.000	SLotRes	15.4	NORMAL	50	30	0.25	0.05	Low	0.06
115.000	MDensRes	50.4	NORMAL	50	45	0.25	0.05	Low	0.05
36.000	Transp.	15.8	NORMAL	75	80	0.10	0.02	Min	0.03
9.000	Rec.Open	3.9	NORMAL	90	0	0.10	0.10	Hi	0.13
3.000	Water	1.3	WET	0	0	0.00	1.00	Hi	0.14
30.000	Vacant	13.2	DRY	10	0	0.35	0.09	Hi	0.11

228.00 = Total Area Avg. = 44 40% 0.230

PERCENT OF SUBBASIN DRY = 13.0 %
NORMAL = 86.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 40
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 40

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
39	0.356	0.92	0.67	0.06	38.0	0.23	0.26	4.60	0.39	40	38

MCUHP2 REPORT
NORTHEAST MESA AREA
EXISTING CONDITIONS

Table F-2
Northeast Area
Existing Land Use Conditions
Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
42	1.747	0.320	0.290	5.00	0.290	10	54.0
51	1.244	0.290	0.300	4.60	0.330	18	27.3
44A	1.594	0.200	0.250	4.50	0.450	45	44.7
43	1.425	0.290	0.300	4.70	0.300	18	29.8
53	0.784	0.290	0.300	5.20	0.250	20	31.8
54	0.488	0.300	0.290	5.40	0.240	17	32.8
57	0.178	0.370	0.350	5.40	0.230	2	13.4
36A	0.097	0.270	0.340	6.00	0.170	28	7.1
44B	1.056	0.260	0.240	6.60	0.150	30	25.6
36B	0.317	0.300	0.290	7.30	0.090	16	16.1
46B	0.358	0.260	0.270	4.00	0.520	30	28.7
29A	0.181	0.330	0.320	4.00	0.420	7	15.3
45A	0.617	0.320	0.320	4.00	0.440	9	30.1
55B	1.861	0.320	0.320	4.10	0.410	10	48.0
29B	0.080	0.350	0.350	4.00	0.390	0	13.8
45B	0.656	0.280	0.310	6.00	0.180	26	33.9
29C	0.233	0.350	0.390	5.70	0.170	0	14.1
55	0.141	0.310	0.300	4.60	0.320	12	10.1
29D	0.648	0.340	0.340	4.90	0.250	3	22.5
36C	0.445	0.320	0.340	4.65	0.280	11	18.6
30	1.123	0.270	0.280	4.00	0.510	26	55.8
37	0.466	0.310	0.330	4.00	0.400	14	42.9
17A	0.180	0.260	0.280	4.00	0.500	33	16.7
23	0.278	0.280	0.300	4.00	0.470	20	29.9
48	0.772	0.310	0.310	4.10	0.440	12	27.1
17B	0.222	0.260	0.280	4.00	0.500	30	20.2
47	1.675	0.320	0.320	4.00	0.440	8	43.6
22	0.405	0.270	0.280	4.00	0.490	29	28.0
49	0.789	0.300	0.300	4.15	0.440	14	27.0
50	0.275	0.330	0.310	4.00	0.450	5	13.7
18A	1.008	0.280	0.290	4.10	0.480	19	24.1
24	0.292	0.230	0.260	4.00	0.560	38	30.4
31B	0.472	0.310	0.320	4.45	0.350	11	23.2
31A	0.534	0.290	0.290	4.15	0.460	18	22.5
38	0.469	0.250	0.290	4.25	0.440	31	50.8
32	0.375	0.230	0.250	4.55	0.440	27	29.1
39	0.356	0.230	0.260	4.60	0.390	40	37.8
52	0.433	0.310	0.310	6.60	0.130	12	52.1
56	0.547	0.310	0.240	7.30	0.110	20	34.9
58	0.950	0.340	0.360	5.60	0.190	4	46.0

LAG REPORT
NORTHEAST MESA AREA
EXISTING CONDITIONS

TABLE F-3
Northeast Area
Existing Land Use Conditions
Summary of MCUHP2 Lag Time Calculation Parameters

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
42	Desert/Rangeland	0.0670	3.12	1.55	60.90	54.0
51	Desert/Rangeland	0.0680	1.47	0.75	54.40	27.3
44A	Desert/Rangeland	0.0390	2.75	1.38	54.50	44.7
43	Desert/Rangeland	0.0680	1.89	0.94	58.20	29.8
53	Valley	0.0660	1.89	0.94	63.50	31.8
54	Valley	0.0620	1.52	0.76	42.80	32.8
57	Desert/Rangeland	0.0890	0.28	0.14	35.70	13.4
36A	Valley	0.0650	0.34	0.17	44.10	7.1
44B	Valley	0.0570	1.08	0.88	64.80	25.6
36B	Valley	0.0760	1.00	0.50	45.00	16.1
46B	Valley	0.0550	1.40	0.70	42.90	28.7
29A	Valley	0.0790	0.85	0.38	41.20	15.3
45A	Desert/Rangeland	0.0760	1.99	1.01	70.30	30.1
55B	Desert/Rangeland	0.0780	3.50	1.75	48.60	48.0
29B	Valley	0.0890	0.76	0.47	52.60	13.8
45B	Valley	0.0640	1.89	0.94	45.00	33.9
29C	Valley	0.0890	0.85	0.47	58.80	14.1
55	Desert/Rangeland	0.0710	0.47	0.23	72.30	10.1
29D	Valley	0.0860	1.23	0.85	40.70	22.5
36C	Valley	0.0810	1.20	0.60	44.20	18.6
30	Valley	0.0600	2.00	1.00	40.00	55.8
37	Valley	0.0780	1.00	0.50	45.00	42.9
17A	Valley	0.0600	0.66	0.52	60.60	16.7
23	Valley	0.0680	1.00	0.33	65.00	29.9
48	Valley	0.0740	1.62	0.81	80.20	27.1
17B	Valley	0.0580	0.80	0.56	50.00	20.2
47	Valley	0.0780	3.03	1.50	51.20	43.6
22	Valley	0.0610	1.17	0.33	51.30	28.0
49	Valley	0.0720	1.63	0.82	73.60	27.0
50	Valley	0.0760	0.86	0.43	81.40	13.7
18A	Valley	0.0710	0.99	0.52	60.60	24.1
24	Valley	0.0520	0.92	0.50	43.50	30.4
31B	Valley	0.0770	1.18	0.52	29.70	23.2
31A	Valley	0.0640	1.04	0.47	43.30	22.5
38	Valley	0.0630	1.08	0.83	37.00	50.8
32	Valley	0.0550	0.95	0.47	38.90	29.1
39	Valley	0.0650	0.92	0.67	38.00	37.8
52	Valley	0.0760	1.64	0.74	54.90	52.1
56	Valley	0.0690	0.95	0.51	57.90	34.9
58	Valley	0.0850	1.13	0.51	50.40	46.0

SUBBASIN PREPARATION REPORTS
EXISTING CONDITIONS
NORTHWEST MESA AREA

SUBBASIN REPORT
NORTHWEST MESA AREA
EXISTING CONDITIONS

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 1

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
68	1.000	0.4	0.63	0
98	188.000	75.2	0.37	0
110	36.000	14.4	0.13	0
113	12.000	4.8	0.39	0
118	13.000	5.2	0.42	0

TOTAL = 250.000 Acres XKSAT = 0.32 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 82.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
10.000	LLotRes	4.0	NORMAL	50	15	0.30	0.05	Low	0.07
26.000	SLotRes	10.4	NORMAL	50	30	0.25	0.05	Low	0.06
1.000	N.Retail	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
9.000	Instit.	3.6	NORMAL	75	80	0.10	0.02	Min	0.03
204.000	Vacant	81.6	DRY	10	0	0.35	0.09	Hi	0.09

250.00 = Total Area Avg. = 18.4 7% 0.328

PERCENT OF SUBBASIN DRY = 82.0 %
NORMAL = 18.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.332

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 7
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 7

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
1	0.391	0.90	0.30	0.08	55.6	0.328	0.332	4.40	0.350	7	33

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 10

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	105.000	22.7	0.41	0
50	42.000	9.1	0.26	0
55	83.000	18.0	0.27	0
110	61.000	13.2	0.13	0
LaA	171.000	37.0	0.25	0

TOTAL = 462.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 5.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
249.000	SLotRes	53.9	NORMAL	50	30	0.25	0.05	Low	0.05
8.000	MDenRes	1.7	NORMAL	50	45	0.25	0.05		
23.000	HDensRes	5.0	NORMAL	50	45	0.25	0.05	Low	0.06
10.000	N.Retail	2.2	NORMAL	75	80	0.10	0.02	Min	0.03
23.000	Educ.	5.0	NORMAL	80	45	0.29	0.05	Hi	0.12
14.000	Instit.	3.0	NORMAL	75	80	0.10	0.02	Min	0.03
2.000	PubFac	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
108.000	Rec.Open	23.4	NORMAL	90	0	0.10	0.10	Hi	0.10
25.000	Vacant	5.4	DRY	10	0	0.35	0.09	Hi	0.12

462.00 = Total Area Avg. = 60.1 26% 0.214

PERCENT OF SUBBASIN DRY = 5.0 %
NORMAL = 95.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.255

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 26

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
10	0.722	1.30	0.80	0.06	53.8	0.214	0.255	4.70	0.400	26	43

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 11

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
44	10.000	1.5	0.03	0
98	112.000	16.6	0.37	0
113	428.000	63.3	0.39	0
115	126.000	18.6	0.39	0

TOTAL = 676.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 47.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
4.000	LLotRes	0.6	NORMAL	50	15	0.30	0.05	Low	0.07
102.000	SLotRes	15.1	NORMAL	50	30	0.25	0.05	Low	0.05
3.000	Hotel	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
1.000	Office	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
3.000	PubFac	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
246.000	Rec.Open	36.4	NORMAL	90	0	0.10	0.10	Hi	0.09
317.000	Vacant	46.9	DRY	10	0	0.35	0.09	Hi	0.09

676.00 = Total Area Avg. = 46.0 5% 0.241

PERCENT OF SUBBASIN DRY = 47.0 %
NORMAL = 53.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.297

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.52

IMPERVIOUS AREA: URBAN @ 100 % effective = 5
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 5

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
11	1.056	2.09	1.52	0.09	57.4	0.241	0.297	4.15	0.520	5	90

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 12

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	19.000	2.9	0.37	0
113	409.000	62.0	0.39	0
115	232.000	35.2	0.39	0

TOTAL = 660.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 21.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
5.000	LLotRes	0.8	NORMAL	50	15	0.30	0.05	Low	0.07
2.000	SLotRes	0.3	NORMAL	50	30	0.25	0.05	Low	0.08
41.000	Ind.	6.2	NORMAL	60	55	0.15	0.03	Min	0.03
125.000	Office	18.9	NORMAL	75	80	0.10	0.02	Min	0.03
64.000	Educ.	9.7	NORMAL	80	45	0.29	0.05	Hi	0.10
24.000	PubFac	3.6	NORMAL	75	80	0.10	0.02	Min	0.03
250.000	Rec.Open	37.9	NORMAL	90	0	0.10	0.10	Hi	0.09
9.000	Water	1.4	WET	0	0	0.00	1.00	Hi	0.13
140.000	Vacant	21.2	DRY	10	0	0.35	0.09	Hi	0.10

660.00 = Total Area Avg. = 65.1 26% 0.175

PERCENT OF SUBBASIN DRY = 21.0 %
NORMAL = 77.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.266

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.63

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 26

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
12	1.031	1.80	0.80	0.08	77.8	0.175	0.266	4.00	0.630	26	60

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 13a

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	2.000	0.4	0.41	0
55	26.000	5.3	0.27	0
112	167.000	33.7	0.39	0
113	28.000	5.7	0.39	0
115	272.000	54.9	0.39	0

TOTAL = 495.000 Acres XKSAT = 0.38 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 19.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
9.000	LLotRes	1.8	NORMAL	50	15	0.30	0.05	Low	0.07
346.000	SLotRes	69.9	NORMAL	50	30	0.25	0.05	Low	0.05
10.000	MDenRes	2.0	NORMAL	50	45	0.25	0.05		
8.000	N.Retail	1.6	NORMAL	75	80	0.10	0.02	Min	0.03
6.000	Instit.	1.2	NORMAL	75	80	0.10	0.02	Min	0.04
20.000	Rec.Open	4.0	NORMAL	90	0	0.10	0.10	Hi	0.12
96.000	Vacant	19.4	DRY	10	0	0.35	0.09	Hi	0.10

495.00 = Total Area Avg. = 44.5 24% 0.260

PERCENT OF SUBBASIN DRY = 19.0 %
NORMAL = 80.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.266

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 24
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 24

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
13a	0.773	1.50	0.90	0.06	46.7	0.260	0.266	4.10	0.530	24	46

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 13b

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	15.000	10.3	0.41	0
50	32.000	21.9	0.26	0
55	53.000	36.3	0.27	0
115	46.000	31.5	0.39	0

TOTAL = 146.000 Acres XKSAT = 0.31 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 7.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
105.000	SLotRes	71.9	NORMAL	50	30	0.25	0.05	Low	0.05
23.000	MDenRes	15.8	NORMAL	50	45	0.25	0.05		
8.000	Rec.Open	5.5	NORMAL	90	0	0.10	0.10	Hi	0.13
10.000	Vacant	6.8	DRY	10	0	0.35	0.09	Hi	0.12

146.00 = Total Area Avg. = 49.5 29% 0.249

PERCENT OF SUBBASIN DRY = 7.0 %
NORMAL = 93.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.257

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 29
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 29

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
13b	0.228	1.10	0.70	0.05	40.9	0.249	0.257	4.45	0.450	29	35

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 14

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	74.000	11.6	0.41	0
50	85.000	13.3	0.26	0
55	479.000	75.1	0.27	0

TOTAL = 638.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
522.000	SLotRes	81.8	NORMAL	50	30	0.25	0.05	Low	0.04
21.000	HDensRes	3.3	NORMAL	50	45	0.25	0.05	Low	0.06
20.000	N.Retail	3.1	NORMAL	75	80	0.10	0.02	Min	0.03
10.000	Instit.	1.6	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	PubFac	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
61.000	Rec.Open	9.6	NORMAL	90	0	0.10	0.10	Hi	0.11
3.000	Vacant	0.5	DRY	10	0	0.35	0.09	Hi	0.14

638.00 = Total Area Avg. = 54.9 30% 0.229

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
14	0.997	1.40	0.70	0.05	46.4	0.229	0.250	4.60	0.420	30	37

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 15a

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	30.000	13.3	0.27	0
75	194.000	86.2	0.23	0
LaA	1.000	0.4	0.25	0

TOTAL = 225.000 Acres XKSAT = 0.24 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
10.000	LLotRes	4.4	NORMAL	50	15	0.30	0.05	Low	0.07
194.000	SLotRes	86.2	NORMAL	50	30	0.25	0.05	Low	0.05
3.000	PubFac	1.3	NORMAL	75	80	0.10	0.02	Min	0.04
11.000	Rec.Open	4.9	NORMAL	90	0	0.10	0.10	Hi	0.12
7.000	Vacant	3.1	DRY	10	0	0.35	0.09	Hi	0.13

225.00 = Total Area Avg. = 51.0 28% 0.246

PERCENT OF SUBBASIN DRY = 3.0 %
NORMAL = 97.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.253

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 28
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 28

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
15a	0.352	1.00	0.70	0.05	33.0	0.246	0.253	4.90	0.350	28	34

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 15b

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	287.000	87.8	0.27	0
75	40.000	12.2	0.23	0

TOTAL = 327.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 6.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
188.000	SLotRes	57.5	NORMAL	50	30	0.25	0.05	Low	0.05
16.000	MDenRes	4.9	NORMAL	50	45	0.25	0.05		
34.000	HDensRes	10.4	NORMAL	50	45	0.25	0.05	Low	0.06
21.000	N.Retail	6.4	NORMAL	75	80	0.10	0.02	Min	0.03
3.000	Office	0.9	NORMAL	75	80	0.10	0.02	Min	0.04
5.000	Educ.	1.5	NORMAL	80	45	0.29	0.05	Hi	0.13
6.000	Instit.	1.8	NORMAL	75	80	0.10	0.02	Min	0.04
33.000	Rec.Open	10.1	NORMAL	90	0	0.10	0.10	Hi	0.11
21.000	Vacant	6.4	DRY	10	0	0.35	0.09	Hi	0.12

327.00 = Total Area Avg. = 54.2 32% 0.228

PERCENT OF SUBBASIN DRY = 6.0 %
NORMAL = 94.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.256

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 32
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 32

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
15b	0.511	1.62	0.43	0.05	21.6	0.228	0.256	4.70	0.390	32	39

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 16

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	56.000	100.	0.27	0

TOTAL = 56.000 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 29.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
40.000	SLotRes	71.4	NORMAL	50	30	0.25	0.05	Low	0.06
16.000	Vacant	28.6	DRY	10	0	0.35	0.09	Hi	0.12

56.000 = Total Area Avg. = 38.6 21% 0.279

PERCENT OF SUBBASIN DRY = 29.0 %
NORMAL = 71.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.279

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.36

IMPERVIOUS AREA: URBAN @ 100 % effective = 21
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 21

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
16	0.087	0.50	0.20	0.06	38.0	0.279	0.279	4.65	0.360	21	18

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 18b

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
100	26.000	10.8	0.40	20
112	169.000	70.1	0.39	0
115	46.000	19.1	0.39	0

TOTAL = 241.000 Acres XKSAT = 0.39 %Rock = 2

DTHETA

Dry = 0.35 PSIF = 22.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
34.000	LLotRes	14.1	NORMAL	50	15	0.30	0.05	Low	0.06
126.000	SLotRes	52.3	NORMAL	50	30	0.25	0.05	Low	0.05
4.000	HDensRes	1.7	NORMAL	50	45	0.25	0.05	Low	0.07
11.000	N.Retail	4.6	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	C.Retail	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
2.000	Hotel	0.8	NORMAL	75	80	0.10	0.02	Min	0.04
2.000	PubFac	0.8	NORMAL	75	80	0.10	0.02	Min	0.04
9.000	Rec.Open	3.7	NORMAL	90	0	0.10	0.10	Hi	0.13
52.000	Vacant	21.6	DRY	10	0	0.35	0.09	Hi	0.11

241.00 = Total Area Avg. = 44.5 24% 0.263

PERCENT OF SUBBASIN DRY = 22.0 %
NORMAL = 78.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.272

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.54

IMPERVIOUS AREA: URBAN @ 100 % effective = 24
ROCK OUTCROP @ 100 % effective = 2
% EFFECTIVE IMP. = 26

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
18b	0.377	0.90	0.40	0.06	55.6	0.263	0.272	4.00	0.540	26	27

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 19

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
112	413.000	85.2	0.39	0
115	72.000	14.8	0.39	0

TOTAL = 485.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 56.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
15.000	SLotRes	3.1	NORMAL	50	30	0.25	0.05	Low	0.06
10.000	MDenRes	2.1	NORMAL	50	45	0.25	0.05		
22.000	HDensRes	4.5	NORMAL	50	45	0.25	0.05	Low	0.06
82.000	C.Retail	16.9	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	Office	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
82.000	Instit.	16.9	NORMAL	75	80	0.10	0.02	Min	0.03
3.000	PubFac	0.6	NORMAL	75	80	0.10	0.02	Min	0.04
270.000	Vacant	55.7	DRY	10	0	0.35	0.09	Hi	0.09

485.00 = Total Area Avg. = 36.4 32% 0.254

PERCENT OF SUBBASIN DRY = 56.0 %
NORMAL = 44.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.306

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.50

IMPERVIOUS AREA: URBAN @ 100 % effective = 32
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 32

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
19	0.758	1.40	0.60	0.06	46.4	0.254	0.306	4.00	0.500	32	40

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 2

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
68	7.000	1.1	0.63	0
98	222.000	34.7	0.37	0
110	170.000	26.6	0.13	0
113	12.000	1.9	0.39	0
115	165.000	25.8	0.39	0
RiB	63.000	9.9	0.40	0

TOTAL = 639.000 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 26.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
15.000	LLotRes	2.3	NORMAL	50	15	0.30	0.05	Low	0.06
243.000	SLotRes	38.0	NORMAL	50	30	0.25	0.05	Low	0.05
34.000	MDenRes	5.3	NORMAL	50	45	0.25	0.05		
6.000	N.Retail	0.9	NORMAL	75	80	0.10	0.02	Min	0.04
1.000	PubFac	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
167.000	Rec.Open	26.1	NORMAL	90	0	0.10	0.10	Hi	0.09
6.000	Water	0.9	WET	0	0	0.00	1.00	Hi	0.13
167.000	Vacant	26.1	DRY	10	0	0.35	0.09	Hi	0.09

639.00 = Total Area Avg. = 49.7 15% 0.234

PERCENT OF SUBBASIN DRY = 26.0 %
NORMAL = 73.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.273

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 15
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 15

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
2	0.998	1.50	1.00	0.08	65.3	0.234	0.273	4.55	0.420	15	62

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 20

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	126.000	34.0	0.41	0
55	77.000	20.8	0.27	0
112	63.000	17.0	0.39	0
115	105.000	28.3	0.39	0

TOTAL = 371.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 11.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
175.000	SLotRes	47.2	NORMAL	50	30	0.25	0.05	Low	0.05
25.000	HDensRes	6.7	NORMAL	50	45	0.25	0.05	Low	0.06
80.000	C.Retail	21.6	NORMAL	75	80	0.10	0.02	Min	0.03
31.000	Hotel	8.4	NORMAL	75	80	0.10	0.02	Min	0.03
3.000	Office	0.8	NORMAL	75	80	0.10	0.02	Min	0.04
17.000	Instit.	4.6	NORMAL	75	80	0.10	0.02	Min	0.03
40.000	Vacant	10.8	DRY	10	0	0.35	0.09	Hi	0.11

371.00 = Total Area Avg. = 54.6 45% 0.208

PERCENT OF SUBBASIN DRY = 11.0 %
NORMAL = 89.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.261

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.55

IMPERVIOUS AREA: URBAN @ 100 % effective = 45
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 45

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
20	0.580	2.38	1.23	0.04	37.8	0.208	0.261	4.15	0.550	45	48

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 21

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	56.000	16.5	0.41	0
55	263.000	77.6	0.27	0
115	20.000	5.9	0.39	0

TOTAL = 339.000 Acres XKSAT = 0.30 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 6.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
164.000	SLotRes	48.4	NORMAL	50	30	0.25	0.05	Low	0.05
56.000	MDenRes	16.5	NORMAL	50	45	0.25	0.05		
34.000	HDensRes	10.0	NORMAL	50	45	0.25	0.05	Low	0.06
11.000	C.Retail	3.2	NORMAL	75	80	0.10	0.02	Min	0.03
6.000	Instit.	1.8	NORMAL	75	80	0.10	0.02	Min	0.04
46.000	Rec.Open	13.6	NORMAL	90	0	0.10	0.10	Hi	0.11
22.000	Vacant	6.5	DRY	10	0	0.35	0.09	Hi	0.12

339.00 = Total Area Avg. = 54.1 30% 0.229

PERCENT OF SUBBASIN DRY = 6.0 %
NORMAL = 94.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.256

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
21	0.530	1.71	0.76	0.06	38.0	0.229	0.256	4.50	0.450	30	46

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 25

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	34.000	10.6	0.26	0
55	9.000	2.8	0.27	0
112	243.000	75.7	0.39	0
115	35.000	10.9	0.39	0

TOTAL = 321.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
166.000	SLotRes	51.7	NORMAL	50	30	0.25	0.05	Low	0.05
125.000	MDenRes	38.9	NORMAL	50	45	0.25	0.05		
7.000	N.Retail	2.2	NORMAL	75	80	0.10	0.02	Min	0.03
6.000	C.Retail	1.9	NORMAL	75	80	0.10	0.02	Min	0.04
1.000	Office	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
1.000	Instit.	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
4.000	Rec.Open	1.2	NORMAL	90	0	0.10	0.10	Hi	0.13
11.000	Vacant	3.4	DRY	10	0	0.35	0.09	Hi	0.12

321.00 = Total Area Avg. = 50.2 37% 0.244

PERCENT OF SUBBASIN DRY = 3.0 %
NORMAL = 97.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.253

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.54

IMPERVIOUS AREA: URBAN @ 100 % effective = 37
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 37

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
25	0.502	1.30	0.60	0.05	42.3	0.244	0.253	4.15	0.540	37	33

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 26

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	53.000	33.1	0.27	0
112	107.000	66.9	0.39	0

TOTAL = 160.000 Acres XKSAT = 0.35 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
141.000	SLotRes	88.1	NORMAL	50	30	0.25	0.05	Low	0.05
11.000	C.Retail	6.9	NORMAL	75	80	0.10	0.02	Min	0.03
3.000	Rec.Open	1.9	NORMAL	90	0	0.10	0.10	Hi	0.14
5.000	Vacant	3.1	DRY	10	0	0.35	0.09	Hi	0.13

160.00 = Total Area Avg. = 51.2 32% 0.240

PERCENT OF SUBBASIN DRY = 3.0 %
NORMAL = 97.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.253

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.51

IMPERVIOUS AREA: URBAN @ 100 % effective = 32
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 32

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
26	0.250	0.80	0.30	0.05	43.8	0.240	0.253	4.25	0.510	32	20

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 27

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	11.000	7.1	0.41	0
55	20.000	12.9	0.27	0
112	124.000	80.0	0.39	0

TOTAL = 155.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 24.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
35.000	SLotRes	22.6	NORMAL	50	30	0.25	0.05	Low	0.06
36.000	C.Retail	23.2	NORMAL	75	80	0.10	0.02	Min	0.03
11.000	Office	7.1	NORMAL	75	80	0.10	0.02	Min	0.03
11.000	Educ.	7.1	NORMAL	80	45	0.29	0.05	Hi	0.12
4.000	Instit.	2.6	NORMAL	75	80	0.10	0.02	Min	0.04
20.000	Rec.Open	12.9	NORMAL	90	0	0.10	0.10	Hi	0.12
38.000	Vacant	24.5	DRY	10	0	0.35	0.09	Hi	0.11

155.00 = Total Area Avg. = 55.7 36% 0.209

PERCENT OF SUBBASIN DRY = 24.0 %
NORMAL = 76.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.274

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.56

IMPERVIOUS AREA: URBAN @ 100 % effective = 36
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 36

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
27	0.242	0.60	0.30	0.06	45.0	0.209	0.274	4.15	0.560	36	20

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 28

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	193.000	33.4	0.41	0
50	6.000	1.0	0.26	0
55	348.000	60.2	0.27	0
75	22.000	3.8	0.23	0
112	9.000	1.6	0.39	0

TOTAL = 578.000 Acres XKSAT = 0.31 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 24.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
186.000	SLotRes	32.2	NORMAL	50	30	0.25	0.05	Low	0.05
76.000	MDenRes	13.1	NORMAL	50	45	0.25	0.05		
12.000	HDensRes	2.1	NORMAL	50	45	0.25	0.05	Low	0.07
14.000	N.Retail	2.4	NORMAL	75	80	0.10	0.02	Min	0.03
68.000	C.Retail	11.8	NORMAL	75	80	0.10	0.02	Min	0.03
10.000	Hotel	1.7	NORMAL	75	80	0.10	0.02	Min	0.03
31.000	Office	5.4	NORMAL	75	80	0.10	0.02	Min	0.03
31.000	Instit.	5.4	NORMAL	75	80	0.10	0.02	Min	0.03
4.000	PubFac	0.7	NORMAL	75	80	0.10	0.02	Min	0.04
5.000	Rec.Open	0.9	NORMAL	90	0	0.10	0.10	Hi	0.13
141.000	Vacant	24.4	DRY	10	0	0.35	0.09	Hi	0.10

578.00 = Total Area Avg. = 47.5 38% 0.232

PERCENT OF SUBBASIN DRY = 24.0 %
NORMAL = 76.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.274

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 38
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 38

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
28	0.903	2.00	0.80	0.05	39.5	0.232	0.274	4.45	0.440	38	45

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 3

Soil Survey Used Eastern County

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
LAA	364.000	57.0	0.25	0
PNC	8.000	1.3	0.40	0
RLB	194.000	30.4	0.40	0
110	73.000	11.4	0.01	0

TOTAL = 639.000 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 10.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
9.000	LLotRes	1.4	NORMAL	50	15	0.30	0.05	Low	0.07
337.000	SLotRes	52.7	NORMAL	50	30	0.25	0.05	Low	0.05
60.000	MDenRes	9.4	NORMAL	50	45	0.25	0.05		
9.000	HDensRes	1.4	NORMAL	50	45	0.25	0.05	Low	0.07
8.000	N.Retail	1.3	NORMAL	75	80	0.10	0.02	Min	0.03
7.000	Bus.Park	1.1	NORMAL	75	80	0.10	0.02	Min	0.03
7.000	Instit.	1.1	NORMAL	75	80	0.10	0.02	Min	0.03
141.000	Rec.Open	22.1	NORMAL	90	0	0.10	0.10	Hi	0.10
61.000	Vacant	9.5	DRY	10	0	0.35	0.09	Hi	0.11

639.00 = Total Area Avg. = 55.9 24% 0.222

PERCENT OF SUBBASIN DRY = 10.0 %
NORMAL = 90.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.262

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.30

IMPERVIOUS AREA: URBAN @ 100 % effective = 24
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 24

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
3	0.998	1.80	1.30	0.06	36.1	0.222	0.262	5.30	0.300	24	64

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 33

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	75.000	16.1	0.41	0
50	63.000	13.5	0.26	0
55	328.000	70.4	0.27	0

TOTAL = 466.000 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
26.000	LLotRes	5.6	NORMAL	50	15	0.30	0.05	Low	0.06
250.000	SLotRes	53.6	NORMAL	50	30	0.25	0.05	Low	0.05
100.000	MDenRes	21.5	NORMAL	50	45	0.25	0.05		
7.000	PubFac	1.5	NORMAL	75	80	0.10	0.02	Min	0.03
61.000	Rec.Open	13.1	NORMAL	90	0	0.10	0.10	Hi	0.11
3.000	Water	0.6	WET	0	0	0.00	1.00	Hi	0.14
19.000	Vacant	4.1	DRY	10	0	0.35	0.09	Hi	0.12

466.00 = Total Area Avg. = 53.7 28% 0.233

PERCENT OF SUBBASIN DRY = 4.0 %
NORMAL = 95.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.252

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.43

IMPERVIOUS AREA: URBAN @ 100 % effective = 28
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 28

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
33	0.728	2.00	1.20	0.06	32.5	0.233	0.252	4.55	0.430	28	65

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 34

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	10.000	1.7	0.41	0
50	73.000	12.6	0.26	0
55	496.000	85.7	0.27	0

TOTAL = 579.000 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
346.000	SLotRes	59.8	NORMAL	50	30	0.25	0.05	Low	0.05
37.000	HDensRes	6.4	NORMAL	50	45	0.25	0.05	Low	0.06
8.000	N.Retail	1.4	NORMAL	75	80	0.10	0.02	Min	0.03
16.000	C.Retail	2.8	NORMAL	75	80	0.10	0.02	Min	0.03
9.000	Instit.	1.6	NORMAL	75	80	0.10	0.02	Min	0.03
3.000	PubFac	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
134.000	Rec.Open	23.1	NORMAL	90	0	0.10	0.10	Hi	0.10
4.000	Water	0.7	WET	0	0	0.00	1.00	Hi	0.13
22.000	Vacant	3.8	DRY	10	0	0.35	0.09	Hi	0.12

579.00 = Total Area Avg. = 59.0 26% 0.208

PERCENT OF SUBBASIN DRY = 4.0 %
NORMAL = 96.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.254

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 26

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
34	0.905	1.71	1.04	0.07	32.2	0.208	0.254	4.65	0.420	26	63

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 35

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	237.000	25.3	0.41	0
50	9.000	1.0	0.26	0
55	662.000	70.8	0.27	0
75	27.000	2.9	0.23	0

TOTAL = 935.000 Acres XKSAT = 0.30 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
659.000	SLotRes	70.5	NORMAL	50	30	0.25	0.05	Low	0.04
2.000	MDenRes	0.2	NORMAL	50	45	0.25	0.05		
1.000	HDensRes	0.1	NORMAL	50	45	0.25	0.05	Low	0.08
4.000	N.Retail	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
3.000	C.Retail	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
2.000	Office	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
206.000	Rec.Open	22.0	NORMAL	90	0	0.10	0.10	Hi	0.09
21.000	Water	2.2	WET	0	0	0.00	1.00	Hi	0.12
37.000	Vacant	4.0	DRY	10	0	0.35	0.09	Hi	0.11

935.00 = Total Area Avg. = 56.3 22% 0.214

PERCENT OF SUBBASIN DRY = 4.0 %
NORMAL = 94.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.249

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 22
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 22

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
35	1.461	2.19	1.14	0.08	29.7	0.214	0.249	4.50	0.450	22	89

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 4

Soil Survey Used Eastern County

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
LAA	639.000	100.	0.25	0

TOTAL = 639.000 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 37.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2.000	SLotRes	0.3	NORMAL	50	30	0.25	0.05	Low	0.08
13.000	N.Retail	2.0	NORMAL	75	80	0.10	0.02	Min	0.03
33.000	Bus.Park	5.2	NORMAL	75	80	0.10	0.02	Min	0.03
43.000	PubFac	6.7	NORMAL	75	80	0.10	0.02	Min	0.03
289.000	Airport	45.2	NORMAL	60	55	0.15	0.03	Min	0.02
24.000	Ag/Orch	3.8	NORMAL	90	0	0.50	0.10	Hi	0.12
235.000	Vacant	36.8	DRY	10	0	0.35	0.09	Hi	0.09

639.00 = Total Area Avg. = 44.8 36% 0.230

PERCENT OF SUBBASIN DRY = 37.0 %
NORMAL = 63.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.287

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 36
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 36

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
4	0.998	1.70	1.20	0.05	23.5	0.230	0.287	4.80	0.350	36	55

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 40

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	18.000	4.8	0.41	0
55	356.000	95.2	0.27	0

TOTAL = 374.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 37.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
60.000	SLotRes	16.0	NORMAL	50	30	0.25	0.05	Low	0.06
81.000	C.Retail	21.7	NORMAL	75	80	0.10	0.02	Min	0.03
15.000	Ind.	4.0	NORMAL	60	55	0.15	0.03	Min	0.03
11.000	Office	2.9	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	PubFac	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
64.000	Transp.	17.1	NORMAL	75	80	0.10	0.02	Min	0.03
2.000	Water	0.5	WET	0	0	0.00	1.00	Hi	0.14
140.000	Vacant	37.4	DRY	10	0	0.35	0.09	Hi	0.10

374.00 = Total Area Avg. = 45.6 41% 0.219

PERCENT OF SUBBASIN DRY = 37.0 %
NORMAL = 62.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.285

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 41
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 41

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
40	0.584	0.76	0.38	0.06	69.7	0.219	0.285	4.60	0.390	41	23

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 41

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	109.000	31.2	0.41	0
55	240.000	68.8	0.27	0

TOTAL = 349.000 Acres XKSAT = 0.31 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 31.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
64.000	C.Retail	18.3	NORMAL	75	80	0.10	0.02	Min	0.03
81.000	Reg.Ret	23.2	NORMAL	75	80	0.10	0.02	Min	0.03
4.000	Hotel	1.1	NORMAL	75	80	0.10	0.02	Min	0.04
1.000	Office	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
10.000	Instit.	2.9	NORMAL	75	80	0.10	0.02	Min	0.03
50.000	Transp.	14.3	NORMAL	75	80	0.10	0.02	Min	0.03
28.000	Rec.Open	8.0	NORMAL	90	0	0.10	0.10	Hi	0.11
4.000	Water	1.1	WET	0	0	0.00	1.00	Hi	0.13
107.000	Vacant	30.7	DRY	10	0	0.35	0.09	Hi	0.10

349.00 = Total Area Avg. = 55.3 48% 0.176

PERCENT OF SUBBASIN DRY = 31.0 %
NORMAL = 68.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.278

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 48
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 48

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
41	0.545	1.42	0.66	0.06	28.2	0.176	0.278	4.45	0.470	48	44

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 5

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
64	16.000	2.6	0.14	25
98	136.000	22.3	0.37	0
112	131.000	21.5	0.39	0
113	205.000	33.7	0.39	0
115	121.000	19.9	0.39	0

TOTAL = 609.000 Acres XKSAT = 0.38 %Rock = 1

DTHETA

Dry = 0.35 PSIF = 26.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
90.000	LLotRes	14.8	NORMAL	50	15	0.30	0.05	Low	0.05
289.000	SLotRes	47.5	NORMAL	50	30	0.25	0.05	Low	0.05
22.000	MDenRes	3.6	NORMAL	50	45	0.25	0.05		
2.000	N.Retail	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
11.000	Educ.	1.8	NORMAL	80	45	0.29	0.05	Hi	0.12
5.000	Instit.	0.8	NORMAL	75	80	0.10	0.02	Min	0.04
32.000	Rec.Open	5.3	NORMAL	90	0	0.10	0.10	Hi	0.11
158.000	Vacant	25.9	DRY	10	0	0.35	0.09	Hi	0.10

609.00 = Total Area Avg. = 42.6 20% 0.274

PERCENT OF SUBBASIN DRY = 26.0 %
NORMAL = 74.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.276

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.52

IMPERVIOUS AREA: URBAN @ 100 % effective = 20
ROCK OUTCROP @ 100 % effective = 1
% EFFECTIVE IMP. = 21

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
5	0.952	1.30	0.80	0.06	73.1	0.274	0.276	4.10	0.520	21	41

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 6

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	34.000	5.3	0.41	0
2	178.000	27.8	0.41	0
50	18.000	2.8	0.26	0
110	107.000	16.7	0.13	0
112	50.000	7.8	0.39	0
113	221.000	34.5	0.39	0
115	26.000	4.1	0.39	0
LAA	7.000	1.1	0.25	0

TOTAL = 641.000 Acres XKSAT = 0.32 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
43.000	LLotRes	6.7	NORMAL	50	15	0.30	0.05	Low	0.06
447.000	SLotRes	69.7	NORMAL	50	30	0.25	0.05	Low	0.04
77.000	MDenRes	12.0	NORMAL	50	45	0.25	0.05		
21.000	HDensRes	3.3	NORMAL	50	45	0.25	0.05	Low	0.06
5.000	C.Retail	0.8	NORMAL	75	80	0.10	0.02	Min	0.04
3.000	Office	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
3.000	Instit.	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
16.000	Rec.Open	2.5	NORMAL	90	0	0.10	0.10	Hi	0.12
26.000	Vacant	4.1	DRY	10	0	0.35	0.09	Hi	0.11

641.00 = Total Area Avg. = 49.9 30% 0.251

PERCENT OF SUBBASIN DRY = 4.0 %
NORMAL = 96.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.254

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
6	1.002	1.60	1.00	0.05	59.4	0.251	0.254	4.40	0.460	30	41

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 7

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	35.000	19.9	0.26	0
110	82.000	46.6	0.13	0
LAA	59.000	33.5	0.25	0

TOTAL = 176.000 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 21.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
7.000	SLotRes	4.0	NORMAL	50	30	0.25	0.05	Low	0.07
7.000	MDenRes	4.0	NORMAL	50	45	0.25	0.05		
23.000	C.Retail	13.1	NORMAL	75	80	0.10	0.02	Min	0.03
24.000	Rec.Open	13.6	NORMAL	90	0	0.10	0.10	Hi	0.12
78.000	Ag/Orch	44.3	NORMAL	90	0	0.50	0.10	Hi	0.10
37.000	Vacant	21.0	DRY	10	0	0.35	0.09	Hi	0.11

176.00 = Total Area Avg. = 68.0 13% 0.342

PERCENT OF SUBBASIN DRY = 21.0 %
NORMAL = 79.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.277

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 13
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 13

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
7	0.275	1.10	0.50	0.08	52.7	0.342	0.277	5.40	0.310	13	45

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 8

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	4.000	1.3	0.26	0
75	87.000	27.3	0.23	0
LAA	228.000	71.5	0.25	0

TOTAL = 319.000 Acres XKSAT = 0.24 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 80.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
55.000	Ind.	17.2	NORMAL	60	55	0.15	0.03	Min	0.03
8.000	Office	2.5	NORMAL	75	80	0.10	0.02	Min	0.03
256.000	Vacant	80.3	DRY	10	0	0.35	0.09	Hi	0.09

319.00 = Total Area Avg. = 20.2 11% 0.309

PERCENT OF SUBBASIN DRY = 80.0 %
NORMAL = 20.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.330

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 11
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 11

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
8	0.498	1.52	0.95	0.08	34.9	0.309	0.330	4.90	0.270	11	66

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 8a

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	3.000	3.9	0.26	0
55	46.000	60.5	0.27	0
75	8.000	10.5	0.23	0
LAA	19.000	25.0	0.25	0

TOTAL = 76.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 100.
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
76.000	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.10

76.000 = Total Area Avg. = 10.0 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.350

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
8a	0.119	0.60	0.40	0.09	35.0	0.350	0.350	4.70	0.260	0	38

TABLE F-4
Northwest Area
Existing Land Use Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 9

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	11.000	3.9	0.23	0
LAA	269.000	96.1	0.25	0

TOTAL = 280.000 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 1.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2.000	LLotRes	0.7	NORMAL	50	15	0.30	0.05	Low	0.08
7.000	Ind.	2.5	NORMAL	60	55	0.15	0.03	Min	0.03
3.000	Water	1.1	WET	0	0	0.00	1.00	Hi	0.14
266.000	Ag/Orch	95.0	NORMAL	90	0	0.50	0.10	Hi	0.09
2.000	Vacant	0.7	DRY	10	0	0.35	0.09	Hi	0.14

280.00 = Total Area Avg. = 87.4 1% 0.483

PERCENT OF SUBBASIN DRY = 1.0 %
NORMAL = 98.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.249

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
9	0.438	1.60	0.80	0.11	11.2	0.483	0.249	4.80	0.470	1	107

MCUHP2 REPORT
NORTHWEST MESA AREA
EXISTING CONDTIIONS

TABLE F-5
Northwest Area, Existing Land Use Conditions
Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
1	0.391	0.328	0.332	4.40	0.350	7	33.1
10	0.722	0.214	0.255	4.70	0.400	26	42.5
11	1.056	0.241	0.297	4.15	0.520	5	90.0
12	1.031	0.175	0.266	4.00	0.630	26	60.0
13a	0.773	0.260	0.266	4.10	0.530	24	45.9
13b	0.228	0.249	0.257	4.45	0.450	29	35.4
14	0.997	0.229	0.250	4.60	0.420	30	37.2
15a	0.352	0.246	0.253	4.90	0.350	28	34.3
15b	0.511	0.228	0.256	4.70	0.390	32	38.5
16	0.087	0.279	0.279	4.65	0.360	21	18.3
18b	0.377	0.263	0.272	4.00	0.540	26	26.9
19	0.758	0.254	0.306	4.00	0.500	32	40.3
2	0.998	0.234	0.273	4.55	0.420	15	62.3
20	0.580	0.208	0.261	4.15	0.550	45	47.8
21	0.530	0.229	0.256	4.50	0.450	30	46.2
25	0.502	0.244	0.253	4.15	0.540	37	32.8
26	0.250	0.240	0.253	4.25	0.510	32	20.4
27	0.242	0.209	0.274	4.15	0.560	36	20.4
28	0.903	0.232	0.274	4.45	0.440	38	44.5
3	0.998	0.222	0.262	5.30	0.300	24	64.4
33	0.728	0.233	0.252	4.55	0.430	28	65.3
34	0.905	0.208	0.254	4.65	0.420	26	63.0
35	1.461	0.214	0.249	4.50	0.450	22	88.8
4	0.998	0.230	0.287	4.80	0.350	36	54.9
40	0.584	0.219	0.285	4.60	0.390	41	22.5
41	0.545	0.176	0.278	4.45	0.470	48	44.0
5	0.952	0.274	0.276	4.10	0.520	21	40.7
6	1.002	0.251	0.254	4.40	0.460	30	41.2
7	0.275	0.342	0.277	5.40	0.310	13	44.8
8	0.498	0.309	0.330	4.90	0.270	11	65.8
8a	0.119	0.350	0.350	4.70	0.260	0	38.3
9	0.438	0.483	0.249	4.80	0.470	1	107.0

LAG REPORT
NORTHWEST MESA AREA
EXISTING CONDTIIONS

TABLE F-6
Northwest Area, Existing Land Use
Summary of MCUHP2 Lag Time Calculation Parameters

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
1	Valley	0.0810	0.90	0.30	55.60	33.1
10	Valley	0.0620	1.30	0.80	53.80	42.5
11	Valley	0.0870	2.09	1.52	57.40	90.0
12	Valley	0.0830	1.80	0.80	77.80	60.0
13a	Valley	0.0590	1.50	0.90	46.70	45.9
13b	Valley	0.0550	1.10	0.70	40.90	35.4
14	Valley	0.0540	1.40	0.70	46.40	37.2
15a	Valley	0.0530	1.00	0.70	33.00	34.3
15b	Valley	0.0550	1.62	0.43	21.60	38.5
16	Valley	0.0610	0.50	0.20	38.00	18.3
18b	Valley	0.0590	0.90	0.40	55.60	26.9
19	Valley	0.0620	1.40	0.60	46.40	40.3
2	Valley	0.0820	1.50	1.00	65.30	62.3
20	Valley	0.0440	2.38	1.23	37.80	47.8
21	Valley	0.0580	1.71	0.76	38.00	46.2
25	Valley	0.0510	1.30	0.60	42.30	32.8
26	Valley	0.0500	0.80	0.30	43.80	20.4
27	Valley	0.0560	0.60	0.30	45.00	20.4
28	Valley	0.0520	2.00	0.80	39.50	44.5
3	Valley	0.0640	1.80	1.30	36.10	64.4
33	Valley	0.0630	2.00	1.20	32.50	65.3
34	Valley	0.0680	1.71	1.04	32.20	63.0
35	Valley	0.0830	2.19	1.14	29.70	88.8
4	Valley	0.0530	1.70	1.20	23.50	54.9
40	Valley	0.0560	0.76	0.38	69.70	22.5
41	Valley	0.0590	1.42	0.66	28.20	44.0
5	Valley	0.0630	1.30	0.80	73.10	40.7
6	Valley	0.0520	1.60	1.00	59.40	41.2
7	Valley	0.0830	1.10	0.50	52.70	44.8
8	Valley	0.0780	1.52	0.95	34.90	65.8
8a	Valley	0.0900	0.60	0.40	35.00	38.3
9	Valley	0.1080	1.60	0.80	11.20	107.0

SUBBASIN PREPARATION REPORTS
EXISTING CONDITIONS
SOUTHERN MESA AREA

SUBBASIN PARAMETERS
EXISTING CONDITIONS
SOUTHERN MESA AREA

TABLE F-5
Northwest Area, Existing Land Use Conditions
Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
1	0.391	0.328	0.332	4.40	0.350	7	33.1
10	0.722	0.214	0.255	4.70	0.400	26	42.5
11	1.056	0.241	0.297	4.15	0.520	5	90.0
12	1.031	0.175	0.266	4.00	0.630	26	60.0
13a	0.773	0.260	0.266	4.10	0.530	24	45.9
13b	0.228	0.249	0.257	4.45	0.450	29	35.4
14	0.997	0.229	0.250	4.60	0.420	30	37.2
15a	0.352	0.246	0.253	4.90	0.350	28	34.3
15b	0.511	0.228	0.256	4.70	0.390	32	38.5
16	0.087	0.279	0.279	4.65	0.360	21	18.3
18b	0.377	0.263	0.272	4.00	0.540	26	26.9
19	0.758	0.254	0.306	4.00	0.500	32	40.3
2	0.998	0.234	0.273	4.55	0.420	15	62.3
20	0.580	0.208	0.261	4.15	0.550	45	47.8
21	0.530	0.229	0.256	4.50	0.450	30	46.2
25	0.502	0.244	0.253	4.15	0.540	37	32.8
26	0.250	0.240	0.253	4.25	0.510	32	20.4
27	0.242	0.209	0.274	4.15	0.560	36	20.4
28	0.903	0.232	0.274	4.45	0.440	38	44.5
3	0.998	0.222	0.262	5.30	0.300	24	64.4
33	0.728	0.233	0.252	4.55	0.430	28	65.3
34	0.905	0.208	0.254	4.65	0.420	26	63.0
35	1.461	0.214	0.249	4.50	0.450	22	88.8
4	0.998	0.230	0.287	4.80	0.350	36	54.9
40	0.584	0.219	0.285	4.60	0.390	41	22.5
41	0.545	0.176	0.278	4.45	0.470	48	44.0
5	0.952	0.274	0.276	4.10	0.520	21	40.7
6	1.002	0.251	0.254	4.40	0.460	30	41.2
7	0.275	0.342	0.277	5.40	0.310	13	44.8
8	0.498	0.309	0.330	4.90	0.270	11	65.8
8a	0.119	0.350	0.350	4.70	0.260	0	38.3
9	0.438	0.483	0.249	4.80	0.470	1	107.0

TABLE F-6
Northwest Area, Existing Land Use
Summary of MCUHP2 Lag Time Calculation Parameters

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
1	Valley	0.0810	0.90	0.30	55.60	33.1
10	Valley	0.0620	1.30	0.80	53.80	42.5
11	Valley	0.0870	2.09	1.52	57.40	90.0
12	Valley	0.0830	1.80	0.80	77.80	60.0
13a	Valley	0.0590	1.50	0.90	46.70	45.9
13b	Valley	0.0550	1.10	0.70	40.90	35.4
14	Valley	0.0540	1.40	0.70	46.40	37.2
15a	Valley	0.0530	1.00	0.70	33.00	34.3
15b	Valley	0.0550	1.62	0.43	21.60	38.5
16	Valley	0.0610	0.50	0.20	38.00	18.3
18b	Valley	0.0590	0.90	0.40	55.60	26.9
19	Valley	0.0620	1.40	0.60	46.40	40.3
2	Valley	0.0820	1.50	1.00	65.30	62.3
20	Valley	0.0440	2.38	1.23	37.80	47.8
21	Valley	0.0580	1.71	0.76	38.00	46.2
25	Valley	0.0510	1.30	0.60	42.30	32.8
26	Valley	0.0500	0.80	0.30	43.80	20.4
27	Valley	0.0560	0.60	0.30	45.00	20.4
28	Valley	0.0520	2.00	0.80	39.50	44.5
3	Valley	0.0640	1.80	1.30	36.10	64.4
33	Valley	0.0630	2.00	1.20	32.50	65.3
34	Valley	0.0680	1.71	1.04	32.20	63.0
35	Valley	0.0830	2.19	1.14	29.70	88.8
4	Valley	0.0530	1.70	1.20	23.50	54.9
40	Valley	0.0560	0.76	0.38	69.70	22.5
41	Valley	0.0590	1.42	0.66	28.20	44.0
5	Valley	0.0630	1.30	0.80	73.10	40.7
6	Valley	0.0520	1.60	1.00	59.40	41.2
7	Valley	0.0830	1.10	0.50	52.70	44.8
8	Valley	0.0780	1.52	0.95	34.90	65.8
8a	Valley	0.0900	0.60	0.40	35.00	38.3
9	Valley	0.1080	1.60	0.80	11.20	107.0

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 59A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	32.100	18.9	0.41	0
55	137.650	81.1	0.27	0

TOTAL = 169.750 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.55
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
134.700	SLotRes	79.4	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
5.500	Instit.	3.2	NORMAL	75	80	0.10	0.02	Min	0.04
	PubFac		NORMAL	75	80	0.10	0.02	Min	
12.000	Transp.	7.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
3.800	Water	2.2	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
13.750	Vacant	8.1	DRY	10	0	0.35	0.09	Hi	0.12

169.75 = Total Area Avg. = 48 32% 0.240

PERCENT OF SUBBASIN DRY = 8.0 %
NORMAL = 90.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 32
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 32

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
59A	0.265	0.85	0.28	0.07	34.9	0.24	0.25	4.55	0.41	32	30

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 59B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	26.710	4.5	0.41	0
50	280.990	46.9	0.26	0
55	291.780	48.7	0.27	0

TOTAL = 599.480 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
0.300	LLotRes	0.1	NORMAL	50	15	0.30	0.05	Low	0.09
293.500	SLotRes	49.0	NORMAL	50	30	0.25	0.05	Low	0.05
49.600	MDenRes	8.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
6.200	N.Retail	1.0	NORMAL	75	80	0.10	0.02	Min	0.04
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
102.000	Rec.Open	17.0	NORMAL	90	0	0.10	0.10	Hi	0.10
18.100	Water	3.0	WET	0	0	0.00	1.00	Hi	0.12
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
0.880	Ag/Row	0.1	NORMAL	85	0	0.50	0.10	Hi	0.15
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
128.900	Vacant	21.5	DRY	10	0	0.35	0.09	Hi	0.10

599.48 = Total Area Avg. = 47 19% 0.240

PERCENT OF SUBBASIN DRY = 22.0 %
NORMAL = 75.0 %
WET = 3.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

IMPERVIOUS AREA: URBAN @ 100 % effective = 19
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 19

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
59B	0.937	1.18	0.66	0.09	33.9	0.24	0.26	4.65	0.38	19	64

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 60

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	88.995	6.0	0.41	0
50	124.525	8.4	0.26	0
55	1042.125	70.7	0.27	0
75	217.932	14.8	0.23	0

TOTAL = 1474.000 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
636.300	SLotRes	43.2	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
21.200	HDensRes	1.4	NORMAL	50	45	0.25	0.05	Low	0.06
10.100	N.Retail	0.7	NORMAL	75	80	0.10	0.02	Min	0.03
36.900	C.Retail	2.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
12.800	Ind.	0.9	NORMAL	60	55	0.15	0.03	Min	0.03
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
3.400	Office	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
0.800	PubFac	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
49.500	Transp.	3.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
294.200	Rec.Open	20.0	NORMAL	90	0	0.10	0.10	Hi	0.09
53.200	Water	3.6	WET	0	0	0.00	1.00	Hi	0.11
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
355.600	Vacant	24.1	DRY	10	0	0.35	0.09	Hi	0.09

1474.0 = Total Area Avg. = 48 20% 0.220

PERCENT OF SUBBASIN DRY = 24.0 %
NORMAL = 72.0 %
WET = 4.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 20
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 20

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
60	2.303	2.36	1.42	0.10	31.8	0.22	0.26	4.65	0.39	20	120

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 61B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	3.610	0.5	0.41	0
50	65.610	9.4	0.26	0
55	383.870	54.9	0.27	0
75	245.120	35.1	0.23	0
113	0.430	0.1	0.39	0
115	0.370	0.1	0.39	0

TOTAL = 699.010 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.80
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
0.100	LLotRes	0.0	NORMAL	50	15	0.30	0.05	Low	0.09
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
617.110	Ag/Row	88.3	NORMAL	85	0	0.50	0.10	Hi	0.08
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
81.800	Vacant	11.7	DRY	10	0	0.35	0.09	Hi	0.10

699.01 = Total Area Avg. = 76 0% 0.480

PERCENT OF SUBBASIN DRY = 12.0 %
NORMAL = 88.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.43

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
61B	1.092	1.37	0.73	0.10	39.7	0.48	0.26	4.80	0.43	0	71

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 64

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	1.321	0.3	0.41	0
50	120.872	23.3	0.26	0
50	90.456	17.4	0.26	0
55	243.308	46.9	0.27	0
75	63.156	12.2	0.23	0

TOTAL = 519.100 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
2.900	LLotRes	0.6	NORMAL	50	15	0.30	0.05	Low	0.07
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
0.100	Rec.Open	0.0	NORMAL	90	0	0.10	0.10	Hi	0.18
8.300	Water	1.6	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
2.000	Ag/Row	0.4	NORMAL	85	0	0.50	0.10	Hi	0.14
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
505.800	Vacant	97.4	DRY	10	0	0.35	0.09	Hi	0.08
519.10 = Total Area			Avg. =	10	0%	0.340			

PERCENT OF SUBBASIN DRY = 97.0 %
NORMAL = 1.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.34

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
64	0.811	1.18	0.58	0.10	25.4	0.34	0.34	4.70	0.26	0	70

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 61A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	9.680	2.9	0.41	0
50	33.280	10.0	0.26	0
55	41.210	12.4	0.27	0
112	138.430	41.6	0.39	0
115	109.870	33.0	0.39	0

TOTAL = 332.470 Acres XKSAT = 0.36 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.20
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
74.100	LLotRes	22.3	NORMAL	50	15	0.30	0.05	Low	0.05
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
29.500	Transp.	8.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
100.900	Ag/Row	30.3	NORMAL	85	0	0.50	0.10	Hi	0.10
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
127.970	Vacant	38.5	DRY	10	0	0.35	0.09	Hi	0.10

332.47 = Total Area Avg. = 47 10% 0.360

PERCENT OF SUBBASIN DRY = 38.0 %
NORMAL = 62.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.51

IMPERVIOUS AREA: URBAN @ 100 % effective = 10
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 10

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
61A	0.519	0.95	0.43	0.08	36.8	0.36	0.29	4.20	0.51	10	40

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62E

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	44.080	44.9	0.26	0
55	46.440	47.3	0.27	0
113	7.640	7.8	0.39	0

TOTAL = 98.160 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
3.900	Ind.	4.0	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
94.260	Vacant	96.0	DRY	10	0	0.35	0.09	Hi	0.10

98.160 = Total Area Avg. = 12 2% 0.340

PERCENT OF SUBBASIN DRY = 96.0 %
NORMAL = 4.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.28

IMPERVIOUS AREA: URBAN @ 100 % effective = 2
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 2

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62E	0.153	0.62	0.33	0.09	31.9	0.34	0.35	4.65	0.28	2	36

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	57.600	24.0	0.41	0
50	34.750	14.5	0.26	0
55	147.600	61.5	0.27	0

TOTAL = 239.950 Acres XKSAT = 0.30 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.50
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
23.000	Transp.	9.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
216.600	Ag/Row	90.3	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
0.350	Vacant	0.1	DRY	10	0	0.35	0.09	Hi	0.16

239.95 = Total Area Avg. = 84 8% 0.460

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.55

IMPERVIOUS AREA: URBAN @ 100 % effective = 8
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 8

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62A	0.375	0.76	0.47	0.09	30.0	0.46	0.25	4.50	0.55	8	47

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	6.310	4.2	0.41	0
50	9.150	6.1	0.26	0
55	134.370	89.7	0.27	0

TOTAL = 149.830 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
7.200	SLotRes	4.8	NORMAL	50	30	0.25	0.05	Low	0.07
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
12.600	Transp.	8.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
56.330	Ag/Row	37.6	NORMAL	85	0	0.50	0.10	Hi	0.11
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
73.700	Vacant	49.2	DRY	10	0	0.35	0.09	Hi	0.10

149.83 = Total Area Avg. = 46 88 0.380

PERCENT OF SUBBASIN DRY = 49.0 %
NORMAL = 51.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

IMPERVIOUS AREA: URBAN @ 100 % effective = 8
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 8

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62B	0.234	0.63	0.33	0.09	47.5	0.38	0.30	4.65	0.38	8	33

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	92.340	31.3	0.26	0
55	203.110	68.7	0.27	0

TOTAL = 295.450 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
23.500	LLotRes	8.0	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
154.060	Ag/Row	52.1	NORMAL	85	0	0.50	0.10	Hi	0.10
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
117.890	Vacant	39.9	DRY	10	0	0.35	0.09	Hi	0.10

295.45 = Total Area Avg. = 52 1% 0.420

PERCENT OF SUBBASIN DRY = 40.0 %
NORMAL = 60.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62D	0.462	0.90	0.33	0.09	30.7	0.42	0.29	4.65	0.40	1	44

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	159.430	45.6	0.26	0
55	189.980	54.4	0.27	0

TOTAL = 349.410 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
93.800	SLotRes	26.8	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
9.100	Rec.Open	2.6	NORMAL	90	0	0.10	0.10	Hi	0.13
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
5.000	Ag/Row	1.4	NORMAL	85	0	0.50	0.10	Hi	0.13
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
241.510	Vacant	69.1	DRY	10	0	0.35	0.09	Hi	0.09

349.41 = Total Area Avg. = 24 8% 0.320

PERCENT OF SUBBASIN DRY = 69.0 %
NORMAL = 31.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 8
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 8

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62C	0.546	0.62	0.28	0.08	24.2	0.32	0.32	4.65	0.31	8	32

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62F

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	103.350	62.8	0.26	0
55	43.900	26.7	0.27	0
113	17.420	10.6	0.39	0

TOTAL = 164.670 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
26.800	LLotRes	16.3	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
0.170	Ag/Row	0.1	NORMAL	85	0	0.50	0.10	Hi	0.17
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
137.700	Vacant	83.6	DRY	10	0	0.35	0.09	Hi	0.10

164.67 = Total Area Avg. = 17 2% 0.340

PERCENT OF SUBBASIN DRY = 84.0 %
NORMAL = 16.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.33

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.29

IMPERVIOUS AREA: URBAN @ 100 % effective = 2
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 2

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62F	0.257	0.62	0.38	0.08	31.9	0.34	0.33	4.65	0.29	2	36

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 63

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	16.480	2.8	0.41	0
50	111.337	19.1	0.26	0
50	16.902	2.9	0.26	0
55	438.213	75.2	0.27	0

TOTAL = 582.900 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
45.100	LLotRes	7.7	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
2.900	N.Retail	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
102.000	Ag/Row	17.5	NORMAL	85	0	0.50	0.10	Hi	0.10
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
432.900	Vacant	74.3	DRY	10	0	0.35	0.09	Hi	0.08
582.90 = Total Area			Avg. =	26	2%	0.370			

PERCENT OF SUBBASIN DRY = 74.0 %
NORMAL = 26.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.32

IMPERVIOUS AREA: URBAN @ 100 % effective = 2
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 2

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
63	0.911	2.00	1.50	0.09	20.0	0.37	0.32	4.65	0.32	2	108

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	0.360	0.2	0.05	0
75	147.550	77.6	0.23	0
112	29.010	15.3	0.39	0
113	5.520	2.9	0.39	0
115	7.580	4.0	0.39	0

TOTAL = 190.020 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
21.500	Transp.	11.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
168.520	Vacant	88.7	DRY	10	0	0.35	0.09	Hi	0.09
190.02 = Total Area			Avg. =	17	9%	0.320			

PERCENT OF SUBBASIN DRY = 89.0 %
NORMAL = 11.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.34

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.28

IMPERVIOUS AREA: URBAN @ 100 % effective = 9
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 9

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67A	0.297	1.04	0.66	0.08	42.9	0.32	0.34	4.70	0.28	9	50

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	22.700	6.7	0.41	0
55	1.660	0.5	0.27	0
77	72.170	21.2	0.05	0
75	26.200	7.7	0.23	0
112	25.370	7.4	0.39	0
113	117.660	34.5	0.39	0
115	74.990	22.0	0.39	0

TOTAL = 340.750 Acres XKSAT = 0.24 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.90
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
35.100	Transp.	10.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
305.650	Vacant	89.7	DRY	10	0	0.35	0.09	Hi	0.09
340.75 = Total Area			Avg. =	17	8%	0.320			

PERCENT OF SUBBASIN DRY = 90.0 %
NORMAL = 10.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.34

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 8
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 8

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67B	0.532	1.23	0.85	0.08	28.0	0.32	0.34	4.90	0.26	8	65

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	10.890	1.8	0.27	0
77	93.230	15.7	0.05	0
78	22.540	3.8	0.05	0
75	192.770	32.6	0.23	0
112	33.950	5.7	0.39	0
113	230.340	38.9	0.39	0
115	8.290	1.4	0.39	0

TOTAL = 592.010 Acres XKSAT = 0.22 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
592.010	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.08

592.01 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.22

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67C	0.925	1.23	0.66	0.09	40.2	0.35	0.36	5.10	0.22	0	59

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	0.420	0.5	0.26	0
77	4.330	5.4	0.05	0
75	75.190	94.1	0.23	0

TOTAL = 79.940 Acres XKSAT = 0.21 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.20
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
79.940	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.10

79.940 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.37

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.21

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67D	0.125	0.57	0.38	0.09	34.7	0.35	0.37	5.20	0.21	0	37

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67E

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	28.730	7.7	0.26	0
55	257.840	69.1	0.27	0
77	79.670	21.3	0.05	0
75	6.940	1.9	0.23	0

TOTAL = 373.180 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
373.180	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.09

373.18 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.38

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.19

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67E	0.583	1.23	0.71	0.09	32.3	0.35	0.38	5.40	0.19	0	64

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 68A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	81.290	36.4	0.26	0
55	63.020	28.2	0.27	0
77	61.970	27.7	0.05	0
113	17.130	7.7	0.39	0

TOTAL = 223.410 Acres XKSAT = 0.17 %Rock = 0

DTHETA

Dry = 0.39 PSIF = 5.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
12.300	Ind.	5.5	NORMAL	60	55	0.15	0.03	Min	0.03
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
211.110	Vacant	94.5	DRY	10	0	0.35	0.09	Hi	0.09
223.41 = Total Area			Avg. =	13	3%	0.340			

PERCENT OF SUBBASIN DRY = 94.0 %
NORMAL = 6.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.38

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.18

IMPERVIOUS AREA: URBAN @ 100 % effective = 3
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 3

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
68A	0.349	0.66	0.38	0.09	37.7	0.34	0.38	5.70	0.18	3	37

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 68B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	71.280	45.5	0.26	0
55	1.890	1.2	0.27	0
77	33.580	21.4	0.05	0
78	0.070	0.0	0.05	0
113	49.770	31.8	0.39	0

TOTAL = 156.590 Acres XKSAT = 0.21 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.20
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
0.090	Ag/Row	0.1	NORMAL	85	0	0.50	0.10	Hi	0.18
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
156.500	Vacant	99.9	DRY	10	0	0.35	0.09	Hi	0.10

156.59 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.37

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.21

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
68B	0.245	0.62	0.28	0.09	32.3	0.35	0.37	5.20	0.21	0	34

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 69

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	40.623	69.6	0.26	0
55	17.706	30.4	0.27	0

TOTAL = 58.330 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
24.700	Ag/Row	42.3	NORMAL	85	0	0.50	0.10	Hi	0.12
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
33.630	Vacant	57.7	DRY	10	0	0.35	0.09	Hi	0.11
58.330 = Total Area			Avg. =	42	0%	0.410			

PERCENT OF SUBBASIN DRY = 58.0 %
NORMAL = 42.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.31

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
69	0.091	0.67	0.33	0.09	22.4	0.41	0.31	4.70	0.35	0	42

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 71

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	0.002	0.0	0.41	0
50	369.800	53.1	0.26	0
55	3.919	0.6	0.27	0
55	26.877	3.9	0.27	0
77	35.198	5.1	0.05	0
75	20.146	2.9	0.23	0
76	48.637	7.0	0.23	0
112	191.361	27.5	0.39	0

TOTAL = 695.940 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
3.177	LLotRes	0.5	NORMAL	50	15	0.30	0.05	Low	0.07
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
201.596	Ag/Row	29.0	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
491.172	Vacant	70.6	DRY	10	0	0.35	0.09	Hi	0.08

695.94 = Total Area Avg. = 32 0% 0.390

PERCENT OF SUBBASIN DRY = 71.0 %
NORMAL = 30.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.32

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
71	1.087	2.36	0.92	0.09	25.4	0.39	0.32	4.70	0.32	0	97

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 65A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	1.100	0.1	0.27	0
77	1.100	0.1	0.05	0
78	68.700	4.2	0.05	0
75	1547.900	95.4	0.23	0
76	0.500	0.0	0.23	0
112	3.100	0.2	0.39	0

TOTAL = 1622.400 Acres XKSAT = 0.22 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1572.48	Desert	96.9	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
35.481	Ind.	2.2	NORMAL	60	55	0.15	0.03	Min	0.03
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
14.500	Ag/Row	0.9	NORMAL	85	0	0.50	0.10	Hi	0.12
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1622.4 = Total Area Avg. = 26 1% 0.350

PERCENT OF SUBBASIN DRY = 97.0 %
NORMAL = 3.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
65A	2.535	1.60	0.90	0.09	51.2	0.35	0.36	5.10	0.26	1	70

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 65AW

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
22	0.270	0.1	0.04	0
55	5.000	1.8	0.27	0
77	41.180	14.9	0.05	0
75	186.400	67.2	0.23	0
76	4.290	1.5	0.23	0
112	40.070	14.5	0.39	0

TOTAL = 277.210 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
277.210	Desert	100.	DRY	25	0	0.35	0.09	Low	0.05
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDensRes		NORMAL	50	45	0.25	0.05	Low	
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

277.21 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.37

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.23

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
65AW	0.433	0.90	0.60	0.09	54.7	0.35	0.37	5.30	0.23	0	26

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 65B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	28.121	3.2	0.27	0
79	156.368	17.8	0.02	0
77	40.020	4.6	0.05	0
75	357.545	40.7	0.23	0
76	67.469	7.7	0.23	0
112	219.780	25.0	0.39	0
23	9.747	1.1	0.01	0

TOTAL = 879.050 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
879.050	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.08

879.05 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.40

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.15

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
65B	1.374	1.99	1.23	0.09	37.5	0.35	0.40	6.00	0.15	0	92

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 66A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	57.130	33.7	0.05	0
75	88.450	52.1	0.23	0
112	18.040	10.6	0.39	0
113	6.130	3.6	0.39	0

TOTAL = 169.750 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
11.150	Transp.	6.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
0.040	Water	0.0	WET	0	0	0.00	1.00	Hi	0.18
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
18.010	Ag/Row	10.6	NORMAL	85	0	0.50	0.10	Hi	0.12
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
140.550	Vacant	82.8	DRY	10	0	0.35	0.09	Hi	0.10
169.75 = Total Area			Avg. =	22	5%	0.350			

PERCENT OF SUBBASIN DRY = 83.0 %
NORMAL = 17.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.38

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.17

IMPERVIOUS AREA: URBAN @ 100 % effective = 5
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 5

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
66A	0.265	0.71	0.28	0.09	55.9	0.35	0.38	6.00	0.17	5	31

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 66B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	421.090	98.6	0.23	0
113	6.130	1.4	0.39	0

TOTAL = 427.220 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
427.220	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.08
427.22 = Total Area			Avg. =	10	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.23

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
66B	0.668	1.61	1.04	0.09	43.3	0.35	0.36	5.00	0.23	0	77

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 66C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	11.820	3.7	0.26	0
77	36.070	11.3	0.05	0
75	271.250	85.0	0.23	0

TOTAL = 319.140 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
319.140	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.09
319.14 = Total Area			Avg. =	10	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.38

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.19

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
66C	0.499	1.14	0.66	0.09	39.5	0.35	0.38	5.40	0.19	0	58

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 66D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	50.030	25.3	0.26	0
55	4.130	2.1	0.27	0
77	103.790	52.5	0.05	0
75	39.810	20.1	0.23	0

TOTAL = 197.760 Acres XKSAT = 0.11 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 6.80
Normal = 0.17
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
197.760	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.09
197.76 = Total Area			Avg. =	10	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.11

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
66D	0.309	1.04	0.66	0.09	28.6	0.35	0.36	6.80	0.11	0	59

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 70A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	51.340	14.9	0.26	0
55	9.110	2.6	0.27	0
75	36.930	10.7	0.23	0
77	198.100	57.6	0.05	0
113	48.590	14.1	0.39	0

TOTAL = 344.070 Acres XKSAT = 0.11 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 6.80
Normal = 0.17
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
4.240	LLotRes	1.2	NORMAL	50	15	0.30	0.05	Low	0.07
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.096	Ind.	0.0	NORMAL	60	55	0.15	0.03	Min	0.05
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
339.740	Vacant	98.7	DRY	10	0	0.35	0.09	Hi	0.09

344.07 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 99.0 %
NORMAL = 1.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.11

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
70A	0.538	0.76	0.57	0.09	26.3	0.35	0.36	6.80	0.11	0	50

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 70B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	6.180	2.6	0.26	0
77	196.660	81.4	0.05	0
113	38.630	16.0	0.39	0

TOTAL = 241.470 Acres XKSAT = 0.07 %Rock = 0

DTHETA

Dry = 0.30 PSIF = 8.00
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
10.580	LLotRes	4.4	NORMAL	50	15	0.30	0.05	Low	0.07
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
39.740	Ag/Row	16.5	NORMAL	85	0	0.50	0.10	Hi	0.11
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
191.150	Vacant	79.2	DRY	10	0	0.35	0.09	Hi	0.09

241.47 = Total Area Avg. = 24 1% 0.370

PERCENT OF SUBBASIN DRY = 79.0 %
NORMAL = 21.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.27

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.08

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
70B	0.377	1.04	0.71	0.09	23.8	0.37	0.27	8.00	0.08	1	63

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 76B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	0.540	0.1	0.41	0
23	27.230	6.7	0.01	0
50	30.150	7.4	0.26	0
77	323.300	79.2	0.05	0
VE	26.880	6.6	0.01	0

TOTAL = 408.100 Acres XKSAT = 0.05 %Rock = 0

DTHETA

Dry = 0.27 PSIF = 8.80
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
39.000	Ag/Row	9.6	NORMAL	85	0	0.50	0.10	Hi	0.11
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
369.100	Vacant	90.4	DRY	10	0	0.35	0.09	Hi	0.09

408.10 = Total Area Avg. = 17 0% 0.360

PERCENT OF SUBBASIN DRY = 90.0 %
NORMAL = 10.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.05

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
76B	0.638	1.80	0.85	0.09	27.4	0.36	0.26	8.80	0.05	0	82

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 72

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	29.492	5.5	0.41	0
22	6.752	1.3	0.04	0
50	396.143	73.4	0.26	0
77	91.241	16.9	0.05	0
75	15.636	2.9	0.23	0
VE	0.333	0.1	0.00	0

TOTAL = 539.600 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
0.140	LLotRes	0.0	NORMAL	50	15	0.30	0.05	Low	0.09
14.860	SLotRes	2.8	NORMAL	50	30	0.25	0.05	Low	0.06
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
0.120	Water	0.0	WET	0	0	0.00	1.00	Hi	0.17
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
524.480	Vacant	97.2	DRY	10	0	0.35	0.09	Hi	0.08

539.60 = Total Area Avg. = 11 1% 0.350

PERCENT OF SUBBASIN DRY = 97.0 %
NORMAL = 3.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.37

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.20

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
72	0.843	1.75	0.58	.0.09	13.1	0.35	0.37	5.30	0.20	1	79

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 76A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	199.820	16.3	0.01	0
50	290.130	23.7	0.26	0
55	0.340	0.0	0.27	0
79	46.920	3.8	0.02	0
77	554.860	45.3	0.05	0
75	1.880	0.2	0.23	0
113	44.120	3.6	0.39	0
VE	86.530	7.1	0.01	0

TOTAL = 1224.600 Acres XKSAT = 0.05 %Rock = 0

DTHETA

Dry = 0.27 PSIF = 8.80
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.310	Bus.Park	0.0	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
1.230	Airport	0.1	NORMAL	60	55	0.15	0.03	Min	0.04
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
0.130	Water	0.0	WET	0	0	0.00	1.00	Hi	0.17
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
1222.98	Vacant	99.9	DRY	10	0	0.35	0.09	Hi	0.07

1224.6 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.27

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.05

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
76A	1.913	3.00	1.80	0.09	23.0	0.35	0.27	8.80	0.05	0	135

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 73A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	0.730	0.1	0.41	0
55	0.850	0.1	0.27	0
77	1.740	0.3	0.05	0
75	601.180	99.2	0.23	0
113	1.590	0.3	0.39	0

TOTAL = 606.090 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
604.450	Desert	99.7	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
1.640	Water	0.3	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

606.09 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
73A	0.947	2.27	1.04	0.09	34.9	0.35	0.36	5.00	0.27	0	95

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 73B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	76.600	28.4	0.41	0
50	10.710	4.0	0.26	0
55	19.210	7.1	0.27	0
77	65.260	24.2	0.05	0
75	71.360	26.5	0.23	0
113	26.300	9.8	0.39	0

TOTAL = 269.440 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
269.440	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.09

269.44 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.37

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.20

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
73B	0.421	0.57	0.38	0.09	26.3	0.35	0.37	5.30	0.20	0	39

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 73C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	85.360	23.0	0.41	0
50	83.680	22.5	0.26	0
77	69.170	18.6	0.05	0
75	133.090	35.8	0.23	0

TOTAL = 371.300 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.310	Ind.	0.1	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
370.990	Vacant	99.9	DRY	10	0	0.35	0.09	Hi	0.09

371.30 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.37

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.20

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
73C	0.580	0.57	0.28	0.09	43.7	0.35	0.37	5.30	0.20	0	32

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 74A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	2.500	0.5	0.41	0
77	1.470	0.3	0.05	0
75	478.730	99.2	0.23	0

TOTAL = 482.700 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
480.110	Desert	99.5	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
2.590	Water	0.5	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

482.70 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
74A	0.754	2.37	0.99	0.09	42.2	0.35	0.36	5.00	0.27	0	93

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 74B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	108.324	51.5	0.41	0
50	0.241	0.1	0.26	0
77	100.081	47.6	0.05	0
113	1.754	0.8	0.39	0

TOTAL = 210.400 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
210.400	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.09
210.40 = Total Area			Avg. =	10	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.40

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.15

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
74B	0.329	0.62	0.47	0.09	32.1	0.35	0.40	6.00	0.15	0	42

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 74C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	57.830	26.2	0.41	0
50	9.440	4.3	0.26	0
77	140.530	63.7	0.05	0
113	12.750	5.8	0.39	0
115	0.140	0.1	0.39	0

TOTAL = 220.690 Acres XKSAT = 0.10 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 7.00
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
220.690	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.09

220.69 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.10

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
74C	0.345	0.71	0.47	0.09	25.4	0.35	0.35	7.00	0.10	0	46

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 75

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	10.364	0.4	0.41	0
1	31.672	1.2	0.41	0
50	215.491	8.4	0.26	0
55	1.199	0.0	0.27	0
79	178.044	6.9	0.02	0
77	979.798	38.2	0.05	0
78	88.526	3.5	0.05	0
75	839.357	32.8	0.23	0
112	218.677	8.5	0.39	0
115	0.035	0.0	0.39	0

TOTAL = 2563.000 Acres XKSAT = 0.11 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 6.80
Normal = 0.17
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2468.80	Desert	96.3	DRY	25	0	0.35	0.09	Low	0.03
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	10	55	0.35	0.09	Min	
94.200	Bus.Park	3.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

2563.0 = Total Area Avg. = 27 38 0.340

PERCENT OF SUBBASIN DRY = 96.0 %
NORMAL = 4.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35
SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.13
IMPERVIOUS AREA: URBAN @ 100 % effective = 3
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 3

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
75	4.005	4.00	3.00	0.09	20.0	0.34	0.35	6.80	0.13	3	182

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 77A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	3.300	0.3	0.41	0
77	2.300	0.2	0.05	0
75	1105.370	99.3	0.23	0
113	1.930	0.2	0.39	0

TOTAL = 1112.900 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1110.44	Desert	99.8	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
2.490	Water	0.2	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1112.9 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
77A	1.739	2.89	1.47	0.09	31.1	0.35	0.36	5.00	0.27	0	119

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 77B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	82.520	36.2	0.41	0
77	78.930	34.6	0.05	0
113	66.580	29.2	0.39	0

TOTAL = 228.030 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
62.260	LLotRes	27.3	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
165.770	Vacant	72.7	DRY	10	0	0.35	0.09	Hi	0.09

228.03 = Total Area Avg. = 21 4% 0.340

PERCENT OF SUBBASIN DRY = 73.0 %
NORMAL = 27.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.34

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.22

IMPERVIOUS AREA: URBAN @ 100 % effective = 4
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 4

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
77B	0.356	0.57	0.28	0.08	26.3	0.34	0.34	5.30	0.22	4	30

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 77C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	4.190	2.3	0.41	0
77	69.660	38.8	0.05	0
78	9.040	5.0	0.05	0
113	96.530	53.7	0.39	0
115	0.260	0.1	0.39	0

TOTAL = 179.680 Acres XKSAT = 0.16 %Rock = 0

DTHETA

Dry = 0.39 PSIF = 5.80
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
179.680	Vacant	100.	DRY	10	0	0.35	0.09	Hi	0.09
179.68 = Total Area			Avg. =	10	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.39

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.16

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
77C	0.281	0.52	0.28	0.09	32.3	0.35	0.39	5.80	0.16	0	32

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
22	0.020	0.0	0.04	0
77	79.100	5.4	0.05	0
75	1178.100	80.4	0.23	0
112	150.600	10.3	0.39	0
113	57.480	3.9	0.39	0

TOTAL = 1465.300 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1465.30	Desert	100.	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
1465.3 = Total Area			Avg. =	25	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78A	2.290	3.70	2.10	0.09	28.5	0.35	0.36	5.00	0.27	0	149

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	71.620	28.9	0.01	0
79	74.870	30.2	0.02	0
113	101.070	40.8	0.39	0

TOTAL = 247.560 Acres XKSAT = 0.06 %Rock = 0

DTHETA

Dry = 0.29 PSIF = 8.40
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
247.330	LLotRes	99.9	NORMAL	50	15	0.30	0.05	Low	0.05
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
0.230	Vacant	0.1	DRY	10	0	0.35	0.09	Hi	0.17

247.56 = Total Area Avg. = 50 15% 0.300

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.09

IMPERVIOUS AREA: URBAN @ 100 % effective = 15
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 15

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78B	0.387	0.57	0.38	0.05	31.6	0.30	0.15	8.40	0.09	15	21

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	134.060	75.0	0.01	0
79	1.110	0.6	0.02	0
113	43.590	24.4	0.39	0

TOTAL = 178.760 Acres XKSAT = 0.02 %Rock = 0

DTHETA

Dry = 0.19 PSIF = 11.20
Normal = 0.10
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
31.990	LLotRes	17.9	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
146.770	Vacant	82.1	DRY	10	0	0.35	0.09	Hi	0.10
178.76 = Total Area			Avg. =	17	38	0.340			

PERCENT OF SUBBASIN DRY = 82.0 %
NORMAL = 18.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.17

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.02

IMPERVIOUS AREA: URBAN @ 100 % effective = 3
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 3

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78C	0.279	0.47	0.28	0.08	31.7	0.34	0.17	11.20	0.02	3	29

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 79A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	36.230	2.8	0.41	0
1	4.940	0.4	0.41	0
23	341.420	26.6	0.01	0
50	83.800	6.5	0.26	0
55	7.900	0.6	0.27	0
77	139.460	10.9	0.05	0
78	343.110	26.7	0.05	0
76	7.400	0.6	0.23	0
113	307.260	23.9	0.39	0
115	12.480	1.0	0.39	0

TOTAL = 1284.000 Acres XKSAT = 0.07 %Rock = 0

DTHETA

Dry = 0.30 PSIF = 8.00
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1283.23	Desert	99.9	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.770	Bus.Park	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1284.0 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30
SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.08
IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
79A	2.006	2.32	1.23	0.09	23.2	0.35	0.30	8.00	0.08	0	106

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78F

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	0.440	0.0	0.01	0
50	0.660	0.0	0.26	0
55	2.150	0.1	0.27	0
77	4.180	0.2	0.05	0
75	2736.270	99.7	0.23	0

TOTAL = 2743.700 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2743.70	Desert	100.	DRY	25	0	0.35	0.09	Low	0.03
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
2743.7 = Total Area			Avg. =	25	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78F	4.287	3.69	2.08	0.09	32.6	0.35	0.36	5.00	0.27	0	145

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	56.960	10.0	0.41	0
23	241.790	42.6	0.01	0
50	13.650	2.4	0.26	0
55	39.800	7.0	0.27	0
77	36.910	6.5	0.05	0
78	4.840	0.9	0.05	0
75	11.920	2.1	0.23	0
113	161.500	28.5	0.39	0

TOTAL = 567.370 Acres XKSAT = 0.07 %Rock = 0

DTHETA

Dry = 0.30 PSIF = 8.00
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
1.330	LLotRes	0.2	NORMAL	50	15	0.30	0.05	Low	0.08
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
566.040	Vacant	99.8	DRY	10	0	0.35	0.09	Hi	0.08

567.37 = Total Area Avg. = 10 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.07

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78D	0.887	1.23	0.47	0.09	21.7	0.35	0.30	8.00	0.07	0	59

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82A1

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
22	0.440	0.0	0.04	0
50	0.490	0.0	0.26	0
77	2.670	0.1	0.05	0
75	1990.210	99.7	0.23	0
112	1.610	0.1	0.39	0

TOTAL = 1995.420 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1995.42	Desert	100.	DRY	25	0	0.35	0.09	Low	0.03
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
1995.4 = Total Area			Avg. =	25	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82A1	3.118	3.60	0.90	0.09	33.9	0.35	0.36	5.00	0.27	0	103

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82A2

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	3.600	0.1	0.05	0
75	2637.600	99.9	0.23	0

TOTAL = 2641.200 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2640.60	Desert	100.	DRY	25	0	0.35	0.09	Low	0.03
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDensRes		NORMAL	50	45	0.25	0.05	Low	
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.590	Ind.	0.0	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
0.080	Ag/Row	0.0	NORMAL	85	0	0.50	0.10	Hi	0.18
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

2641.2 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82A2	4.127	4.60	2.90	0.09	27.2	0.35	0.36	5.00	0.27	0	185

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82A3

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	1294.800	100.	0.23	0

TOTAL = 1294.800 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1293.41	Desert	99.9	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDensRes		NORMAL	50	45	0.25	0.05	Low	
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.150	Ind.	0.0	NORMAL	60	55	0.15	0.03	Min	0.05
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
1.300	Ag/Row	0.1	NORMAL	85	0	0.50	0.10	Hi	0.15
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
1294.8 = Total Area			Avg. =	25	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82A3	2.023	3.60	2.00	0.09	28.3	0.35	0.36	5.00	0.27	0	145

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82A4

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
22	11.860	0.9	0.04	0
77	35.290	2.6	0.05	0
75	1294.670	94.9	0.23	0
112	21.880	1.6	0.39	0

TOTAL = 1363.700 Acres XKSAT = 0.22 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1361.62	Desert	99.8	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDensRes		NORMAL	50	45	0.25	0.05	Low	
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
2.080	Ind.	0.2	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1363.7 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82A4	2.131	3.50	1.50	0.09	29.1	0.35	0.36	5.10	0.26	0	128

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78E

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	234.240	36.4	0.01	0
77	179.480	27.9	0.05	0
78	61.790	9.6	0.05	0
75	31.690	4.9	0.23	0
113	136.600	21.2	0.39	0

TOTAL = 643.800 Acres XKSAT = 0.05 %Rock = 0

DTHETA

Dry = 0.27 PSIF = 8.80
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
594.310	Desert	92.3	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
48.350	LLotRes	7.5	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
1.140	Ag/Row	0.2	NORMAL	85	0	0.50	0.10	Hi	0.15
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
643.80 = Total Area			Avg. =	27	1%	0.350			

PERCENT OF SUBBASIN DRY = 92.0 %
NORMAL = 8.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.06

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78E	1.006	1.14	0.47	0.09	17.4	0.35	0.26	8.80	0.06	1	57

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 79B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	266.970	41.8	0.01	0
55	50.070	7.8	0.27	0
77	183.700	28.8	0.05	0
78	63.040	9.9	0.05	0
75	67.090	10.5	0.23	0
113	7.130	1.1	0.39	0

TOTAL = 638.000 Acres XKSAT = 0.04 %Rock = 0

DTHETA

Dry = 0.25 PSIF = 9.70
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
636.940	Desert	99.8	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
0.390	Airport	0.1	NORMAL	60	55	0.15	0.03	Min	0.04
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
0.670	Ag/Row	0.1	NORMAL	85	0	0.50	0.10	Hi	0.15
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
638.00 = Total Area			Avg. =	25	0%	0.350			

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.05

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
79B	0.997	1.37	0.57	0.09	9.0	0.35	0.25	9.70	0.05	0	78

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 80A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	814.440	48.2	0.01	0
50	47.360	2.8	0.26	0
55	64.800	3.8	0.27	0
77	281.520	16.7	0.05	0
78	78.310	4.6	0.05	0
75	165.000	9.8	0.23	0
76	143.680	8.5	0.23	0
113	93.990	5.6	0.39	0

TOTAL = 1689.100 Acres XKSAT = 0.04 %Rock = 0

DTHETA

Dry = 0.25 PSIF = 9.70
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.350	Ind.	0.0	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
1465.01	Airport	86.7	NORMAL	60	55	0.15	0.03	Min	0.02
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
0.340	Ag/Row	0.0	NORMAL	85	0	0.50	0.10	Hi	0.16
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
223.470	Vacant	13.2	DRY	10	0	0.35	0.09	Hi	0.09

1689.1 = Total Area Avg. = 53 48% 0.180

PERCENT OF SUBBASIN DRY = 13.0 %
NORMAL = 87.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.16

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.06

IMPERVIOUS AREA: URBAN @ 100 % effective = 48
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 48

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
80A	2.639	3.79	2.18	0.04	14.2	0.18	0.16	9.70	0.06	48	74

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 80B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	149.180	20.9	0.01	0
50	13.610	1.9	0.26	0
55	8.740	1.2	0.27	0
75	528.890	74.0	0.23	0
VE	14.060	2.0	0.01	0

TOTAL = 714.480 Acres XKSAT = 0.11 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 6.80
Normal = 0.17
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
53.180	SLotRes	7.4	NORMAL	50	30	0.25	0.05	Low	0.06
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
502.430	Airport	70.3	NORMAL	60	55	0.15	0.03	Min	0.02
130.760	Rec.Open	18.3	NORMAL	90	0	0.10	0.10	Hi	0.10
0.260	Water	0.0	WET	0	0	0.00	1.00	Hi	0.16
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
27.850	Vacant	3.9	DRY	10	0	0.35	0.09	Hi	0.11

714.48 = Total Area Avg. = 63 41% 0.160

PERCENT OF SUBBASIN DRY = 4.0 %
NORMAL = 96.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.18

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.17

IMPERVIOUS AREA: URBAN @ 100 % effective = 41
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 41

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
80B	1.116	1.52	0.95	0.05	18.4	0.16	0.18	6.80	0.17	41	45

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	3.160	0.5	0.41	0
77	0.560	0.1	0.05	0
75	584.960	99.4	0.23	0

TOTAL = 588.680 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
586.520	Desert	99.6	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
0.970	Ag/Row	0.2	NORMAL	85	0	0.50	0.10	Hi	0.15
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
1.190	Vacant	0.2	DRY	10	0	0.35	0.09	Hi	0.15

588.68 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82B	0.920	0.95	0.43	0.09	21.2	0.35	0.36	5.00	0.27	0	17

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 83

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	635.966	98.7	0.23	0
22	6.611	1.0	0.04	0
75	2.163	0.3	0.23	0

TOTAL = 644.700 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
16.290	LLotRes	2.5	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
8.060	Ind.	1.3	NORMAL	60	55	0.15	0.03	Min	0.03
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
620.350	Ag/Row	96.2	NORMAL	85	0	0.50	0.10	Hi	0.08
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

644.70 = Total Area Avg. = 84 1% 0.490

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
83	1.007	2.00	0.50	0.10	15.0	0.49	0.25	5.00	0.42	1	84

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 84

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	289.968	45.7	0.23	0
22	1.385	0.2	0.04	0
54	109.824	17.3	0.29	0
55	11.783	1.9	0.27	0
55	181.711	28.7	0.27	0
75	0.072	0.0	0.23	0
125	39.200	6.2	0.43	0

TOTAL = 633.900 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.140	Ind.	0.0	NORMAL	60	55	0.15	0.03	Min	0.05
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
633.760	Ag/Row	100.	NORMAL	85	0	0.50	0.10	Hi	0.08
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

633.90 = Total Area Avg. = 85 0% 0.500

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
84	0.990	2.00	0.50	0.10	12.5	0.50	0.25	4.70	0.48	0	89

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 85

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
54	179.426	27.9	0.29	0
55	69.339	10.8	0.27	0
55	125.863	19.6	0.27	0
125	268.440	41.7	0.43	0

TOTAL = 643.100 Acres XKSAT = 0.33 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.35
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
643.100	Ag/Row	100.	NORMAL	85	0	0.50	0.10	Hi	0.08
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
643.10 = Total Area			Avg. =	85	0%	0.500			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.60

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
85	1.005	2.00	0.50	0.10	15.0	0.50	0.25	4.35	0.60	0	86

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 86

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
54	89.171	13.9	0.29	0
55	398.704	62.2	0.27	0
55	70.773	11.1	0.27	0
125	81.830	12.8	0.43	0

TOTAL = 640.500 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.55
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
639.500	Ag/Row	99.8	NORMAL	85	0	0.50	0.10	Hi	0.08
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
1.000	Vacant	0.2	DRY	10	0	0.35	0.09	Hi	0.15

640.50 = Total Area Avg. = 85 0% 0.500

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
86	1.001	2.00	0.50	0.10	15.0	0.50	0.25	4.55	0.53	0	86

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 87A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	314.880	100.	0.23	0

TOTAL = 314.880 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
314.880	Ag/Row	100.	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

314.88 = Total Area Avg. = 85 0% 0.500

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
87A	0.492	0.99	0.47	0.10	24.9	0.50	0.25	5.00	0.42	0	59

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 87B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	315.100	100.	0.23	0

TOTAL = 315.100 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
315.100	Ag/Row	100.	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

315.10 = Total Area Avg. = 85 0% 0.500

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
87B	0.492	0.85	0.47	0.10	11.6	0.50	0.25	5.00	0.42	0	64

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 88A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	321.100	100.	0.23	0

TOTAL = 321.100 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
321.100	Ag/Row	100.	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

321.10 = Total Area Avg. = 85 0% 0.500

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
88A	0.502	0.76	0.24	0.10	13.2	0.50	0.25	5.00	0.42	0	46

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 88B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	318.780	100.	0.23	0

TOTAL = 318.780 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
318.780	Ag/Row	100.	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

318.78 = Total Area Avg. = 85 0% 0.500

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
88B	0.498	0.95	0.57	0.10	21.2	0.50	0.25	5.00	0.42	0	64

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 89A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	62.210	19.5	0.25	0
55	83.230	26.1	0.27	0
75	150.320	47.2	0.23	0
VF	22.700	7.1	1.20	0

TOTAL = 318.460 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
0.140	Rec.Open	0.0	NORMAL	90	0	0.10	0.10	Hi	0.17
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
318.320	Ag/Row	100.	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

318.46 = Total Area Avg. = 85 0% 0.500

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.50

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
89A	0.498	1.04	0.57	0.10	19.0	0.50	0.25	4.65	0.50	0	68

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 89B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	33.850	10.7	0.25	0
55	134.030	42.2	0.27	0
75	148.170	46.7	0.23	0
VF	1.290	0.4	0.00	0

TOTAL = 317.340 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.80
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
0.690	Rural	0.2	NORMAL	30	5	0.30	0.05	Low	0.08
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
316.650	Ag/Row	99.8	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

317.34 = Total Area Avg. = 85 0% 0.500

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
89B	0.496	0.95	0.47	0.10	23.2	0.50	0.25	4.80	0.46	0	58

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 90A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	47.610	15.5	0.25	0
55	247.150	80.4	0.27	0
VF	12.570	4.1	1.25	0

TOTAL = 307.330 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
3.050	Transp.	1.0	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
285.200	Ag/Row	92.8	NORMAL	85	0	0.50	0.10	Hi	0.09
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
19.080	Vacant	6.2	DRY	10	0	0.35	0.09	Hi	0.12

307.33 = Total Area Avg. = 80 1% 0.490

PERCENT OF SUBBASIN DRY = 6.0 %
NORMAL = 94.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.50

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
90A	0.480	0.57	0.19	0.10	24.2	0.49	0.26	4.60	0.50	1	33

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 90B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	64.680	12.2	0.25	0
55	463.460	87.8	0.27	0

TOTAL = 528.140 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
319.690	Rural	60.5	NORMAL	30	5	0.30	0.05	Low	0.05
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
0.380	Transp.	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
123.240	Ag/Row	23.3	NORMAL	85	0	0.50	0.10	Hi	0.10
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
84.830	Vacant	16.1	DRY	10	0	0.35	0.09	Hi	0.10

528.14 = Total Area Avg. = 40 3% 0.350

PERCENT OF SUBBASIN DRY = 16.0 %
NORMAL = 84.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.27

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.36

IMPERVIOUS AREA: URBAN @ 100 % effective = 3
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 3

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
90B	0.825	1.99	1.18	0.07	15.3	0.35	0.27	4.65	0.36	3	81

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 91

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
54	3.189	1.1	0.29	0
55	210.000	71.3	0.27	0
55	81.328	27.6	0.27	0

TOTAL = 294.500 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
5.290	Ind.	1.8	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
5.080	Transp.	1.7	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
45.560	Ag/Row	15.5	NORMAL	85	0	0.50	0.10	Hi	0.11
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
238.570	Vacant	81.0	DRY	10	0	0.35	0.09	Hi	0.09
294.50 = Total Area			Avg. =	24	2%	0.370			

PERCENT OF SUBBASIN DRY = 81.0 %
NORMAL = 19.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.33

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 2
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 2

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
91	0.460	1.36	0.58	0.09	18.4	0.37	0.33	4.65	0.31	2	67

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 81A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	2.940	0.3	0.01	0
55	858.220	73.9	0.27	0
75	299.840	25.8	0.23	0

TOTAL = 1161.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
3.310	SLotRes	0.3	NORMAL	50	30	0.25	0.05	Low	0.07
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
67.580	Ind.	5.8	NORMAL	60	55	0.15	0.03	Min	0.03
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
1051.78	Airport	90.6	NORMAL	60	55	0.15	0.03	Min	0.02
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
1.820	Ag/Row	0.2	NORMAL	85	0	0.50	0.10	Hi	0.14
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
36.530	Vacant	3.1	DRY	10	0	0.35	0.09	Hi	0.11

1161.0 = Total Area Avg. = 58 53% 0.160

PERCENT OF SUBBASIN DRY = 3.0 %
NORMAL = 97.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 53
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 53

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
81A	1.814	3.27	1.89	0.03	16.4	0.16	0.25	4.70	0.40	53	54

TABLE F-7
Southern Mesa Area
Existing Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 81B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	72.260	13.4	0.26	0
55	313.200	58.1	0.27	0
75	153.280	28.5	0.23	0

TOTAL = 538.740 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
179.470	SLotRes	33.3	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.610	Ind.	0.1	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
3.500	Transp.	0.6	NORMAL	75	80	0.10	0.02	Min	0.04
104.810	Airport	19.5	NORMAL	60	55	0.15	0.03	Min	0.03
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
0.470	Water	0.1	WET	0	0	0.00	1.00	Hi	0.16
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
249.880	Vacant	46.4	DRY	10	0	0.35	0.09	Hi	0.09
538.74 = Total Area			Avg. =	34	21%	0.280			

PERCENT OF SUBBASIN
DRY = 46.0 %
NORMAL = 53.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.29

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.33

IMPERVIOUS AREA: URBAN @ 100 % effective = 21
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 21

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
81B	0.842	1.09	0.43	0.06	6.9	0.28	0.29	4.70	0.33	21	49

MCUHP2 REPORT
EXISTING CONDITIONS
SOUTHERN MESA AREA

TABLE F-8
Southern Mesa Area
Existing Conditions
MCUHP2 Report

Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
59A	0.265	0.240	0.250	4.55	0.410	32	30.2
59B	0.937	0.240	0.260	4.65	0.380	19	63.7
60	2.303	0.220	0.260	4.65	0.390	20	120.0
64	0.811	0.340	0.340	4.70	0.260	0	70.1
61A	0.519	0.360	0.290	4.20	0.510	10	40.3
61B	1.092	0.480	0.260	4.80	0.430	0	70.8
62E	0.153	0.340	0.350	4.65	0.280	2	35.9
62A	0.375	0.460	0.250	4.50	0.550	8	46.9
62B	0.234	0.380	0.300	4.65	0.380	8	32.7
62D	0.462	0.420	0.290	4.65	0.400	1	43.6
62C	0.546	0.320	0.320	4.65	0.310	8	32.3
62F	0.257	0.340	0.330	4.65	0.290	2	35.7
63	0.911	0.370	0.320	4.65	0.320	2	108.0
67A	0.297	0.320	0.340	4.70	0.280	9	50.1
67B	0.532	0.320	0.340	4.90	0.260	8	64.5
67C	0.925	0.350	0.360	5.10	0.220	0	59.3
67D	0.125	0.350	0.370	5.20	0.210	0	36.9
67E	0.583	0.350	0.380	5.40	0.190	0	63.6
68A	0.349	0.340	0.380	5.70	0.180	3	37.2
68B	0.245	0.350	0.370	5.20	0.210	0	34.4
69	0.091	0.410	0.310	4.70	0.350	0	42.3
71	1.087	0.390	0.320	4.70	0.320	0	97.2
65A	2.535	0.350	0.360	5.10	0.260	1	69.7
65AW	0.433	0.350	0.370	5.30	0.230	0	26.1
65B	1.374	0.350	0.400	6.00	0.150	0	91.5
66A	0.265	0.350	0.380	6.00	0.170	5	31.2
66B	0.668	0.350	0.360	5.00	0.230	0	77.0
66C	0.499	0.350	0.380	5.40	0.190	0	57.8
66D	0.309	0.350	0.360	6.80	0.110	0	59.4
70A	0.538	0.350	0.360	6.80	0.110	0	50.1
70B	0.377	0.370	0.270	8.00	0.080	1	63.2
76B	0.638	0.360	0.260	8.80	0.050	0	82.1
72	0.843	0.350	0.370	5.30	0.200	1	79.1
76A	1.913	0.350	0.270	8.80	0.050	0	135.0
73A	0.947	0.350	0.360	5.00	0.270	0	94.5
73B	0.421	0.350	0.370	5.30	0.200	0	38.9
73C	0.580	0.350	0.370	5.30	0.200	0	31.5
74A	0.754	0.350	0.360	5.00	0.270	0	92.9
74B	0.329	0.350	0.400	6.00	0.150	0	42.0
74C	0.345	0.350	0.350	7.00	0.100	0	46.2
75	4.005	0.340	0.350	6.80	0.130	3	182.0
77A	1.739	0.350	0.360	5.00	0.270	0	119.0
77B	0.356	0.340	0.340	5.30	0.220	4	30.4
77C	0.281	0.350	0.390	5.80	0.160	0	32.2
78A	2.290	0.350	0.360	5.00	0.270	0	149.0

TABLE F-8
Southern Mesa Area
Existing Conditions
MCUHP2 Report
(continued)

Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
78B	0.387	0.300	0.150	8.40	0.090	15	20.9
78C	0.279	0.340	0.170	11.20	0.020	3	28.7
79A	2.006	0.350	0.300	8.00	0.080	0	106.0
78F	4.287	0.350	0.360	5.00	0.270	0	145.0
78D	0.887	0.350	0.300	8.00	0.070	0	58.6
82A1	3.118	0.350	0.360	5.00	0.270	0	103.0
82A2	4.127	0.350	0.360	5.00	0.270	0	185.0
82A3	2.023	0.350	0.360	5.00	0.270	0	145.0
82A4	2.131	0.350	0.360	5.10	0.260	0	128.0
78E	1.006	0.350	0.260	8.80	0.060	1	57.4
79B	0.997	0.350	0.250	9.70	0.050	0	77.7
80A	2.639	0.180	0.160	9.70	0.060	48	73.7
80B	1.116	0.160	0.180	6.80	0.170	41	44.7
82B	0.920	0.350	0.360	5.00	0.270	0	17.2
83	1.007	0.490	0.250	5.00	0.420	1	84.4
84	0.990	0.500	0.250	4.70	0.480	0	89.1
85	1.005	0.500	0.250	4.35	0.600	0	86.1
86	1.001	0.500	0.250	4.55	0.530	0	86.1
87A	0.492	0.500	0.250	5.00	0.420	0	58.5
87B	0.492	0.500	0.250	5.00	0.420	0	63.8
88A	0.502	0.500	0.250	5.00	0.420	0	46.2
88B	0.498	0.500	0.250	5.00	0.420	0	63.8
89A	0.498	0.500	0.250	4.65	0.500	0	67.5
89B	0.496	0.500	0.250	4.80	0.460	0	58.3
90A	0.480	0.490	0.260	4.60	0.500	1	33.4
90B	0.825	0.350	0.270	4.65	0.360	3	80.7
91	0.460	0.370	0.330	4.65	0.310	2	67.3
81A	1.814	0.160	0.250	4.70	0.400	53	54.1
81B	0.842	0.280	0.290	4.70	0.330	21	48.6

LAG REPORT
EXISTING CONDITIONS
SOUTHERN MESA AREA

TABLE F-9
Southern Mesa Area
Existing Conditions
Summary of MCUHP2 Lag Time Calculation Parameters

Summary of MCUHP2 Lag Time Calculation Parameters

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
59A	Valley	0.0710	0.85	0.28	34.90	30.2
59B	Valley	0.0950	1.18	0.66	33.90	63.7
60	Valley	0.1020	2.36	1.42	31.80	120.0
64	Valley	0.1040	1.18	0.58	25.40	70.1
61A	Valley	0.0780	0.95	0.43	36.80	40.3
61B	Valley	0.0990	1.37	0.73	39.70	70.8
62E	Valley	0.0880	0.62	0.33	31.90	35.9
62A	Valley	0.0920	0.76	0.47	30.00	46.9
62B	Valley	0.0860	0.63	0.33	47.50	32.7
62D	Valley	0.0920	0.90	0.33	30.70	43.6
62C	Valley	0.0800	0.62	0.28	24.20	32.3
62F	Valley	0.0830	0.62	0.38	31.90	35.7
63	Valley	0.0880	2.00	1.50	20.00	108.0
67A	Valley	0.0820	1.04	0.66	42.90	50.1
67B	Valley	0.0830	1.23	0.85	28.00	64.5
67C	Valley	0.0900	1.23	0.66	40.20	59.3
67D	Valley	0.0900	0.57	0.38	34.70	36.9
67E	Valley	0.0900	1.23	0.71	32.30	63.6
68A	Valley	0.0870	0.66	0.38	37.70	37.2
68B	Valley	0.0900	0.62	0.28	32.30	34.4
69	Valley	0.0940	0.67	0.33	22.40	42.3
71	Valley	0.0930	2.36	0.92	25.40	97.2
65A	Valley	0.0890	1.60	0.90	51.20	69.7
65AW	Valley	0.0900	0.90	0.60	54.70	26.1
65B	Valley	0.0900	1.99	1.23	37.50	91.5
66A	Valley	0.0860	0.71	0.28	55.90	31.2
66B	Valley	0.0900	1.61	1.04	43.30	77.0
66C	Valley	0.0900	1.14	0.66	39.50	57.8
66D	Valley	0.0900	1.04	0.66	28.60	59.4
70A	Valley	0.0890	0.76	0.57	26.30	50.1
70B	Valley	0.0900	1.04	0.71	23.80	63.2
76B	Valley	0.0910	1.80	0.85	27.40	82.1
72	Valley	0.0890	1.75	0.58	13.10	79.1
76A	Valley	0.0900	3.00	1.80	23.00	135.0
73A	Valley	0.0930	2.27	1.04	34.90	94.5
73B	Valley	0.0900	0.57	0.38	26.30	38.9
73C	Valley	0.0900	0.57	0.28	43.70	31.5
74A	Valley	0.0950	2.37	0.99	42.20	92.9
74B	Valley	0.0900	0.62	0.47	32.10	42.0
74C	Valley	0.0900	0.71	0.47	25.40	46.2
75	Valley	0.0870	4.00	3.00	20.00	182.0
77A	Valley	0.0920	2.89	1.47	31.10	119.0
77B	Valley	0.0790	0.57	0.28	26.30	30.4
77C	Valley	0.0900	0.52	0.28	32.30	32.2
78A	Valley	0.0900	3.70	2.10	28.50	149.0
78B	Valley	0.0500	0.57	0.38	31.60	20.9
78C	Valley	0.0830	0.47	0.28	31.70	28.7

TABLE F-9
Southern Mesa Area
Existing Conditions
Summary of MCUHP2 Lag Time Calculation Parameters
(continued)

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
79A	Valley	0.0900	2.32	1.23	23.20	106.0
78F	Valley	0.0900	3.69	2.08	32.60	145.0
78D	Valley	0.0900	1.23	0.47	21.70	58.6
82A1	Desert/Rangeland	0.0900	3.60	0.90	33.90	103.0
82A2	Desert/Rangeland	0.0900	4.60	2.90	27.20	185.0
82A3	Desert/Rangeland	0.0900	3.60	2.00	28.30	145.0
82A4	Desert/Rangeland	0.0900	3.50	1.50	29.10	128.0
78E	Valley	0.0870	1.14	0.47	17.40	57.4
79B	Valley	0.0900	1.37	0.57	9.00	77.7
80A	Valley	0.0380	3.79	2.18	14.20	73.7
80B	Valley	0.0470	1.52	0.95	18.40	44.7
82B	Valley	0.0900	0.95	0.43	21.20	17.2
83	Valley	0.0980	2.00	0.50	15.00	84.4
84	Valley	0.1000	2.00	0.50	12.50	89.1
85	Valley	0.1000	2.00	0.50	15.00	86.1
86	Valley	0.1000	2.00	0.50	15.00	86.1
87A	Valley	0.1000	0.99	0.47	24.90	58.5
87B	Valley	0.1000	0.85	0.47	11.60	63.8
88A	Valley	0.1000	0.76	0.24	13.20	46.2
88B	Valley	0.1000	0.95	0.57	21.20	63.8
89A	Valley	0.1000	1.04	0.57	19.00	67.5
89B	Valley	0.1000	0.95	0.47	23.20	58.3
90A	Valley	0.0990	0.57	0.19	24.20	33.4
90B	Valley	0.0680	1.99	1.18	15.30	80.7
91	Valley	0.0890	1.36	0.58	18.40	67.3
81A	Valley	0.0320	3.27	1.89	16.40	54.1
81B	Valley	0.0650	1.09	0.43	6.90	48.6

APPENDIX G

SUBBASIN PREPARATION REPORTS
FUTURE CONDITIONS

APPENDIX G

TABLE G-1 Northeast Mesa Area, Future Conditions, Subbasin Parameters **G-1**

TABLE G-2 Northeast Mesa Area, Future Conditions, MCUHP2 Report **G-41**

TABLE G-3 Northeast Mesa Area, Future Conditions, Lag Report **G-42**

TABLE G-4 Northeast Mesa Area, Future Conditions, Subbasin Retention Volumes **G-43**

TABLE G-5 Northwest Mesa Area, Future Conditions, Subbasin Parameters **G-44**

TABLE G-6 Northwest Mesa Area, Future Conditions, MCUHP2 Report **G-76**

TABLE G-7 Northwest Mesa Area, Future Conditions, Lag Report **G-77**

TABLE G-8 Northwest Mesa Area, Future Conditions, Subbasin Retention Volumes **G-78**

TABLE G-9 Southern Mesa Area, Future Conditions, Subbasin Parameters **G-79**

TABLE G-10 Southern Mesa Area, Future Conditions, MCUHP2 Report **G-153**

TABLE G-11 Southern Mesa Area, Future Conditions, Lag Report **G-155**

TABLE G-12 Southern Mesa Area, Future Conditions, Subbasin Retention Volumes **G-157**

SUBBASIN PREPARATION REPORTS
FUTURE CONDITIONS
NORTHEAST MESA AREA

SUBBASIN PARAMETERS
FUTURE CONDITIONS
NORTHEAST MESA AREA

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 42

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
3	133.000	11.9	0.58	0
10	24.000	2.1	0.94	0
12	38.000	3.4	0.01	0
44	194.000	17.4	0.03	0
68	69.000	6.2	0.63	0
98	603.000	53.9	0.37	0
113	12.000	1.1	0.39	0
115	14.000	1.3	0.39	0
116	31.000	2.8	0.23	0

TOTAL = 1118.000 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Ver. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
410.000	Rural	36.7	NORMAL	30	5	0.30	0.05	Low	0.04
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
327.000	SLotRes	29.2	NORMAL	50	30	0.25	0.05	Low	0.05
170.000	MDenRes	15.2	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
184.000	C.Retail	16.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
1.000	PubFac	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
26.000	Rec.Open	2.3	NORMAL	90	0	0.10	0.10	Hi	0.11
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
1118.0 = Total Area			Avg. =	42	31%	0.240			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
42	1.747	3.12	1.55	0.05	60.9	0.24	0.25	5.00	0.31	31	55

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 51

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
12	24.000	3.0	0.01	0
44	45.000	5.7	0.03	0
78	16.000	2.0	0.05	0
98	250.000	31.4	0.37	0
113	350.000	44.0	0.39	0
115	111.000	13.9	0.39	0

TOTAL = 796.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
382.000	SLotRes	48.0	NORMAL	50	30	0.25	0.05	Low	0.04
198.000	MDenRes	24.9	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
216.000	C.Retail	27.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
796.00 = Total Area			Avg. =	53	47%	0.210			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 47
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 47

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
51	1.244	1.47	0.75	0.04	54.4	0.21	0.25	4.60	0.41	47	29

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 44A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
12	54.000	5.3	0.01	0
78	30.000	2.9	0.05	0
98	51.000	5.0	0.37	0
113	740.000	72.5	0.39	0
115	137.000	13.4	0.39	0
118	8.000	0.8	0.42	0

TOTAL = 1020.000 Acres XKSAT = 0.30 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.50
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
263.000	Rural	25.8	NORMAL	30	5	0.30	0.05	Low	0.05
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
555.000	SLotRes	54.4	NORMAL	50	30	0.25	0.05	Low	0.04
27.000	MDenRes	2.6	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
24.000	N.Retail	2.4	NORMAL	75	80	0.10	0.02	Min	0.03
109.000	C.Retail	10.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
4.000	PubFac	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
33.000	Rec.Open	3.2	NORMAL	90	0	0.10	0.10	Hi	0.11
5.000	Water	0.5	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1020.0 = Total Area Avg. = 45 30% 0.240

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % *effective* = 30
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
44A	1.594	2.75	1.38	0.05	54.5	0.24	0.25	4.50	0.42	30	53

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 43

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
3	5.000	0.5	0.58	0
12	21.000	2.3	0.01	0
44	105.000	11.5	0.03	0
68	3.000	0.3	0.63	0
98	601.000	65.9	0.37	0
113	177.000	19.4	0.39	0

TOTAL = 912.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
3.000	Rural	0.3	NORMAL	30	5	0.30	0.05	Low	0.07
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
461.000	SLotRes	50.5	NORMAL	50	30	0.25	0.05	Low	0.04
63.000	MDenRes	6.9	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
231.000	C.Retail	25.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
114.000	PubFac	12.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
40.000	Rec.Open	4.4	NORMAL	90	0	0.10	0.10	Hi	0.11
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
912.00 = Total Area			Avg. =	57	49%	0.190			

PERCENT OF SUBBASIN
DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 49
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 49

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
43	1.425	1.89	0.94	0.04	58.2	0.19	0.25	4.70	0.40	49	34

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 53

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
12	10.000	2.0	0.01	0
78	139.000	27.7	0.05	0
98	6.000	1.2	0.37	0
113	319.000	63.5	0.39	0
115	28.000	5.6	0.39	0

TOTAL = 502.000 Acres XKSAT = 0.21 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.20
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
438.000	SLotRes	87.3	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
64.000	C.Retail	12.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
502.00 = Total Area			Avg. =	51	36%	0.230			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 36
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 36

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
53	0.784	1.89	0.94	0.05	63.5	0.23	0.25	5.20	0.31	36	37

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 54

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	18.000	5.8	0.05	0
78	93.000	29.8	0.05	0
98	2.000	0.6	0.37	0
113	199.000	63.8	0.39	0

TOTAL = 312.000 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
304.000	SLotRes	97.4	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
5.000	C.Retail	1.6	NORMAL	75	80	0.10	0.02	Min	0.04
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
3.000	Water	1.0	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

312.00 = Total Area Avg. = 49 31% 0.250

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
54	0.488	1.52	0.76	0.06	42.8	0.25	0.25	5.40	0.27	31	39

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 57

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	39.000	34.2	0.05	0
75	3.000	2.6	0.23	0
113	72.000	63.2	0.39	0

TOTAL = 114.000 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
40.000	SLotRes	35.1	NORMAL	50	30	0.25	0.05	Low	0.06
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
16.000	C.Retail	14.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
45.000	Bus.Park	39.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
6.000	Transp.	5.3	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
7.000	Water	6.1	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

114.00 = Total Area Avg. = 50 58% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 94.0 %
WET = 6.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.23

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 58
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 58

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
57	0.178	0.28	0.14	0.09	35.7	0.15	0.23	5.40	0.27	58	6

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 36A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	21.000	33.9	0.05	0
75	28.000	45.2	0.23	0
113	13.000	21.0	0.39	0

TOTAL = 62.000 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05	Low	
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
38.000	PubFac	61.3	NORMAL	90	0	0.20	0.10	Hi	0.11
22.000	Transp.	35.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
2.000	Water	3.2	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

62.000 = Total Area Avg. = 84 28% 0.160

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 97.0 %
WET = 3.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 28
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 28

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
36A	0.097	0.34	0.17	0.10	44.1	0.16	0.24	6.00	0.27	28	24

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 52

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	155.000	56.0	0.05	0
113	101.000	36.5	0.39	0
115	21.000	7.6	0.39	0

TOTAL = 277.000 Acres XKSAT = 0.12 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 6.60
Normal = 0.19
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
190.000	SLotRes	68.6	NORMAL	50	30	0.25	0.05	Low	0.05
2.000	MDenRes	0.7	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
72.000	C.Retail	26.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
13.000	PubFac	4.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

277.00 = Total Area Avg. = 53 45% 0.200

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.19

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.18

IMPERVIOUS AREA: URBAN @ 100 % effective = 45
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 45

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
52	0.433	1.64	0.74	0.04	54.9	0.20	0.19	6.60	0.18	45	36

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 56

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	14.000	4.0	0.05	0
78	238.000	68.0	0.05	0
113	98.000	28.0	0.39	0

TOTAL = 350.000 Acres XKSAT = 0.09 %Rock = 0

DTHETA

Dry = 0.33 PSIF = 7.30
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
178.000	SLotRes	50.9	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
39.000	C.Retail	11.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
102.000	PubFac	29.1	NORMAL	75	80	0.10	0.02	Min	0.03
28.000	Transp.	8.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
3.000	Rec.Open	0.9	NORMAL	90	0	0.10	0.10	Hi	0.14
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

350.00 = Total Area Avg. = 56 54% 0.180

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.14

IMPERVIOUS AREA: URBAN @ 100 % effective = 54
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 54

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
56	0.547	0.95	0.51	0.04	57.9	0.18	0.15	7.30	0.14	54	33

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 58

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	2.000	0.3	0.05	0
78	173.000	28.5	0.05	0
75	206.000	33.9	0.23	0
113	227.000	37.3	0.39	0

TOTAL = 608.000 Acres XKSAT = 0.18 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
114.000	SLotRes	18.8	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
67.000	C.Retail	11.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
212.000	Bus.Park	34.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
79.000	PubFac	13.0	NORMAL	75	80	0.10	0.02	Min	0.03
25.000	Transp.	4.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
82.000	Rec.Open	13.5	NORMAL	90	0	0.10	0.10	Hi	0.10
29.000	Water	4.8	WET	0	0	0.00	1.00	Hi	0.11
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

608.00 = Total Area Avg. = 64 56% 0.120

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 95.0 %
WET = 5.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.29

IMPERVIOUS AREA: URBAN @ 100 % effective = 56
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 56

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
58	0.950	1.13	0.51	0.08	50.4	0.12	0.24	5.60	0.29	56	28

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 44B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	17.000	2.5	0.05	0
78	373.000	55.2	0.05	0
98	3.000	0.4	0.37	0
114	283.000	41.9	0.39	0

TOTAL = 676.000 Acres XKSAT = 0.12 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 6.60
Normal = 0.19
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
447.000	SLotRes	66.1	NORMAL	50	30	0.25	0.05	Low	0.04
135.000	MDenRes	20.0	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
12.000	N.Retail	1.8	NORMAL	75	80	0.10	0.02	Min	0.03
75.000	C.Retail	11.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
7.000	Water	1.0	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

676.00 = Total Area Avg. = 50 39% 0.230

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.19

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.17

IMPERVIOUS AREA: URBAN @ 100 % effective = 39
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 39

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
44B	1.056	1.08	0.88	0.06	64.8	0.23	0.19	6.60	0.17	39	32

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 36B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	71.000	35.0	0.05	0
78	72.000	35.5	0.05	0
75	23.000	11.3	0.23	0
113	36.000	17.7	0.39	0
112	1.000	0.5	0.39	0

TOTAL = 203.000 Acres XKSAT = 0.09 %Rock = 0

DTHETA

Dry = 0.33 PSIF = 7.30
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05	Low	
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
4.000	N.Retail	2.0	NORMAL	75	80	0.10	0.02	Min	0.04
2.000	C.Retail	1.0	NORMAL	75	80	0.10	0.02	Min	0.04
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
11.000	Bus.Park	5.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
145.000	PubFac	71.4	NORMAL	90	0	0.20	0.10	Hi	0.10
39.000	Transp.	19.2	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
2.000	Water	1.0	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

203.00 = Total Area Avg. = 88 22% 0.170

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.17

IMPERVIOUS AREA: URBAN @ 100 % effective = 22
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 22

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
36B	0.317	1.00	0.50	0.09	45.0	0.17	0.15	7.30	0.17	22	44

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 46B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	84.000	36.7	0.41	0
78	3.000	1.3	0.05	0
113	18.000	7.9	0.39	0
115	124.000	54.1	0.39	0

TOTAL = 229.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
175.000	MDenRes	76.4	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
47.000	N.Retail	20.5	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
7.000	Water	3.1	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

229.00 = Total Area Avg. = 49 51% 0.210

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 97.0 %
WET = 3.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.56

IMPERVIOUS AREA: URBAN @ 100 % effective = 51
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 51

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
46B	0.358	1.40	0.70	0.07	42.9	0.21	0.24	4.00	0.56	51	33

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 29A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	26.000	22.4	0.41	0
113	87.000	75.0	0.39	0
115	3.000	2.6	0.39	0

TOTAL = 116.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
53.000	SLotRes	45.7	NORMAL	50	30	0.25	0.05	Low	0.06
38.000	MDenRes	32.8	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
1.000	N.Retail	0.9	NORMAL	75	80	0.10	0.02	Min	0.04
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
18.000	Rec.Open	15.5	NORMAL	90	0	0.10	0.10	Hi	0.12
6.000	Water	5.2	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

116.00 = Total Area Avg. = 55 29% 0.210

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 95.0 %
WET = 5.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.58

IMPERVIOUS AREA: URBAN @ 100 % effective = 29
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 29

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
29A	0.181	0.85	0.38	0.11	41.2	0.21	0.24	4.00	0.58	29	25

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 45A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	33.000	8.4	0.37	0
112	249.000	63.0	0.39	0
115	113.000	28.6	0.39	0

TOTAL = 395.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
56.000	Rural	14.2	NORMAL	30	5	0.30	0.05	Low	0.06
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
219.000	SLotRes	55.4	NORMAL	50	30	0.25	0.05	Low	0.05
1.000	MDenRes	0.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
9.000	N.Retail	2.3	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	C.Retail	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
102.000	Rec.Open	25.8	NORMAL	90	0	0.10	0.10	Hi	0.10
7.000	Water	1.8	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

395.00 = Total Area Avg. = 59 19% 0.210

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.60

IMPERVIOUS AREA: URBAN @ 100 % effective = 19
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 19

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
45A	0.617	1.99	1.01	.0.08	70.4	0.21	0.25	4.00	0.60	19	51

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 55B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	3.000	0.3	0.41	0
3	4.000	0.3	0.58	0
78	14.000	1.2	0.05	0
98	327.000	27.5	0.37	0
113	578.000	48.5	0.39	0
115	265.000	22.3	0.39	0

TOTAL = 1191.000 Acres XKSAT = 0.38 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
24.000	Rural	2.0	NORMAL	30	5	0.30	0.05	Low	0.06
181.000	LLotRes	15.2	NORMAL	50	15	0.30	0.05	Low	0.05
473.000	SLotRes	39.7	NORMAL	50	30	0.25	0.05	Low	0.04
302.000	MDenRes	25.4	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
38.000	N.Retail	3.2	NORMAL	75	80	0.10	0.02	Min	0.03
47.000	C.Retail	3.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
120.000	Rec.Open	10.1	NORMAL	90	0	0.10	0.10	Hi	0.10
6.000	Water	0.5	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1191.0 = Total Area Avg. = 55 31% 0.230

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.57

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
55B	1.861	3.50	1.75	0.06	48.6	0.23	0.25	4.10	0.57	31	73

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 29B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
113	30.000	58.8	0.39	0
115	21.000	41.2	0.39	0

TOTAL = 51.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
23.000	SLotRes	45.1	NORMAL	50	30	0.25	0.05	Low	0.06
1.000	MDenRes	2.0	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
3.000	Educ.	5.9	NORMAL	80	45	0.29	0.05	Hi	0.14
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
23.000	Rec.Open	45.1	NORMAL	90	0	0.10	0.10	Hi	0.12
1.000	Water	2.0	WET	0	0	0.00	1.00	Hi	0.15
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

51.000 = Total Area Avg. = 72 17% 0.180

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.66

IMPERVIOUS AREA: URBAN @ 100 % effective = 17
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 17

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
29B	0.080	0.76	0.47	0.09	52.6	0.18	0.25	4.00	0.66	17	23

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 45B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	195.000	46.4	0.05	0
113	207.000	49.3	0.39	0
115	18.000	4.3	0.39	0

TOTAL = 420.000 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
18.000	SLotRes	4.3	NORMAL	50	30	0.25	0.05	Low	0.06
329.000	MDenRes	78.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
69.000	N.Retail	16.4	NORMAL	75	80	0.10	0.02	Min	0.03
1.000	C.Retail	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
3.000	Water	0.7	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

420.00 = Total Area Avg. = 51 50% 0.220

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.22

IMPERVIOUS AREA: URBAN @ 100 % effective = 50
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 50

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
45B	0.656	1.89	0.94	0.05	45.0	0.22	0.25	6.00	0.22	50	40

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 29C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	62.000	41.6	0.05	0
113	85.000	57.0	0.39	0
115	2.000	1.3	0.39	0

TOTAL = 149.000 Acres XKSAT = 0.17 %Rock = 0

DTHETA

Dry = 0.39 PSIF = 5.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
78.000	SLotRes	52.3	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
6.000	HDensRes	4.0	NORMAL	50	45	0.25	0.05	Low	0.07
2.000	N.Retail	1.3	NORMAL	75	80	0.10	0.02	Min	0.04
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
43.000	Educ.	28.9	NORMAL	80	45	0.29	0.05	Hi	0.11
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
17.000	Rec.Open	11.4	NORMAL	90	0	0.10	0.10	Hi	0.12
3.000	Water	2.0	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
149.00 = Total Area			Avg. =	62	32%	0.240			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 32
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 32

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
29C	0.233	0.85	0.47	0.07	58.8	0.24	0.25	5.70	0.27	32	30

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 55

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
78	14.000	15.6	0.05	0
113	76.000	84.4	0.39	0

TOTAL = 90.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
87.000	SLotRes	96.7	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
3.000	Water	3.3	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

90.000 = Total Area Avg. = 48 29% 0.240

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 97.0 %
WET = 3.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 29
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 29

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
55	0.141	0.47	0.23	0.08	72.3	0.24	0.24	4.60	0.40	29	13

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 29D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	4.000	1.0	0.05	0
78	86.000	20.7	0.05	0
75	31.000	7.5	0.23	0
112	294.000	70.8	0.39	0

TOTAL = 415.000 Acres XKSAT = 0.24 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.90
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
255.000	SLotRes	61.4	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
4.000	HDensRes	1.0	NORMAL	50	45	0.25	0.05	Low	0.07
22.000	N.Retail	5.3	NORMAL	75	80	0.10	0.02	Min	0.03
77.000	C.Retail	18.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
47.000	Educ.	11.3	NORMAL	80	45	0.29	0.05	Hi	0.11
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
10.000	Water	2.4	WET	0	0	0.00	1.00	Hi	0.12
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
415.00 = Total Area			Avg. =	53	43%	0.210			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 43
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 43

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
29D	0.648	1.23	0.85	0.07	40.7	0.21	0.25	4.90	0.35	43	41

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 36C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	3.000	1.1	0.41	0
12	15.000	5.3	0.01	0
77	9.000	3.2	0.05	0
78	7.000	2.5	0.05	0
75	21.000	7.4	0.23	0
113	206.000	72.3	0.39	0
115	24.000	8.4	0.39	0

TOTAL = 285.000 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
19.000	N.Retail	6.7	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
228.000	Bus.Park	80.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
38.000	Transp.	13.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

285.00 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
36C	0.445	1.20	0.60	0.02	44.2	0.10	0.25	4.65	0.47	80	16

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 30

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
112	211.000	29.3	0.39	0
55	4.000	0.6	0.27	0
98	36.000	5.0	0.37	0
113	355.000	49.4	0.39	0
112	3.000	0.4	0.39	0
115	110.000	15.3	0.39	0

TOTAL = 719.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
689.000	MDenRes	95.8	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
13.000	N.Retail	1.8	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
1.000	Bus.Park	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
6.000	Educ.	0.8	NORMAL	80	45	0.29	0.05	Hi	0.13
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
10.000	Rec.Open	1.4	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
719.00 = Total Area			Avg. =	51	45%	0.250			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.57

IMPERVIOUS AREA: URBAN @ 100 % effective = 45
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 45

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
30	1.123	2.00	1.00	0.05	40.0	0.25	0.25	4.00	0.57	45	47

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 37

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	0.000	0.0	0.41	0
1	11.000	3.7	0.41	0
55	6.000	2.0	0.27	0
113	135.000	45.3	0.39	0
112	8.000	2.7	0.39	0
115	138.000	46.3	0.39	0

TOTAL = 298.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
13.000	N.Retail	4.4	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
234.000	Bus.Park	78.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
51.000	Transp.	17.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

298.00 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.67

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
37	0.466	1.00	0.50	0.02	45.0	0.10	0.25	4.00	0.67	80	15

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 17A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	1.000	0.9	0.37	0
113	113.000	98.3	0.39	0
115	1.000	0.9	0.39	0

TOTAL = 115.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
105.000	MDenRes	91.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
3.000	N.Retail	2.6	NORMAL	75	80	0.10	0.02	Min	0.04
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
3.000	Rec.Open	2.6	NORMAL	90	0	0.10	0.10	Hi	0.14
4.000	Water	3.5	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
115.00 = Total Area			Avg. =	49	43%	0.230			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 96.0 %
WET = 4.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.56

IMPERVIOUS AREA: URBAN @ 100 % effective = 43
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 43

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
17A	0.180	0.66	0.52	0.08	60.6	0.23	0.24	4.00	0.56	43	20

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 23

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	4.000	2.2	0.27	0
113	152.000	85.4	0.39	0
115	22.000	12.4	0.39	0

TOTAL = 178.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
88.000	SLotRes	49.4	NORMAL	50	30	0.25	0.05	Low	0.05
54.000	MDenRes	30.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
30.000	Transp.	16.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
6.000	Rec.Open	3.4	NORMAL	90	0	0.10	0.10	Hi	0.13
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
178.00 = Total Area			Avg. =	54	42%	0.220			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.58

IMPERVIOUS AREA: URBAN @ 100 % effective = 42
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 42

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
23	0.278	1.00	0.33	0.05	65.0	0.22	0.25	4.00	0.58	42	21

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 48

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	253.000	51.2	0.37	0
113	155.000	31.4	0.39	0
115	86.000	17.4	0.39	0

TOTAL = 494.000 Acres XKSAT = 0.38 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
63.000	Rural	12.8	NORMAL	30	5	0.30	0.05	Low	0.06
211.000	LLotRes	42.7	NORMAL	50	15	0.30	0.05	Low	0.05
130.000	SLotRes	26.3	NORMAL	50	30	0.25	0.05	Low	0.05
73.000	MDenRes	14.8	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
7.000	Educ.	1.4	NORMAL	80	45	0.29	0.05	Hi	0.13
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
5.000	Rec.Open	1.0	NORMAL	90	0	0.10	0.10	Hi	0.13
5.000	Water	1.0	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

494.00 = Total Area Avg. = 47 22% 0.270

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.54

IMPERVIOUS AREA: URBAN @ 100 % effective = 22
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 22

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
48	0.772	1.62	0.81	0.06	80.2	0.27	0.25	4.10	0.54	22	36

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 17B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
113	77.000	54.2	0.39	0
115	65.000	45.8	0.39	0

TOTAL = 142.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
89.000	MDenRes	62.7	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
48.000	N.Retail	33.8	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
5.000	Water	3.5	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
142.00 = Total Area			Avg. =	50	55%	0.190			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 96.0 %
WET = 4.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.56

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
17B	0.222	0.80	0.56	0.07	50.0	0.19	0.24	4.00	0.56	55	22

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 47

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	1.000	0.1	0.41	0
3	69.000	6.4	0.58	0
98	526.000	49.1	0.37	0
100	12.000	1.1	0.40	20
113	308.000	28.7	0.39	0
115	156.000	14.6	0.39	0

TOTAL = 1072.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
243.000	Rural	22.7	NORMAL	30	5	0.30	0.05	Low	0.05
516.000	LLotRes	48.1	NORMAL	50	15	0.30	0.05	Low	0.04
154.000	SLotRes	14.4	NORMAL	50	30	0.25	0.05	Low	0.05
91.000	MDenRes	8.5	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
10.000	Educ.	0.9	NORMAL	80	45	0.29	0.05	Hi	0.12
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
55.000	Rec.Open	5.1	NORMAL	90	0	0.10	0.10	Hi	0.11
3.000	Water	0.3	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1072.0 = Total Area Avg. = 47 17% 0.280

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.55

IMPERVIOUS AREA: URBAN @ 100 % effective = 17
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 17

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
47	1.675	3.03	1.50	0.05	51.2	0.28	0.25	4.00	0.55	17	63

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 22

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	30.000	11.6	0.41	0
55	6.000	2.3	0.27	0
113	64.000	24.7	0.39	0
115	159.000	61.4	0.39	0

TOTAL = 259.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
204.000	MDenRes	78.8	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
53.000	N.Retail	20.5	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
1.000	Rec.Open	0.4	NORMAL	90	0	0.10	0.10	Hi	0.15
1.000	Water	0.4	WET	0	0	0.00	1.00	Hi	0.15
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
259.00 = Total Area			Avg. =	52	52%	0.220			

PERCENT OF SUBBASIN
DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.57

IMPERVIOUS AREA: URBAN @ 100 % effective = 52
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 52

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
22	0.405	1.17	0.33	0.05	51.3	0.22	0.25	4.00	0.57	52	21

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 49

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
61	4.000	0.8	0.15	0
98	369.000	73.1	0.37	0
113	32.000	6.3	0.39	0
115	100.000	19.8	0.39	0

TOTAL = 505.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.15
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
199.000	LLotRes	39.4	NORMAL	50	15	0.30	0.05	Low	0.05
291.000	SLotRes	57.6	NORMAL	50	30	0.25	0.05	Low	0.05
3.000	MDenRes	0.6	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
7.000	Rec.Open	1.4	NORMAL	90	0	0.10	0.10	Hi	0.13
5.000	Water	1.0	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

505.00 = Total Area Avg. = 50 23% 0.270

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 23
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 23

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
49	0.789	1.63	0.82	0.06	73.6	0.27	0.25	4.15	0.53	23	36

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 50

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	41.000	23.3	0.37	0
113	44.000	25.0	0.39	0
115	91.000	51.7	0.39	0

TOTAL = 176.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
7.000	LLotRes	4.0	NORMAL	50	15	0.30	0.05	Low	0.07
32.000	SLotRes	18.2	NORMAL	50	30	0.25	0.05	Low	0.06
112.000	MDenRes	63.6	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
19.000	Transp.	10.8	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
6.000	Water	3.4	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
176.00 = Total Area			Avg. =	48	43%	0.230			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 97.0 %
WET = 3.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.55

IMPERVIOUS AREA: URBAN @ 100 % effective = 43
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 43

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
50	0.275	0.86	0.43	0.08	81.4	0.23	0.24	4.00	0.55	43	23

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 18A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
44	1.000	0.2	0.03	0
75	12.000	1.9	0.23	0
98	14.000	2.2	0.37	0
100	18.000	2.8	0.40	20
113	415.000	64.3	0.39	0
115	185.000	28.7	0.39	0

TOTAL = 645.000 Acres XKSAT = 0.38 %Rock = 1

DTHETA

Dry = 0.35 PSIF = 4.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
203.000	SLotRes	31.5	NORMAL	50	30	0.25	0.05	Low	0.05
187.000	MDenRes	29.0	NORMAL	50	45	0.25	0.05		
111.000	HDensRes	17.2	NORMAL	50	45	0.25	0.05	Low	0.05
59.000	N.Retail	9.1	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
25.000	Transp.	3.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
50.000	Rec.Open	7.8	NORMAL	90	0	0.10	0.10	Hi	0.11
10.000	Water	1.6	WET	0	0	0.00	1.00	Hi	0.12
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
645.00 = Total Area			Avg. =	55	41%	0.220			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.57

IMPERVIOUS AREA: URBAN @ 100 % effective = 41
ROCK OUTCROP @ 100 % effective = 1
% EFFECTIVE IMP. = 42

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
18A	1.008	0.99	0.52	0.06	60.6	0.22	0.25	4.10	0.57	42	27

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 24

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	3.000	1.6	0.26	0
113	184.000	98.4	0.39	0

TOTAL = 187.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
176.000	MDenRes	94.1	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
1.000	Transp.	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
10.000	Rec.Open	5.3	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
187.00 = Total Area			Avg. =	54	43%	0.240			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.58

IMPERVIOUS AREA: URBAN @ 100 % effective = 43
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 43

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
24	0.292	0.92	0.50	0.05	43.5	0.24	0.25	4.00	0.58	43	24

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 31B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	7.000	2.3	0.41	0
1	7.000	2.3	0.41	0
50	8.000	2.6	0.26	0
55	170.000	56.3	0.27	0
75	14.000	4.6	0.23	0
112	27.000	8.9	0.39	0
115	69.000	22.8	0.39	0

TOTAL = 302.000 Acres XKSAT = 0.31 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.45
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
181.000	SLotRes	59.9	NORMAL	50	30	0.25	0.05	Low	0.05
100.000	MDenRes	33.1	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
15.000	Transp.	5.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
6.000	Rec.Open	2.0	NORMAL	90	0	0.10	0.10	Hi	0.13
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
302.00 = Total Area			Avg. =	52	37%	0.240			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 37
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 37

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
31B	0.472	1.18	0.52	0.05	29.7	0.24	0.25	4.45	0.46	37	33

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 31A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	92.000	26.9	0.41	0
1	19.000	5.6	0.41	0
55	59.000	17.3	0.27	0
112	113.000	33.0	0.39	0
115	59.000	17.3	0.39	0

TOTAL = 342.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.15
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
34.000	SLotRes	9.9	NORMAL	50	30	0.25	0.05	Low	0.06
276.000	MDenRes	80.7	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
1.000	N.Retail	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
30.000	Transp.	8.8	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
1.000	Rec.Open	0.3	NORMAL	90	0	0.10	0.10	Hi	0.15
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
342.00 = Total Area			Avg. =	51	47%	0.240			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.54

IMPERVIOUS AREA: URBAN @ 100 % effective = 47
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 47

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
31A	0.534	1.04	0.47	0.05	43.3	0.24	0.25	4.15	0.54	47	28

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 38

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	194.000	64.7	0.41	0
55	106.000	35.3	0.27	0

TOTAL = 300.000 Acres XKSAT = 0.35 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.25
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
1.000	MDenRes	0.3	NORMAL	50	45	0.25	0.05		
160.000	HDensRes	53.3	NORMAL	50	45	0.25	0.05	Low	0.05
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
40.000	C.Retail	13.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
70.000	Transp.	23.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
18.000	Rec.Open	6.0	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
11.000	MixedUse	3.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	
300.00 = Total Area			Avg. =	60	56%	0.180			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.54

IMPERVIOUS AREA: URBAN @ 100 % effective = 56
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 56

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
38	0.469	1.08	0.83	0.04	37.0	0.18	0.25	4.25	0.54	56	26

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 32

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	33.000	13.8	0.41	0
55	207.000	86.2	0.27	0

TOTAL = 240.000 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.55
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
215.000	SLotRes	89.6	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
25.000	Rec.Open	10.4	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
240.00 = Total Area			Avg. =	56	27%	0.230			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 27
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 27

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
32	0.375	0.95	0.47	0.05	38.9	0.23	0.25	4.55	0.44	27	29

TABLE G-1
Northeast Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 39

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	24.000	10.5	0.41	0
55	204.000	89.5	0.27	0

TOTAL = 228.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
64.000	SLotRes	28.1	NORMAL	50	30	0.25	0.05	Low	0.06
	MDenRes		NORMAL	50	45	0.25	0.05		
116.000	HDensRes	50.9	NORMAL	50	45	0.25	0.05	Low	0.05
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
36.000	Transp.	15.8	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
9.000	Rec.Open	3.9	NORMAL	90	0	0.10	0.10	Hi	0.13
3.000	Water	1.3	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
228.00 = Total Area			Avg. =	53	44%	0.220			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 44
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 44

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
39	0.356	0.92	0.67	0.06	38.0	0.22	0.25	4.60	0.41	44	32

MCUHP2 REPORT
FUTURE CONDITIONS
NORTHEAST MESA AREA

TABLE G-2
Northeast Mesa Area
Future Conditions
MCUHP2 Report

Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
42	1.747	0.240	0.250	5.00	0.310	31	55.2
51	1.244	0.210	0.250	4.60	0.410	47	29.4
44A	1.594	0.240	0.250	4.50	0.420	30	52.6
43	1.425	0.190	0.250	4.70	0.400	49	33.9
53	0.784	0.230	0.250	5.20	0.310	36	37.4
54	0.488	0.250	0.250	5.40	0.270	31	38.7
57	0.178	0.150	0.230	5.40	0.270	58	6.2
36A	0.097	0.160	0.240	6.00	0.270	28	23.7
44B	1.056	0.230	0.190	6.60	0.170	39	32.0
36B	0.317	0.170	0.150	7.30	0.170	22	43.5
46B	0.358	0.210	0.240	4.00	0.560	51	32.9
29A	0.181	0.210	0.240	4.00	0.580	29	24.5
45A	0.617	0.210	0.250	4.00	0.600	19	51.0
55B	1.861	0.230	0.250	4.10	0.570	31	72.7
29B	0.080	0.180	0.250	4.00	0.660	17	22.9
45B	0.656	0.220	0.250	6.00	0.220	50	40.0
29C	0.233	0.240	0.250	5.70	0.270	32	30.0
55	0.141	0.240	0.240	4.60	0.400	29	13.2
29D	0.648	0.210	0.250	4.90	0.350	43	40.6
36C	0.445	0.100	0.250	4.65	0.470	80	15.5
30	1.123	0.250	0.250	4.00	0.570	45	46.5
37	0.466	0.100	0.250	4.00	0.670	80	14.5
17A	0.180	0.230	0.240	4.00	0.560	43	20.2
23	0.278	0.220	0.250	4.00	0.580	42	20.9
48	0.772	0.270	0.250	4.10	0.540	22	36.1
17B	0.222	0.190	0.240	4.00	0.560	55	21.7
47	1.675	0.280	0.250	4.00	0.550	17	63.0
22	0.405	0.220	0.250	4.00	0.570	52	21.4
49	0.789	0.270	0.250	4.15	0.530	23	36.2
50	0.275	0.230	0.240	4.00	0.550	43	22.7
18A	1.008	0.220	0.250	4.10	0.570	42	27.2
24	0.292	0.240	0.250	4.00	0.580	43	24.1
31B	0.472	0.240	0.250	4.45	0.460	37	33.3
31A	0.534	0.240	0.250	4.15	0.540	47	28.4
38	0.469	0.180	0.250	4.25	0.540	56	25.7
32	0.375	0.230	0.250	4.55	0.440	27	29.1
39	0.356	0.220	0.250	4.60	0.410	44	32.4
52	0.433	0.200	0.190	6.60	0.180	45	36.2
56	0.547	0.180	0.150	7.30	0.140	54	32.9
58	0.950	0.120	0.240	5.60	0.290	56	28.3

LAG REPORT
FUTURE CONDITIONS
NORTHEAST MESA AREA

TABLE G-3
Northeast Mesa Area
Future Conditions
Lag Report

Summary of MCUHP2 Lag Time Calculation Parameters

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
42	Valley	0.0460	3.12	1.55	60.90	55.2
51	Valley	0.0420	1.47	0.75	54.40	29.4
44A	Valley	0.0520	2.75	1.38	54.50	52.6
43	Valley	0.0410	1.89	0.94	58.20	33.9
53	Valley	0.0460	1.89	0.94	63.50	37.4
54	Valley	0.0590	1.52	0.76	42.80	38.7
57	Valley	0.0900	0.28	0.14	35.70	6.2
36A	Valley	0.1000	0.34	0.17	44.10	23.7
44B	Valley	0.0560	1.08	0.88	64.80	32.0
36B	Valley	0.0870	1.00	0.50	45.00	43.5
46B	Valley	0.0730	1.40	0.70	42.90	32.9
29A	Valley	0.1070	0.85	0.38	41.20	24.5
45A	Valley	0.0790	1.99	1.01	70.40	51.0
55B	Valley	0.0580	3.50	1.75	48.60	72.7
29B	Valley	0.0920	0.76	0.47	52.60	22.9
45B	Valley	0.0520	1.89	0.94	45.00	40.0
29C	Valley	0.0740	0.85	0.47	58.80	30.0
55	Valley	0.0810	0.47	0.23	72.30	13.2
29D	Valley	0.0660	1.23	0.85	40.70	40.6
36C	Valley	0.0200	1.20	0.60	44.20	15.5
30	Valley	0.0500	2.00	1.00	40.00	46.5
37	Valley	0.0200	1.00	0.50	45.00	14.5
17A	Valley	0.0840	0.66	0.52	60.60	20.2
23	Valley	0.0470	1.00	0.33	65.00	20.9
48	Valley	0.0600	1.62	0.81	80.20	36.1
17B	Valley	0.0730	0.80	0.56	50.00	21.7
47	Valley	0.0550	3.03	1.50	51.20	63.0
22	Valley	0.0480	1.17	0.33	51.30	21.4
49	Valley	0.0600	1.63	0.82	73.60	36.2
50	Valley	0.0790	0.86	0.43	81.40	22.7
18A	Valley	0.0650	0.99	0.52	60.60	27.2
24	Valley	0.0520	0.92	0.50	43.50	24.1
31B	Valley	0.0490	1.18	0.52	29.70	33.3
31A	Valley	0.0470	1.04	0.47	43.30	28.4
38	Valley	0.0410	1.08	0.83	37.00	25.7
32	Valley	0.0550	0.95	0.47	38.90	29.1
39	Valley	0.0600	0.92	0.67	38.00	32.4
52	Valley	0.0410	1.64	0.74	54.90	36.2
56	Valley	0.0360	0.95	0.51	57.90	32.9
58	Valley	0.0830	1.13	0.51	50.40	28.3

SUBBASIN RETENTION VOLUMES
FUTURE CONDITIONS
NORTHEAST MESA AREA

TABLE G-4

Northeast Mesa Area

Future Conditions

SUBBASIN RETENTION VOLUMES

'97 MAG Land Uses

SUBBASIN	VOLUME (ac-ft)	% of Future Development	Future Dev. Vol (ac-ft)	80% of future dev.
42	161	42	68	54
51	125	50	63	50
44A	140	43	60	48
43	146	53	77	62
53	75	45	34	27
54	46	31	14	11
57	20	93	19	15
36A	9	63	6	5
52	47	68	32	26
56	64	48	31	25
58	105	87	91	73
44B	111	27	30	24
36B	31	80	25	20
46B	36	16	6	5
29A	15	73	11	9
45A	46	66	30	24
55B	157	73	115	92
29B	6	98	6	5
45B	71	42	30	24
29C	22	98	22	17
29D	64	53	34	27
55	12	90	11	9
36C	55	87	48	38
30	107	25	27	21
37	57	83	47	38
49	62	54	33	27
17A	17	29	5	4
48	60	59	35	28
17B	23	27	6	5
47	123	69	85	68
22	41	33	14	11
23	26	49	13	10
50	26	64	17	13
18A	94	44	41	33
24	27	8	2	2
31B	43	66	28	23
31A	52	38	20	16
38	49	38	19	15
32	32	0	0	0
39	35	13	5	4

SUBBASIN PREPARATION REPORTS
FUTURE CONDITIONS
NORTHWEST MESA AREA

SUBBASIN PARAMETERS
FUTURE CONDITIONS
NORTHWEST MESA AREA

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 1

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
68	1.000	0.4	0.63	0
98	188.000	75.2	0.37	0
110	36.000	14.4	0.13	0
113	12.000	4.8	0.39	0
118	13.000	5.2	0.42	0

TOTAL = 250.000 Acres XKSAT = 0.32 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 38.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
50.000	LLotRes	20.0	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
29.000	MDenRes	11.6	NORMAL	50	45	0.25	0.05		
29.000	HDensRes	11.6	NORMAL	50	45	0.25	0.05	Low	0.06
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
96.000	PubFac	38.4	DRY	10	0	0.10	0.02	Min	0.03
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
12.000	Water	4.8	WET	0	0	0.00	1.00	Hi	0.12
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
34.000	MixedUse	13.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

250.00 = Total Area Avg. = 35.6 24% 0.170

PERCENT OF SUBBASIN DRY = 38.0 %
NORMAL = 57.0 %
WET = 5.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.275

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 24
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 24

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
1	0.391	0.90	0.30	0.08	55.6	0.170	0.275	4.40	0.410	24	33

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 10

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	105.000	22.7	0.41	0
50	42.000	9.1	0.26	0
55	83.000	18.0	0.27	0
110	61.000	13.2	0.13	0
LaA	171.000	37.0	0.25	0

TOTAL = 462.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
312.000	SLotRes	67.5	NORMAL	50	30	0.25	0.05	Low	0.05
15.500	MDenRes	3.4	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
11.000	N.Retail	2.4	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
15.500	Educ.	3.4	NORMAL	80	45	0.29	0.05	Hi	0.12
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
108.000	Rec.Open	23.4	NORMAL	90	0	0.10	0.10	Hi	0.10
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

462.00 = Total Area Avg. = 61.0 25% 0.213

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 25
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 25

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
10	0.722	1.30	0.80	0.06	53.8	0.213	0.250	4.70	0.410	25	42

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 11

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
44	10.000	1.5	0.03	0
98	112.000	16.6	0.37	0
113	428.000	63.3	0.39	0
115	126.000	18.6	0.39	0

TOTAL = 676.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
280.000	SLotRes	41.4	NORMAL	50	30	0.25	0.05	Low	0.05
110.000	MDenRes	16.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
112.500	PubFac	16.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
169.500	Rec.Open	25.1	NORMAL	90	0	0.10	0.10	Hi	0.09
4.000	Water	0.6	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

676.00 = Total Area Avg. = 63.9 33% 0.186

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.248

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.59

IMPERVIOUS AREA: URBAN @ 100 % effective = 33
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 33

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
11	1.056	2.09	1.52	0.06	57.4	0.186	0.248	4.15	0.590	33	65

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 12

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
98	19.000	2.9	0.37	0
113	409.000	62.0	0.39	0
115	232.000	35.2	0.39	0

TOTAL = 660.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
2.000	SLotRes	0.3	NORMAL	50	30	0.25	0.05	Low	0.08
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
110.000	Educ.	16.7	NORMAL	80	45	0.29	0.05	Hi	0.10
	Instit.		NORMAL	75	80	0.10	0.02	Min	
259.500	PubFac	39.3	NORMAL	75	80	0.10	0.02	Min	0.02
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
274.500	Rec.Open	41.6	NORMAL	90	0	0.10	0.10	Hi	0.09
14.000	Water	2.1	WET	0	0	0.00	1.00	Hi	0.12
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

660.00 = Total Area Avg. = 80.4 39% 0.130

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.245

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.70

IMPERVIOUS AREA: URBAN @ 100 % effective = 39
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 39

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
12	1.031	1.80	0.80	0.08	77.8	0.130	0.245	4.00	0.700	39	57

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 13a

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	2.000	0.4	0.41	0
55	26.000	5.3	0.27	0
112	167.000	33.7	0.39	0
113	28.000	5.7	0.39	0
115	272.000	54.9	0.39	0

TOTAL = 495.000 Acres XKSAT = 0.38 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
383.000	SLotRes	77.4	NORMAL	50	30	0.25	0.05	Low	0.04
31.000	MDenRes	6.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
61.000	N.Retail	12.3	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
20.000	Rec.Open	4.0	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

495.00 = Total Area Avg. = 54.7 36% 0.226

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.57

IMPERVIOUS AREA: URBAN @ 100 % effective = 36
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 36

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
13a	0.773	1.50	0.90	0.05	46.7	0.226	0.250	4.10	0.570	36	37

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 13b

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	15.000	10.3	0.41	0
50	32.000	21.9	0.26	0
55	53.000	36.3	0.27	0
115	46.000	31.5	0.39	0

TOTAL = 146.000 Acres XKSAT = 0.31 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
129.000	SLotRes	88.4	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
9.000	N.Retail	6.2	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
8.000	Rec.Open	5.5	NORMAL	90	0	0.10	0.10	Hi	0.13
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

146.00 = Total Area Avg. = 53.8 31% 0.233

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
13b	0.228	1.10	0.70	0.05	40.9	0.233	0.250	4.45	0.460	31	33

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 14

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	74.000	11.6	0.41	0
50	85.000	13.3	0.26	0
55	479.000	75.1	0.27	0

TOTAL = 638.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
558.500	SLotRes	87.5	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
5.500	N.Retail	0.9	NORMAL	75	80	0.10	0.02	Min	0.04
13.500	C.Retail	2.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
60.500	Rec.Open	9.5	NORMAL	90	0	0.10	0.10	Hi	0.11
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

638.00 = Total Area Avg. = 54.5 29% 0.231

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 29
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 29

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
14	0.997	1.40	0.70	0.05	46.4	0.231	0.250	4.60	0.420	29	37

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 15a

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	30.000	13.3	0.27	0
75	194.000	86.2	0.23	0
LaA	1.000	0.4	0.25	0

TOTAL = 225.000 Acres XKSAT = 0.24 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
213.000	SLotRes	94.7	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
12.000	Rec.Open	5.3	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

225.00 = Total Area Avg. = 52.1 28% 0.242

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 28
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 28

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
15a	0.352	1.00	0.70	0.05	33.0	0.242	0.250	4.90	0.350	28	34

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 15b

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	287.000	87.8	0.27	0
75	40.000	12.2	0.23	0

TOTAL = 327.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
268.000	SLotRes	82.0	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
21.000	C.Retail	6.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
5.000	Educ.	1.5	NORMAL	80	45	0.29	0.05	Hi	0.13
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
33.000	Rec.Open	10.1	NORMAL	90	0	0.10	0.10	Hi	0.11
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

327.00 = Total Area Avg. = 56.1 30% 0.226

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
15b	0.511	1.62	0.43	0.05	21.6	0.226	0.250	4.70	0.390	30	37

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 16

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	56.000	100.	0.27	0

TOTAL = 56.000 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
46.000	SLotRes	82.1	NORMAL	50	30	0.25	0.05	Low	0.06
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
10.000	N.Retail	17.9	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

56.000 = Total Area Avg. = 54.5 39% 0.223

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 39
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 39

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
16	0.087	0.50	0.20	0.05	38.0	0.223	0.250	4.65	0.400	39	14

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 18b

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
100	26.000	10.8	0.40	20
112	169.000	70.1	0.39	0
115	46.000	19.1	0.39	0

TOTAL = 241.000 Acres XKSAT = 0.39 %Rock = 2

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
204.000	SLotRes	84.6	NORMAL	50	30	0.25	0.05	Low	0.05
1.000	MDenRes	0.4	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
36.000	N.Retail	14.9	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

241.00 = Total Area Avg. = 53.7 38% 0.227

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.58

IMPERVIOUS AREA: URBAN @ 100 % effective = 38
ROCK OUTCROP @ 100 % effective = 2
% EFFECTIVE IMP. = 40

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
18b	0.377	0.90	0.40	0.05	55.6	0.227	0.250	4.00	0.580	40	21

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 19

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
112	413.000	85.2	0.39	0
115	72.000	14.8	0.39	0

TOTAL = 485.000 Acres XKSAT = 0.39 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
60.000	SLotRes	12.4	NORMAL	50	30	0.25	0.05	Low	0.06
106.000	MDenRes	21.9	NORMAL	50	45	0.25	0.05		
122.000	HDensRes	25.2	NORMAL	50	45	0.25	0.05	Low	0.05
117.000	N.Retail	24.1	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
80.000	PubFac	16.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
485.00 = Total Area			Avg. =	60.2	57%	0.189			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.61

IMPERVIOUS AREA: URBAN @ 100 % effective = 57
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 57

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
19	0.758	1.40	0.60	0.04	46.4	0.189	0.250	4.00	0.610	57	25

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 2

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
68	7.000	1.1	0.63	0
98	222.000	34.7	0.37	0
110	170.000	26.6	0.13	0
113	12.000	1.9	0.39	0
115	165.000	25.8	0.39	0
RiB	63.000	9.9	0.40	0

TOTAL = 639.000 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
414.500	SLotRes	64.9	NORMAL	50	30	0.25	0.05	Low	0.04
7.000	MDenRes	1.1	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
19.000	N.Retail	3.0	NORMAL	75	80	0.10	0.02	Min	0.03
26.000	C.Retail	4.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
166.500	Rec.Open	26.1	NORMAL	90	0	0.10	0.10	Hi	0.09
6.000	Water	0.9	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

639.00 = Total Area Avg. = 61.8 26% 0.198

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.248

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 26

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
2	0.998	1.50	1.00	0.07	65.3	0.198	0.248	4.55	0.460	26	53

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 20

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	126.000	34.0	0.41	0
55	77.000	20.8	0.27	0
112	63.000	17.0	0.39	0
115	105.000	28.3	0.39	0

TOTAL = 371.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
289.500	SLotRes	78.0	NORMAL	50	30	0.25	0.05	Low	0.05
1.000	MDenRes	0.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
80.500	N.Retail	21.7	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

371.00 = Total Area Avg. = 55.4 41% 0.217

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.56

IMPERVIOUS AREA: URBAN @ 100 % effective = 41
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 41

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
20	0.580	2.38	1.23	0.04	37.8	0.217	0.250	4.15	0.560	41	47

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 21

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	56.000	16.5	0.41	0
55	263.000	77.6	0.27	0
115	20.000	5.9	0.39	0

TOTAL = 339.000 Acres XKSAT = 0.30 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
212.000	SLotRes	62.5	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
67.000	HDensRes	19.8	NORMAL	50	45	0.25	0.05	Low	0.05
14.000	N.Retail	4.1	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
46.000	Rec.Open	13.6	NORMAL	90	0	0.10	0.10	Hi	0.11
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
339.00 = Total Area			Avg. = 56.5		31%	0.223			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
21	0.530	1.71	0.76	0.06	38.0	0.223	0.250	4.50	0.460	31	45

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 25

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	34.000	10.6	0.26	0
55	9.000	2.8	0.27	0
112	243.000	75.7	0.39	0
115	35.000	10.9	0.39	0

TOTAL = 321.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
171.000	SLotRes	53.3	NORMAL	50	30	0.25	0.05	Low	0.05
133.000	MDenRes	41.4	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
13.000	N.Retail	4.0	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
4.000	Rec.Open	1.2	NORMAL	90	0	0.10	0.10	Hi	0.13
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

321.00 = Total Area Avg. = 51.4 38% 0.242

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.54

IMPERVIOUS AREA: URBAN @ 100 % effective = 38
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 38

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
25	0.502	1.30	0.60	0.05	42.3	0.242	0.250	4.15	0.540	38	32

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 26

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	53.000	33.1	0.27	0
112	107.000	66.9	0.39	0

TOTAL = 160.000 Acres XKSAT = 0.35 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
141.000	SLotRes	88.1	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
16.000	N.Retail	10.0	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
3.000	Rec.Open	1.9	NORMAL	90	0	0.10	0.10	Hi	0.14
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

160.00 = Total Area Avg. = 53.3 34% 0.232

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.52

IMPERVIOUS AREA: URBAN @ 100 % effective = 34
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 34

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
26	0.250	0.80	0.30	0.05	43.8	0.232	0.250	4.25	0.520	34	20

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 27

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	11.000	7.1	0.41	0
55	20.000	12.9	0.27	0
112	124.000	80.0	0.39	0

TOTAL = 155.000 Acres XKSAT = 0.37 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
39.000	SLotRes	25.2	NORMAL	50	30	0.25	0.05	Low	0.06
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
84.500	N.Retail	54.5	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
11.000	Educ.	7.1	NORMAL	80	45	0.29	0.05	Hi	0.12
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
20.500	Rec.Open	13.2	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

155.00 = Total Area Avg. = 71.0 54% 0.151

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.62

IMPERVIOUS AREA: URBAN @ 100 % effective = 54
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 54

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
27	0.242	0.60	0.30	0.04	45.0	0.151	0.250	4.15	0.620	54	15

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 28

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	193.000	33.4	0.41	0
50	6.000	1.0	0.26	0
55	348.000	60.2	0.27	0
75	22.000	3.8	0.23	0
112	9.000	1.6	0.39	0

TOTAL = 578.000 Acres XKSAT = 0.31 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
154.500	SLotRes	26.7	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
227.500	HDensRes	39.4	NORMAL	50	45	0.25	0.05	Low	0.05
146.500	N.Retail	25.3	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
26.500	Office	4.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
18.000	PubFac	3.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
5.000	Rec.Open	0.9	NORMAL	90	0	0.10	0.10	Hi	0.13
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
578.00 = Total Area			Avg. = 58.6		52%	0.199			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

IMPERVIOUS AREA: URBAN @ 100 % effective = 52
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 52

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
28	0.903	2.00	0.80	0.04	39.5	0.199	0.250	4.45	0.480	52	35

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 3

Soil Survey Used Eastern County

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
LAA	364.000	57.0	0.25	0
PNC	8.000	1.3	0.40	0
RLB	194.000	30.4	0.40	0
110	73.000	11.4	0.01	0

TOTAL = 639.000 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
286.000	SLotRes	44.8	NORMAL	50	30	0.25	0.05	Low	0.05
188.000	MDenRes	29.4	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
24.000	N.Retail	3.8	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
141.000	Rec.Open	22.1	NORMAL	90	0	0.10	0.10	Hi	0.10
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

639.00 = Total Area Avg. = 59.8 30% 0.211

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
3	0.998	1.80	1.30	0.06	36.1	0.211	0.250	5.30	0.310	30	60

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 33

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	75.000	16.1	0.41	0
50	63.000	13.5	0.26	0
55	328.000	70.4	0.27	0

TOTAL = 466.000 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
381.000	SLotRes	81.8	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
17.000	N.Retail	3.6	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
65.000	Rec.Open	13.9	NORMAL	90	0	0.10	0.10	Hi	0.10
3.000	Water	0.6	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

466.00 = Total Area Avg. = 56.1 27% 0.222

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.248

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 27
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 27

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
33	0.728	2.00	1.20	0.06	32.5	0.222	0.248	4.55	0.440	27	64

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 34

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	10.000	1.7	0.41	0
50	73.000	12.6	0.26	0
55	496.000	85.7	0.27	0

TOTAL = 579.000 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
400.000	SLotRes	69.1	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
20.000	N.Retail	3.5	NORMAL	75	80	0.10	0.02	Min	0.03
18.000	C.Retail	3.1	NORMAL	75	80	0.10	0.02	Min	0.03
3.000	Reg.Ret	0.5	NORMAL	75	80	0.10	0.02	Min	0.04
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
134.000	Rec.Open	23.1	NORMAL	90	0	0.10	0.10	Hi	0.10
4.000	Water	0.7	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

579.00 = Total Area Avg. = 60.7 26% 0.203

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.248

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 26

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
34	0.905	1.71	1.04	0.07	32.2	0.203	0.248	4.65	0.420	26	61

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 35

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	237.000	25.3	0.41	0
50	9.000	1.0	0.26	0
55	662.000	70.8	0.27	0
75	27.000	2.9	0.23	0

TOTAL = 935.000 Acres XKSAT = 0.30 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
691.000	SLotRes	73.9	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
4.000	HDensRes	0.4	NORMAL	50	45	0.25	0.05	Low	0.07
11.000	N.Retail	1.2	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
1.000	Office	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
207.000	Rec.Open	22.1	NORMAL	90	0	0.10	0.10	Hi	0.09
21.000	Water	2.2	WET	0	0	0.00	1.00	Hi	0.12
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

935.00 = Total Area Avg. = 58.0 23% 0.209

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.245

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 23
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 23

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
35	1.461	2.19	1.14	0.08	29.7	0.209	0.245	4.50	0.460	23	88

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 4

Soil Survey Used Eastern County

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
LAA	639.000	100.	0.25	0

TOTAL = 639.000 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
2.000	SLotRes	0.3	NORMAL	50	30	0.25	0.05	Low	0.08
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
347.000	Ind.	54.3	NORMAL	60	55	0.15	0.03	Min	0.02
1.000	Bus.Park	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
289.000	Airport	45.2	NORMAL	60	55	0.15	0.03	Min	0.02
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

639.00 = Total Area Avg. = 60.0 55% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
4	0.998	1.70	1.20	0.03	23.5	0.150	0.250	4.80	0.390	55	31

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 40

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	18.000	4.8	0.41	0
55	356.000	95.2	0.27	0

TOTAL = 374.000 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
61.000	SLotRes	16.3	NORMAL	50	30	0.25	0.05	Low	0.06
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
1.000	N.Retail	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
106.500	Reg.Ret	28.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
139.500	Bus.Park	37.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
64.000	Transp.	17.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
2.000	Water	0.5	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

374.00 = Total Area Avg. = 70.5 71% 0.124

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.248

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 71
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 71

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
40	0.584	0.76	0.38	0.03	69.7	0.124	0.248	4.60	0.470	71	12

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 41

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	109.000	31.2	0.41	0
55	240.000	68.8	0.27	0

TOTAL = 349.000 Acres XKSAT = 0.31 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
267.000	Reg.Ret	76.5	NORMAL	75	80	0.10	0.02	Min	0.02
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
50.000	Transp.	14.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
28.000	Rec.Open	8.0	NORMAL	90	0	0.10	0.10	Hi	0.11
4.000	Water	1.1	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

349.00 = Total Area Avg. = 75.3 73% 0.099

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.248

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 73
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 73

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
41	0.545	1.42	0.66	0.04	28.2	0.099	0.248	4.45	0.530	73	28

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 5

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
64	16.000	2.6	0.14	25
98	136.000	22.3	0.37	0
112	131.000	21.5	0.39	0
113	205.000	33.7	0.39	0
115	121.000	19.9	0.39	0

TOTAL = 609.000 Acres XKSAT = 0.38 %Rock = 1

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
196.000	LLotRes	32.2	NORMAL	50	15	0.30	0.05	Low	0.05
305.000	SLotRes	50.1	NORMAL	50	30	0.25	0.05	Low	0.05
42.000	MDenRes	6.9	NORMAL	50	45	0.25	0.05		
2.000	HDensRes	0.3	NORMAL	50	45	0.25	0.05	Low	0.08
10.000	N.Retail	1.6	NORMAL	75	80	0.10	0.02	Min	0.03
10.000	C.Retail	1.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
11.000	Educ.	1.8	NORMAL	80	45	0.29	0.05	Hi	0.12
	Instit.		NORMAL	75	80	0.10	0.02	Min	
5.000	PubFac	0.8	NORMAL	75	80	0.10	0.02	Min	0.04
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
23.000	Rec.Open	3.8	NORMAL	90	0	0.10	0.10	Hi	0.12
5.000	Water	0.8	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

609.00 = Total Area Avg. = 52.6 27% 0.253

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.248

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.56

IMPERVIOUS AREA: URBAN @ 100 % effective = 27
ROCK OUTCROP @ 100 % effective = 1
% EFFECTIVE IMP. = 28

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
5	0.952	1.30	0.80	0.06	73.1	0.253	0.248	4.10	0.560	28	38

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 6

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	34.000	5.3	0.41	0
2	178.000	27.8	0.41	0
50	18.000	2.8	0.26	0
110	107.000	16.7	0.13	0
112	50.000	7.8	0.39	0
113	221.000	34.5	0.39	0
115	26.000	4.1	0.39	0
LAA	7.000	1.1	0.25	0

TOTAL = 641.000 Acres XKSAT = 0.32 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
593.000	SLotRes	92.5	NORMAL	50	30	0.25	0.05	Low	0.04
15.000	MDenRes	2.3	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
8.000	N.Retail	1.2	NORMAL	75	80	0.10	0.02	Min	0.03
9.000	C.Retail	1.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
16.000	Rec.Open	2.5	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

641.00 = Total Area Avg. = 51.6 31% 0.242

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
6	1.002	1.60	1.00	0.05	59.4	0.242	0.250	4.40	0.470	31	40

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 7

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	35.000	19.9	0.26	0
110	82.000	46.6	0.13	0
LAA	59.000	33.5	0.25	0

TOTAL = 176.000 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
57.000	SLotRes	32.4	NORMAL	50	30	0.25	0.05	Low	0.06
66.000	MDenRes	37.5	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
29.000	N.Retail	16.5	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
24.000	Rec.Open	13.6	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

176.00 = Total Area Avg. = 59.6 40% 0.205

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.29

IMPERVIOUS AREA: URBAN @ 100 % effective = 40
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 40

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
7	0.275	1.10	0.50	0.05	52.7	0.205	0.250	5.40	0.290	40	28

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 8

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	4.000	1.3	0.26	0
75	87.000	27.3	0.23	0
LAA	228.000	71.5	0.25	0

TOTAL = 319.000 Acres XKSAT = 0.24 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
307.000	Bus.Park	96.2	NORMAL	75	80	0.10	0.02	Min	0.02
	Office		NORMAL	75	80	0.10	0.02	Min	
12.000	Educ.	3.8	NORMAL	80	45	0.29	0.05	Hi	0.12
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

319.00 = Total Area Avg. = 75.2 79% 0.107

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 79
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 79

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
8	0.498	1.52	0.95	0.02	34.9	0.107	0.250	4.90	0.410	79	18

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 8a

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	3.000	3.9	0.26	0
55	46.000	60.5	0.27	0
75	8.000	10.5	0.23	0
LAA	19.000	25.0	0.25	0

TOTAL = 76.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
76.000	SLotRes	100.	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

76.000 = Total Area Avg. = 50.0 30% 0.250

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.250

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
8a	0.119	0.60	0.40	0.05	35.0	0.250	0.250	4.70	0.380	30	21

TABLE G-5
Northwest Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 9

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	11.000	3.9	0.23	0
LAA	269.000	96.1	0.25	0

TOTAL = 280.000 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 0.0
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
3.000	SLotRes	1.1	NORMAL	50	30	0.25	0.05	Low	0.07
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
3.000	Ind.	1.1	NORMAL	60	55	0.15	0.03	Min	0.04
271.000	Bus.Park	96.8	NORMAL	75	80	0.10	0.02	Min	0.02
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
3.000	Water	1.1	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

280.00 = Total Area Avg. = 73.8 78% 0.101

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 99.0 %
WET = 1.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.248

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.43

IMPERVIOUS AREA: URBAN @ 100 % effective = 78
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 78

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
9	0.438	1.60	0.80	0.03	11.2	0.101	0.248	4.80	0.430	78	31

MCUHP2 REPORT
FUTURE CONDITIONS
NORTHWEST MESA AREA

TABLE G-6
Northwest Mesa Area
Future Conditions
MCUHP2 Report

Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
1	0.391	0.170	0.275	4.40	0.410	24	32.6
10	0.722	0.213	0.250	4.70	0.410	25	41.8
11	1.056	0.186	0.248	4.15	0.590	33	65.2
12	1.031	0.130	0.245	4.00	0.700	39	57.1
13a	0.773	0.226	0.250	4.10	0.570	36	37.3
13b	0.228	0.233	0.250	4.45	0.460	31	32.9
14	0.997	0.231	0.250	4.60	0.420	29	37.2
15a	0.352	0.242	0.250	4.90	0.350	28	34.3
15b	0.511	0.226	0.250	4.70	0.390	30	37.1
16	0.087	0.223	0.250	4.65	0.400	39	13.5
18b	0.377	0.227	0.250	4.00	0.580	40	20.5
19	0.758	0.189	0.250	4.00	0.610	57	24.7
2	0.998	0.198	0.248	4.55	0.460	26	53.2
20	0.580	0.217	0.250	4.15	0.560	41	46.7
21	0.530	0.223	0.250	4.50	0.460	31	44.6
25	0.502	0.242	0.250	4.15	0.540	38	31.5
26	0.250	0.232	0.250	4.25	0.520	34	19.6
27	0.242	0.151	0.250	4.15	0.620	54	14.6
28	0.903	0.199	0.250	4.45	0.480	52	35.1
3	0.998	0.211	0.250	5.30	0.310	30	60.4
33	0.728	0.222	0.248	4.55	0.440	27	64.3
34	0.905	0.203	0.248	4.65	0.420	26	61.2
35	1.461	0.209	0.245	4.50	0.460	23	87.8
4	0.998	0.150	0.250	4.80	0.390	55	31.1
40	0.584	0.124	0.248	4.60	0.470	71	12.0
41	0.545	0.099	0.248	4.45	0.530	73	27.6
5	0.952	0.253	0.248	4.10	0.560	28	37.5
6	1.002	0.242	0.250	4.40	0.470	31	39.6
7	0.275	0.205	0.250	5.40	0.290	40	28.1
8	0.498	0.107	0.250	4.90	0.410	79	17.7
8a	0.119	0.250	0.250	4.70	0.380	30	21.3
9	0.438	0.101	0.248	4.80	0.430	78	31.0

LAG REPORT
FUTURE CONDITIONS
NORTHWEST MESA AREA

TABLE G-7
Northwest Mesa Area
Future Conditions
Lag Report

Summary of MCUHP2 Lag Time Calculation Parameters

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
1	Valley	0.0800	0.90	0.30	55.60	32.6
10	Valley	0.0610	1.30	0.80	53.80	41.8
11	Valley	0.0630	2.09	1.52	57.40	65.2
12	Valley	0.0790	1.80	0.80	77.80	57.1
13a	Valley	0.0480	1.50	0.90	46.70	37.3
13b	Valley	0.0510	1.10	0.70	40.90	32.9
14	Valley	0.0540	1.40	0.70	46.40	37.2
15a	Valley	0.0530	1.00	0.70	33.00	34.3
15b	Valley	0.0530	1.62	0.43	21.60	37.1
16	Mountain	0.0450	0.50	0.20	38.00	13.5
18b	Valley	0.0450	0.90	0.40	55.60	20.5
19	Valley	0.0380	1.40	0.60	46.40	24.7
2	Valley	0.0700	1.50	1.00	65.30	53.2
20	Valley	0.0430	2.38	1.23	37.80	46.7
21	Valley	0.0560	1.71	0.76	38.00	44.6
25	Valley	0.0490	1.30	0.60	42.30	31.5
26	Valley	0.0480	0.80	0.30	43.80	19.6
27	Valley	0.0400	0.60	0.30	45.00	14.6
28	Valley	0.0410	2.00	0.80	39.50	35.1
3	Valley	0.0600	1.80	1.30	36.10	60.4
33	Valley	0.0620	2.00	1.20	32.50	64.3
34	Valley	0.0660	1.71	1.04	32.20	61.2
35	Valley	0.0820	2.19	1.14	29.70	87.8
4	Valley	0.0300	1.70	1.20	23.50	31.1
40	Valley	0.0300	0.76	0.38	69.70	12.0
41	Valley	0.0370	1.42	0.66	28.20	27.6
5	Valley	0.0580	1.30	0.80	73.10	37.5
6	Valley	0.0500	1.60	1.00	59.40	39.6
7	Valley	0.0520	1.10	0.50	52.70	28.1
8	Valley	0.0210	1.52	0.95	34.90	17.7
8a	Valley	0.0500	0.60	0.40	35.00	21.3
9	Valley	0.0310	1.60	0.80	11.20	31.0

SUBBASIN RETENTION VOLUMES
FUTURE CONDITIONS
NORTHWEST MESA AREA

TABLE G-8

Northwest Mesa Area

Future Conditions

SUBBASIN RETENTION VOLUMES

'97 MAG Land Uses

SUBBASIN	VOLUME (ac-ft)	% of Future Development	Future Dev. Vol (ac-ft)	80% of future dev.
9	54	96	52	41
4	107	41	44	35
8	61	80	49	39
3	91	10	9	7
7	27	21	6	5
10	61	5	3	2
8A	11	100	11	9
15A	31	3	1	1
15B	45	6	3	2
1	33	82	27	22
5	78	26	20	16
2	84	26	22	17
6	87	4	3	3
11	91	47	43	34
12	92	21	19	15
13A	68	19	13	10
13B	20	7	1	1
14	87	1	1	1
16	8	29	2	2
21	46	7	3	3
19	79	56	44	35
27	25	25	6	5
20	54	11	6	5
28	93	24	22	18
26	22	3	1	1
34	77	4	3	2
35	119	4	5	4
18B	35	22	8	6
25	45	3	1	1
33	62	4	2	2
40	69	37	26	20
41	64	31	20	16

SUBBASIN PREPARATION REPORTS
FUTURE CONDITIONS
SOUTHERN MESA AREA

SUBBASIN PARAMETERS
FUTURE CONDITIONS
SOUTHERN MESA AREA

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 59A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	32.100	18.9	0.41	0
55	137.650	81.1	0.27	0

TOTAL = 169.750 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.55
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
153.890	SLotRes	90.7	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
12.010	Transp.	7.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
3.850	Water	2.3	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

169.75 = Total Area Avg. = 51 33% 0.230

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 33
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 33

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
59A	0.265	0.85	0.28	0.07	34.9	0.23	0.25	4.55	0.42	33	30

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 59B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	26.710	4.5	0.41	0
50	280.990	46.9	0.26	0
55	291.780	48.7	0.27	0

TOTAL = 599.480 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
476.350	SLotRes	79.5	NORMAL	50	30	0.25	0.05	Low	0.04
2.930	MDenRes	0.5	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
102.080	Rec.Open	17.0	NORMAL	90	0	0.10	0.10	Hi	0.10
18.120	Water	3.0	WET	0	0	0.00	1.00	Hi	0.12
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
599.48 = Total Area			Avg. =	55	24%	0.220			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 97.0 %
WET = 3.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 24
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 24

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
59B	0.937	1.18	0.66	0.09	33.9	0.22	0.24	4.65	0.41	24	58

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 60

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	88.995	6.0	0.41	0
50	124.525	8.4	0.26	0
55	1042.125	70.7	0.27	0
75	217.932	14.8	0.23	0

TOTAL = 1474.000 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
721.140	SLotRes	48.9	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
54.850	HDensRes	3.7	NORMAL	50	45	0.25	0.05	Low	0.06
68.100	N.Retail	4.6	NORMAL	75	80	0.10	0.02	Min	0.03
101.720	C.Retail	6.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
6.380	Educ.	0.4	NORMAL	80	45	0.29	0.05	Hi	0.13
	Instit.		NORMAL	75	80	0.10	0.02	Min	
12.860	PubFac	0.9	NORMAL	75	80	0.10	0.02	Min	0.03
49.530	Transp.	3.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
294.250	Rec.Open	20.0	NORMAL	90	0	0.10	0.10	Hi	0.09
53.290	Water	3.6	WET	0	0	0.00	1.00	Hi	0.11
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
111.890	MixedUse	7.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

1474.0 = Total Area Avg. = 62 35% 0.180

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 96.0 %
WET = 4.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.43

IMPERVIOUS AREA: URBAN @ 100 % effective = 35
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 35

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
60	2.303	2.36	1.42	0.09	31.8	0.18	0.24	4.65	0.43	35	102

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 64

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	1.321	0.3	0.41	0
50	120.872	23.3	0.26	0
50	90.456	17.4	0.26	0
55	243.308	46.9	0.27	0
75	63.156	12.2	0.23	0

TOTAL = 519.100 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
229.440	SLotRes	44.2	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
1.290	N.Retail	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.380	Bus.Park	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
33.330	Educ.	6.4	NORMAL	80	45	0.29	0.05	Hi	0.11
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
1.960	Rec.Open	0.4	NORMAL	90	0	0.10	0.10	Hi	0.14
8.360	Water	1.6	WET	0	0	0.00	1.00	Hi	0.13
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
244.340	MixedUse	47.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

519.10 = Total Area Avg. = 63 54% 0.180

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 54
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 54

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
64	0.811	1.18	0.58	0.05	25.4	0.18	0.25	4.70	0.41	54	34

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 61A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	9.680	2.9	0.41	0
50	33.280	10.0	0.26	0
55	41.210	12.4	0.27	0
112	138.430	41.6	0.39	0
115	109.870	33.0	0.39	0

TOTAL = 332.470 Acres XKSAT = 0.36 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.20
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
187.840	SLotRes	56.5	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
13.860	N.Retail	4.2	NORMAL	75	80	0.10	0.02	Min	0.03
37.860	C.Retail	11.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
63.330	Bus.Park	19.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
29.580	Transp.	8.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

332.47 = Total Area . Avg. = 61 52% 0.190

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.56

IMPERVIOUS AREA: URBAN @ 100 % effective = 52
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 52

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
61A	0.519	0.95	0.43	0.04	36.8	0.19	0.25	4.20	0.56	52	19

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 61B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	3.610	0.5	0.41	0
50	65.610	9.4	0.26	0
55	383.870	54.9	0.27	0
75	245.120	35.1	0.23	0
113	0.430	0.1	0.39	0
115	0.370	0.1	0.39	0

TOTAL = 699.010 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.80
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
593.400	SLotRes	84.9	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
25.320	HDensRes	3.6	NORMAL	50	45	0.25	0.05	Low	0.06
57.650	N.Retail	8.2	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.250	Bus.Park	0.0	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
22.390	Educ.	3.2	NORMAL	80	45	0.29	0.05	Hi	0.12
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

699.01 = Total Area Avg. = 53 35% 0.240

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.37

IMPERVIOUS AREA: URBAN @ 100 % effective = 35
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 35

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
61B	1.092	1.37	0.73	0.05	39.7	0.24	0.25	4.80	0.37	35	34

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62E

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	44.080	44.9	0.26	0
55	46.440	47.3	0.27	0
113	7.640	7.8	0.39	0

TOTAL = 98.160 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
0.100	SLotRes	0.1	NORMAL	50	30	0.25	0.05	Low	0.09
	MDenRes		NORMAL	50	45	0.25	0.05		
97.940	HDensRes	99.8	NORMAL	50	45	0.25	0.05	Low	0.05
0.120	N.Retail	0.1	NORMAL	75	80	0.10	0.02	Min	0.05
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

98.160 = Total Area Avg. = 50 45% 0.250

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 45
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 45

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62E	0.153	0.62	0.33	0.05	31.9	0.25	0.25	4.65	0.39	45	20

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	57.600	24.0	0.41	0
50	34.750	14.5	0.26	0
55	147.600	61.5	0.27	0

TOTAL = 239.950 Acres XKSAT = 0.30 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.50
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
0.140	MDenRes	0.1	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
0.060	N.Retail	0.0	NORMAL	75	80	0.10	0.02	Min	0.05
50.750	C.Retail	21.2	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
41.380	Transp.	17.2	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
147.620	MixedUse	61.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

239.95 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.52

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62A	0.375	0.76	0.47	0.02	30.0	0.10	0.25	4.50	0.52	80	10

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	6.310	4.2	0.41	0
50	9.150	6.1	0.26	0
55	134.370	89.7	0.27	0

TOTAL = 149.830 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
6.750	SLotRes	4.5	NORMAL	50	30	0.25	0.05	Low	0.07
0.060	MDenRes	0.0	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
17.760	Transp.	11.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
125.260	MixedUse	83.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	
149.83 = Total Area			Avg. =	74	78%	0.110			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 78
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 78

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62B	0.234	0.63	0.33	0.02	47.5	0.11	0.25	4.65	0.46	78	8

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	92.340	31.3	0.26	0
55	203.110	68.7	0.27	0

TOTAL = 295.450 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
250.270	MDenRes	84.7	NORMAL	50	45	0.25	0.05		
0.250	HDensRes	0.1	NORMAL	50	45	0.25	0.05	Low	0.09
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
44.930	Transp.	15.2	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

295.45 = Total Area Avg. = 54 50% 0.230

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 50
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 50

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62D	0.462	0.90	0.33	0.05	30.7	0.23	0.25	4.65	0.40	50	21

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	159.430	45.6	0.26	0
55	189.980	54.4	0.27	0

TOTAL = 349.410 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
1.730	SLotRes	0.5	NORMAL	50	30	0.25	0.05	Low	0.08
304.800	MDenRes	87.2	NORMAL	50	45	0.25	0.05		
2.680	HDensRes	0.8	NORMAL	50	45	0.25	0.05	Low	0.07
26.560	N.Retail	7.6	NORMAL	75	80	0.10	0.02	Min	0.03
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
4.470	Transp.	1.3	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
9.170	Rec.Open	2.6	NORMAL	90	0	0.10	0.10	Hi	0.13
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
349.41 = Total Area			Avg. =	53	47%	0.230			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 47
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 47

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62C	0.546	0.62	0.28	0.05	24.2	0.23	0.25	4.65	0.40	47	20

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 62F

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	103.350	62.8	0.26	0
55	43.900	26.7	0.27	0
113	17.420	10.6	0.39	0

TOTAL = 164.670 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
0.450	SLotRes	0.3	NORMAL	50	30	0.25	0.05	Low	0.08
100.800	MDenRes	61.2	NORMAL	50	45	0.25	0.05		
20.560	HDensRes	12.5	NORMAL	50	45	0.25	0.05	Low	0.06
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
22.260	Transp.	13.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
20.600	MixedUse	12.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

164.67 = Total Area Avg. = 56 54% 0.210

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 54
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 54

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
62F	0.257	0.62	0.38	0.04	31.9	0.21	0.25	4.65	0.41	54	18

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 63

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	16.480	2.8	0.41	0
50	111.337	19.1	0.26	0
50	16.902	2.9	0.26	0
55	438.213	75.2	0.27	0

TOTAL = 582.900 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
294.030	SLotRes	50.4	NORMAL	50	30	0.25	0.05	Low	0.05
0.250	MDenRes	0.0	NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
0.110	C.Retail	0.0	NORMAL	75	80	0.10	0.02	Min	0.05
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.710	Bus.Park	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
0.090	Water	0.0	WET	0	0	0.00	1.00	Hi	0.18
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
287.710	MixedUse	49.4	NORMAL	75	80	0.10	0.02	Min	0.02
	Vacant		DRY	10	0	0.35	0.09	Hi	

582.90 = Total Area Avg. = 62 55% 0.180

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.43

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
63	0.911	1.42	0.71	0.04	28.2	0.18	0.25	4.65	0.43	55	27

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	0.360	0.2	0.05	0
75	147.550	77.6	0.23	0
112	29.010	15.3	0.39	0
113	5.520	2.9	0.39	0
115	7.580	4.0	0.39	0

TOTAL = 190.020 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
141.680	SLotRes	74.6	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
26.780	C.Retail	14.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
21.560	Transp.	11.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

190.02 = Total Area Avg. = 56 43% 0.210

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 43
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 43

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67A	0.297	1.04	0.66	0.04	42.9	0.21	0.25	4.70	0.39	43	26

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	22.700	6.7	0.41	0
55	1.660	0.5	0.27	0
77	72.170	21.2	0.05	0
75	26.200	7.7	0.23	0
112	25.370	7.4	0.39	0
113	117.660	34.5	0.39	0
115	74.990	22.0	0.39	0

TOTAL = 340.750 Acres XKSAT = 0.24 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.90
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
161.440	SLotRes	47.4	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
11.720	N.Retail	3.4	NORMAL	75	80	0.10	0.02	Min	0.03
132.440	C.Retail	38.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
35.150	Transp.	10.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

340.75 = Total Area Avg. = 63 56% 0.170

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

IMPERVIOUS AREA: URBAN @ 100 % effective = 56
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 56

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67B	0.532	1.23	0.85	0.03	28.0	0.17	0.25	4.90	0.38	56	26

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	10.890	1.8	0.27	0
77	93.230	15.7	0.05	0
78	22.540	3.8	0.05	0
75	192.770	32.6	0.23	0
112	33.950	5.7	0.39	0
113	230.340	38.9	0.39	0
115	8.290	1.4	0.39	0

TOTAL = 592.010 Acres XKSAT = 0.22 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
579.330	SLotRes	97.9	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
12.310	N.Retail	2.1	NORMAL	75	80	0.10	0.02	Min	0.03
0.370	C.Retail	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

592.01 = Total Area Avg. = 51 31% 0.250

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.32

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67C	0.925	1.23	0.66	0.05	40.2	0.25	0.25	5.10	0.32	31	32

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	0.420	0.5	0.26	0
77	4.330	5.4	0.05	0
75	75.190	94.1	0.23	0

TOTAL = 79.940 Acres XKSAT = 0.21 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.20
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
79.940	SLotRes	100.	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

79.940 = Total Area Avg. = 50 30% 0.250

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.30

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67D	0.125	0.57	0.38	0.05	34.7	0.25	0.25	5.20	0.30	30	21

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 67E

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	28.730	7.7	0.26	0
55	257.840	69.1	0.27	0
77	79.670	21.3	0.05	0
75	6.940	1.9	0.23	0

TOTAL = 373.180 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
221.590	SLotRes	59.4	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
0.250	HDensRes	0.1	NORMAL	50	45	0.25	0.05	Low	0.09
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
16.020	C.Retail	4.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
135.320	Bus.Park	36.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

373.18 = Total Area Avg. = 60 50% 0.190

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.30

IMPERVIOUS AREA: URBAN @ 100 % effective = 50
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 50

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
67E	0.583	1.23	0.71	0.04	32.3	0.19	0.25	5.40	0.30	50	27

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 68A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	81.290	36.4	0.26	0
55	63.020	28.2	0.27	0
77	61.970	27.7	0.05	0
113	17.130	7.7	0.39	0

TOTAL = 223.410 Acres XKSAT = 0.17 %Rock = 0

DTHETA

Dry = 0.39 PSIF = 5.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
0.080	SLotRes	0.0	NORMAL	50	30	0.25	0.05	Low	0.10
	MDenRes		NORMAL	50	45	0.25	0.05		
86.820	HDensRes	38.9	NORMAL	50	45	0.25	0.05	Low	0.05
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
36.080	C.Retail	16.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
100.430	MixedUse	45.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	
223.41 = Total Area			Avg. =	65	66%	0.160			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 66
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 66

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
68A	0.349	0.66	0.38	0.03	37.7	0.16	0.25	5.70	0.27	66	14

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 68B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	71.280	45.5	0.26	0
55	1.890	1.2	0.27	0
77	33.580	21.4	0.05	0
78	0.070	0.0	0.05	0
113	49.770	31.8	0.39	0

TOTAL = 156.590 Acres XKSAT = 0.21 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.20
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
2.230	HDensRes	1.4	NORMAL	50	45	0.25	0.05	Low	0.08
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
28.200	C.Retail	18.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
27.580	Transp.	17.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
98.580	MixedUse	63.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

156.59 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.36

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
68B	0.245	0.62	0.28	0.02	32.3	0.10	0.25	5.20	0.36	80	8

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 69

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	40.623	69.6	0.26	0
55	17.706	30.4	0.27	0

TOTAL = 58.330 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
27.900	C.Retail	47.8	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
1.130	Bus.Park	1.9	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
29.300	MixedUse	50.2	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

58.330 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
69	0.091	0.67	0.33	0.02	22.4	0.10	0.25	4.70	0.45	80	9

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 71

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	0.002	0.0	0.41	0
50	372.816	53.6	0.26	0
55	23.578	3.4	0.27	0
77	22.872	3.3	0.05	0
75	21.376	3.1	0.23	0
76	51.660	7.4	0.23	0
113	203.446	29.2	0.39	0

TOTAL = 695.750 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
50.320	C.Retail	7.2	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
539.610	Bus.Park	77.6	NORMAL	75	80	0.10	0.02	Min	0.02
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
17.340	Transp.	2.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
88.480	MixedUse	12.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

695.75 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
71	1.087	1.63	0.76	0.02	26.4	0.10	0.25	4.65	0.47	80	17

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 65AW

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	0.268	0.1	0.01	0
55	4.996	1.8	0.27	0
75	186.390	67.2	0.23	0
76	4.291	1.5	0.23	0
77	41.171	14.9	0.05	0
113	40.074	14.5	0.39	0

TOTAL = 277.190 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
265.380	SLotRes	95.7	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
11.810	Bus.Park	4.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
277.19 = Total Area			Avg. =	51	32%	0.240			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.29

IMPERVIOUS AREA: URBAN @ 100 % effective = 32
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 32

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
65AW	0.433	0.95	0.57	0.05	54.7	0.24	0.25	5.30	0.29	32	26

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 65B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	28.121	3.2	0.27	0
79	156.368	17.8	0.02	0
77	40.020	4.6	0.05	0
75	357.545	40.7	0.23	0
76	67.469	7.7	0.23	0
112	219.780	25.0	0.39	0
23	9.747	1.1	0.01	0

TOTAL = 879.050 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
476.820	SLotRes	54.2	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.060	Ind.	0.0	NORMAL	60	55	0.15	0.03	Min	0.05
402.170	Bus.Park	45.8	NORMAL	75	80	0.10	0.02	Min	0.02
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

879.05 = Total Area Avg. = 61 53% 0.180

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.24

IMPERVIOUS AREA: URBAN @ 100 % effective = 53
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 53

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
65B	1.374	1.99	1.23	0.04	37.5	0.18	0.25	6.00	0.24	53	37

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 66A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
77	57.130	33.7	0.05	0
75	88.450	52.1	0.23	0
112	18.040	10.6	0.39	0
113	6.130	3.6	0.39	0

TOTAL = 169.750 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
154.140	SLotRes	90.8	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
4.070	Bus.Park	2.4	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
11.490	Transp.	6.8	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
0.050	Water	0.0	WET	0	0	0.00	1.00	Hi	0.18
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
169.75 = Total Area			Avg. =	52	35%	0.240			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.22

IMPERVIOUS AREA: URBAN @ 100 % effective = 35
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 35

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
66A	0.265	0.71	0.28	0.05	55.9	0.24	0.25	6.00	0.22	35	17

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 66B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	421.090	98.6	0.23	0
113	6.130	1.4	0.39	0

TOTAL = 427.220 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
426.360	SLotRes	99.8	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.860	Bus.Park	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
427.22 = Total Area			Avg. =	50	30%	0.250			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.33

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 30

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
66B	0.668	1.61	1.04	0.05	43.3	0.25	0.25	5.00	0.33	30	43

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 66C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	11.820	3.7	0.26	0
77	36.070	11.3	0.05	0
75	271.250	85.0	0.23	0

TOTAL = 319.140 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
201.710	SLotRes	63.2	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
117.430	Bus.Park	36.8	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

319.14 = Total Area Avg. = 59 48% 0.190

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.29

IMPERVIOUS AREA: URBAN @ 100 % effective = 48
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 48

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
66C	0.499	1.14	0.66	0.04	46.5	0.19	0.25	5.40	0.29	48	24

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 66D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	50.030	25.3	0.26	0
55	4.130	2.1	0.27	0
77	103.790	52.5	0.05	0
75	39.810	20.1	0.23	0

TOTAL = 197.760 Acres XKSAT = 0.11 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 6.80
Normal = 0.17
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
0.070	SLotRes	0.0	NORMAL	50	30	0.25	0.05	Low	0.10
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
21.920	C.Retail	11.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
175.770	Bus.Park	88.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

197.76 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.17

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.19

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
66D	0.309	1.04	0.66	0.02	28.6	0.10	0.17	6.80	0.19	80	13

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 70A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	51.343	14.9	0.26	0
55	9.107	2.6	0.27	0
77	198.093	57.6	0.05	0
79	36.930	10.7	0.02	0
113	48.587	14.1	0.39	0

TOTAL = 344.060 Acres XKSAT = 0.08 %Rock = 0

DTHETA

Dry = 0.32 PSIF = 7.60
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
70.260	C.Retail	20.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
185.490	Ind.	53.9	NORMAL	60	55	0.15	0.03	Min	0.03
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
88.310	MixedUse	25.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

344.06 = Total Area Avg. = 64 67% 0.130

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.13

IMPERVIOUS AREA: URBAN @ 100 % effective = 67
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 67

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
70A	0.538	0.85	0.37	0.03	23.5	0.13	0.15	7.60	0.13	67	13

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 70B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	6.181	2.6	0.26	0
77	196.655	81.4	0.05	0
113	38.624	16.0	0.39	0

TOTAL = 241.460 Acres XKSAT = 0.07 %Rock = 0

DTHETA

Dry = 0.30 PSIF = 8.00
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
0.760	C.Retail	0.3	NORMAL	75	80	0.10	0.02	Min	0.04
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
39.780	Ind.	16.5	NORMAL	60	55	0.15	0.03	Min	0.03
148.310	Bus.Park	61.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
36.180	Transp.	15.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
16.430	MixedUse	6.8	NORMAL	75	80	0.10	0.02	Min	0.03
	Vacant		DRY	10	0	0.35	0.09	Hi	

241.46 = Total Area Avg. = 70 76% 0.110

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.12

IMPERVIOUS AREA: URBAN @ 100 % effective = 76
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 76

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
70B	0.377	1.57	1.14	0.02	29.9	0.11	0.15	8.00	0.12	76	21

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 76B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	0.540	0.1	0.41	0
23	27.230	6.7	0.01	0
50	30.150	7.4	0.26	0
77	323.300	79.2	0.05	0
VE	26.880	6.6	0.01	0

TOTAL = 408.100 Acres XKSAT = 0.05 %Rock = 0

DTHETA

Dry = 0.27 PSIF = 8.80
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
90.540	C.Retail	22.2	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
27.370	Ind.	6.7	NORMAL	60	55	0.15	0.03	Min	0.03
200.260	Bus.Park	49.1	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
89.930	Transp.	22.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

408.10 = Total Area Avg. = 74 78% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.09

IMPERVIOUS AREA: URBAN @ 100 % effective = 78
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 78

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
76B	0.638	1.80	0.85	0.02	27.4	0.10	0.15	8.80	0.09	78	19

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 72

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	29.492	5.5	0.41	0
23	6.752	1.3	0.01	0
50	396.143	73.4	0.26	0
75	15.630	2.9	0.23	0
77	91.240	16.9	0.05	0
VE	0.333	0.1	0.01	0

TOTAL = 539.590 Acres XKSAT = 0.19 %Rock = 0

DTHETA

Dry = 0.38 PSIF = 5.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
539.390	Bus.Park	100.	NORMAL	75	80	0.10	0.02	Min	0.02
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
0.030	Transp.	0.0	NORMAL	75	80	0.10	0.02	Min	0.05
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
0.130	Water	0.0	WET	0	0	0.00	1.00	Hi	0.17
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
0.040	MixedUse	0.0	NORMAL	75	80	0.10	0.02	Min	0.05
	Vacant		DRY	10	0	0.35	0.09	Hi	

539.59 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.33

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
72	0.843	1.60	0.90	0.02	13.1	0.10	0.25	5.40	0.33	80	20

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 76A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	199.820	16.3	0.01	0
50	290.060	23.7	0.26	0
55	0.340	0.0	0.27	0
79	46.990	3.8	0.02	0
77	554.860	45.3	0.05	0
75	1.880	0.2	0.23	0
113	44.120	3.6	0.39	0
VE	86.530	7.1	0.01	0

TOTAL = 1224.600 Acres XKSAT = 0.05 %Rock = 0

DTHETA

Dry = 0.27 PSIF = 8.80
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
43.110	C.Retail	3.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
1180.23	Ind.	96.4	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
1.180	Transp.	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
0.130	Water	0.0	WET	0	0	0.00	1.00	Hi	0.17
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1224.6 = Total Area Avg. = 60 56% 0.150

PERCENT OF SUBBASIN
DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.08

IMPERVIOUS AREA: URBAN @ 100 % effective = 56
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 56

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
76A	1.913	2.91	1.66	0.03	24.1	0.15	0.15	8.80	0.08	56	43

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 73B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	76.600	28.4	0.41	0
50	10.710	4.0	0.26	0
55	19.210	7.1	0.27	0
77	65.260	24.2	0.05	0
75	71.360	26.5	0.23	0
113	26.300	9.8	0.39	0

TOTAL = 269.440 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
100.160	Rural	37.2	NORMAL	30	5	0.30	0.05	Low	0.05
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
168.090	SLotRes	62.4	NORMAL	50	30	0.25	0.05	Low	0.05
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
1.190	Bus.Park	0.4	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
269.44 = Total Area			Avg. =	43	21%	0.270			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 21
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 21

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
73B	0.421	0.57	0.38	0.05	26.3	0.27	0.25	5.30	0.27	21	22

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 73C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	85.360	23.0	0.41	0
50	83.680	22.5	0.26	0
77	69.170	18.6	0.05	0
75	133.090	35.8	0.23	0

TOTAL = 371.300 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
371.300	Bus.Park	100.	NORMAL	75	80	0.10	0.02	Min	0.02
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

371.30 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.34

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
73C	0.580	0.57	0.28	0.02	43.7	0.10	0.25	5.30	0.34	80	7

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 74B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	108.324	51.5	0.41	0
50	0.241	0.1	0.26	0
77	100.071	47.6	0.05	0
113	1.754	0.8	0.39	0

TOTAL = 210.390 Acres XKSAT = 0.15 %Rock = 0

DTHETA

Dry = 0.40 PSIF = 6.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
209.910	Rural	99.8	NORMAL	30	5	0.30	0.05	Low	0.05
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.480	Bus.Park	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
210.39 = Total Area			Avg. =	30	5%	0.300			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.18

IMPERVIOUS AREA: URBAN @ 100 % effective = 5
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 5

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
74B	0.329	0.62	0.47	0.05	32.1	0.30	0.25	6.00	0.18	5	23

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 74C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	57.830	26.2	0.41	0
50	9.440	4.3	0.26	0
77	140.520	63.7	0.05	0
113	12.750	5.8	0.39	0
115	0.140	0.1	0.39	0

TOTAL = 220.680 Acres XKSAT = 0.10 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 7.00
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
220.680	Bus.Park	100.	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

220.68 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.17

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
74C	0.345	0.71	0.47	0.02	25.4	0.10	0.15	7.00	0.17	80	10

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 77A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	3.350	0.3	0.41	0
77	2.300	0.2	0.05	0
75	1105.380	99.3	0.23	0
113	1.870	0.2	0.39	0

TOTAL = 1112.900 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1110.44	Desert	99.8	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
2.530	Water	0.2	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1112.9 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
77A	1.739	2.89	1.47	0.09	31.1	0.35	0.36	5.00	0.27	0	119

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 77B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	82.520	36.2	0.41	0
77	78.930	34.6	0.05	0
113	66.580	29.2	0.39	0

TOTAL = 228.030 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37 PSIF = 5.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
228.030	Rural	100.	NORMAL	30	5	0.30	0.05	Low	0.05
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
228.03 = Total Area			Avg. =	30	5%	0.300			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.24

IMPERVIOUS AREA: URBAN @ 100 % effective = 5
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 5

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
77B	0.356	0.57	0.28	0.05	26.3	0.30	0.25	5.30	0.24	5	19

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 77C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	4.190	2.3	0.41	0
77	69.660	38.8	0.05	0
78	9.040	5.0	0.05	0
113	96.530	53.7	0.39	0
115	0.260	0.1	0.39	0

TOTAL = 179.680 Acres XKSAT = 0.16 %Rock = 0

DTHETA

Dry = 0.39 PSIF = 5.80
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
0.390	Rural	0.2	NORMAL	30	5	0.30	0.05	Low	0.09
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
4.390	Ind.	2.4	NORMAL	60	55	0.15	0.03	Min	0.04
174.900	Bus.Park	97.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

179.68 = Total Area Avg. = 74 79% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 79
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 79

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
77C	0.281	0.52	0.28	0.02	32.3	0.10	0.25	5.80	0.27	79	7

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	71.620	28.9	0.01	0
79	74.860	30.2	0.02	0
113	101.070	40.8	0.39	0

TOTAL = 247.550 Acres XKSAT = 0.06 %Rock = 0

DTHETA

Dry = 0.29 PSIF = 8.40
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
247.020	Rural	99.8	NORMAL	30	5	0.30	0.05	Low	0.05
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.530	Ind.	0.2	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

247.55 = Total Area Avg. = 30 5% 0.300

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.07

IMPERVIOUS AREA: URBAN @ 100 % effective = 5
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 5

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78B	0.387	0.57	0.38	0.05	31.6	0.30	0.15	8.40	0.07	5	21

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	134.060	75.0	0.01	0
79	1.110	0.6	0.02	0
113	43.590	24.4	0.39	0

TOTAL = 178.760 Acres XKSAT = 0.02 %Rock = 0

DTHETA

Dry = 0.19 PSIF = 11.20
Normal = 0.10
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
0.260	Rural	0.1	NORMAL	30	5	0.30	0.05	Low	0.09
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
114.900	Ind.	64.3	NORMAL	60	55	0.15	0.03	Min	0.03
63.600	Bus.Park	35.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

178.76 = Total Area Avg. = 65 64% 0.130

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.10

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.03

IMPERVIOUS AREA: URBAN @ 100 % effective = 64
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 64

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78C	0.279	0.47	0.28	0.03	31.7	0.13	0.10	11.20	0.03	64	9

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78F

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	0.113	0.0	0.26	0
55	2.141	0.1	0.27	0
77	0.763	0.0	0.05	0
75	2677.170	99.8	0.23	0
113	2.513	0.1	0.39	0

TOTAL = 2682.700 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2682.70	Desert	100.	DRY	25	0	0.35	0.09	Low	0.03
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

2682.7 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78F	4.192	3.69	2.08	0.09	29.8	0.35	0.36	5.00	0.27	0	147

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	56.960	10.0	0.41	0
23	241.790	42.6	0.01	0
50	13.650	2.4	0.26	0
55	39.800	7.0	0.27	0
77	36.910	6.5	0.05	0
78	4.840	0.9	0.05	0
75	11.920	2.1	0.23	0
113	161.500	28.5	0.39	0

TOTAL = 567.370 Acres XKSAT = 0.07 %Rock = 0

DTHETA

Dry = 0.30 PSIF = 8.00
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
567.370	Ind.	100.	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
567.37 = Total Area			Avg. =	60	55%	0.150			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.11

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78D	0.887	1.23	0.47	0.03	21.7	0.15	0.15	8.00	0.11	55	20

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 80A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	814.440	48.2	0.01	0
50	47.360	2.8	0.26	0
55	64.800	3.8	0.27	0
77	281.520	16.7	0.05	0
78	78.310	4.6	0.05	0
75	165.000	9.8	0.23	0
76	143.680	8.5	0.23	0
113	93.990	5.6	0.39	0

TOTAL = 1689.100 Acres XKSAT = 0.04 %Rock = 0

DTHETA

Dry = 0.25 PSIF = 9.70
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
1689.10	Ind.	100.	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1689.1 = Total Area Avg. = 60 55% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.06

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
80A	2.639	3.79	2.18	0.03	14.2	0.15	0.15	9.70	0.06	55	58

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 80B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	149.170	20.9	0.01	0
50	13.610	1.9	0.26	0
55	8.740	1.2	0.27	0
75	528.890	74.0	0.23	0
VE	14.060	2.0	0.01	0

TOTAL = 714.470 Acres XKSAT = 0.11 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 6.80
Normal = 0.17
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
368.190	Ind.	51.5	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
176.500	PubFac	24.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
169.510	Rec.Open	23.7	NORMAL	90	0	0.10	0.10	Hi	0.09
0.270	Water	0.0	WET	0	0	0.00	1.00	Hi	0.16
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

714.47 = Total Area Avg. = 71 48% 0.130

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.17

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.18

IMPERVIOUS AREA: URBAN @ 100 % effective = 48
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 48

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
80B	1.116	1.52	0.95	0.04	18.4	0.13	0.17	6.80	0.18	48	42

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	3.160	0.5	0.41	0
77	0.560	0.1	0.05	0
75	584.960	99.4	0.23	0

TOTAL = 588.680 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
0.950	Warehous	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
587.730	Ind.	99.8	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

588.68 = Total Area Avg. = 60 55% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.36

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82B	0.920	0.95	0.43	0.03	21.2	0.15	0.25	5.00	0.36	55	17

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 83

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	635.966	98.7	0.23	0
22	6.611	1.0	0.04	0
75	2.163	0.3	0.23	0

TOTAL = 644.700 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
1.200	Warehous	0.2	NORMAL	75	80	0.10	0.02	Min	0.04
643.500	Ind.	99.8	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

644.70 = Total Area Avg. = 60 55% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.36

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
83	1.007	2.00	0.50	0.03	15.0	0.15	0.25	5.00	0.36	55	26

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 84

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	289.968	45.7	0.23	0
22	1.385	0.2	0.04	0
54	109.860	17.3	0.29	0
55	11.783	1.9	0.27	0
55	181.704	28.7	0.27	0
75	0.040	0.0	0.23	0
125	39.200	6.2	0.43	0

TOTAL = 633.940 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
0.290	Warehous	0.0	NORMAL	75	80	0.10	0.02	Min	0.04
633.650	Ind.	100.	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

633.94 = Total Area Avg. = 60 55% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
84	0.991	2.00	0.50	0.03	12.5	0.15	0.25	4.70	0.40	55	27

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 85

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
54	179.426	27.9	0.29	0
55	69.339	10.8	0.27	0
55	125.863	19.6	0.27	0
125	268.440	41.7	0.43	0

TOTAL = 643.100 Acres XKSAT = 0.33 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.35
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
643.100	Ind.	100.	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

643.10 = Total Area Avg. = 60 55% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.51

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Loa	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
85	1.005	2.00	0.50	0.03	15.0	0.15	0.25	4.35	0.51	55	26

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 86

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
54	89.171	13.9	0.29	0
55	398.704	62.3	0.27	0
55	70.765	11.0	0.27	0
125	81.830	12.8	0.43	0

TOTAL = 640.470 Acres XKSAT = 0.29 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.55
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
639.700	Ind.	99.9	NORMAL	60	55	0.15	0.03	Min	0.02
0.770	Bus.Park	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

640.47 = Total Area Avg. = 60 55% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
86	1.001	2.00	0.50	0.03	15.0	0.15	0.25	4.55	0.45	55	26

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 87A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	314.870	100.	0.23	0

TOTAL = 314.870 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
312.990	Warehous	99.4	NORMAL	75	80	0.10	0.02	Min	0.02
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
1.880	Rec.Open	0.6	NORMAL	90	0	0.10	0.10	Hi	0.14
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
314.87 = Total Area			Avg. =	75	80%	0.100			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
87A	0.492	0.99	0.47	0.02	24.8	0.10	0.25	5.00	0.40	80	12

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 87B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	315.100	100.	0.23	0

TOTAL = 315.100 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
315.100	Warehous	100.	NORMAL	75	80	0.10	0.02	Min	0.02
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

315.10 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
87B	0.492	0.85	0.47	0.02	11.6	0.10	0.25	5.00	0.40	80	13

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 88A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	321.100	100.	0.23	0

TOTAL = 321.100 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
319.950	Warehous	99.6	NORMAL	75	80	0.10	0.02	Min	0.02
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.080	Bus.Park	0.0	NORMAL	75	80	0.10	0.02	Min	0.05
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
1.070	Rec.Open	0.3	NORMAL	90	0	0.10	0.10	Hi	0.15
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

321.10 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
88A	0.502	0.76	0.24	0.02	13.2	0.10	0.25	5.00	0.40	80	9

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 88B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	318.780	100.	0.23	0

TOTAL = 318.780 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
318.780	Warehous	100.	NORMAL	75	80	0.10	0.02	Min	0.02
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

318.78 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
88B	0.498	0.95	0.57	0.02	21.2	0.10	0.25	5.00	0.40	80	13

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 89A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	62.210	19.5	0.25	0
55	83.230	26.1	0.27	0
75	150.320	47.2	0.23	0
VF	22.700	7.1	1.20	0

TOTAL = 318.460 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
120.850	Warehous	37.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Ind.		NORMAL	60	55	0.15	0.03	Min	
197.290	Bus.Park	62.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
0.130	Educ.	0.0	NORMAL	80	45	0.29	0.05	Hi	0.17
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
0.190	Rec.Open	0.1	NORMAL	90	0	0.10	0.10	Hi	0.17
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

318.46 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
89A	0.498	1.04	0.57	0.02	19.0	0.10	0.25	4.65	0.47	80	14

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 89B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	33.850	10.7	0.25	0
55	134.030	42.2	0.27	0
75	148.170	46.7	0.23	0
VF	1.290	0.4	0.00	0

TOTAL = 317.340 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.80
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
0.120	Rural	0.0	NORMAL	30	5	0.30	0.05	Low	0.09
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
233.610	Warehous	73.6	NORMAL	75	80	0.10	0.02	Min	0.03
0.080	Ind.	0.0	NORMAL	60	55	0.15	0.03	Min	0.05
83.530	Bus.Park	26.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

317.34 = Total Area Avg. = 75 80% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.43

IMPERVIOUS AREA: URBAN @ 100 % effective = 80
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 80

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
89B	0.496	0.95	0.47	0.02	23.2	0.10	0.25	4.80	0.43	80	12

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 90A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	47.610	15.5	0.25	0
55	247.150	80.4	0.27	0
VF	12.570	4.1	1.25	0

TOTAL = 307.330 Acres XKSAT = 0.28 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.60
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
0.410	Rural	0.1	NORMAL	30	5	0.30	0.05	Low	0.09
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
235.160	Bus.Park	76.5	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
3.050	Transp.	1.0	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
68.710	Rec.Open	22.4	NORMAL	90	0	0.10	0.10	Hi	0.10
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
307.33 = Total Area			Avg. =	78	62%	0.100			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.49

IMPERVIOUS AREA: URBAN @ 100 % effective = 62
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 62

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
90A	0.480	0.57	0.19	0.04	24.2	0.10	0.25	4.60	0.49	62	13

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 90B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	64.680	12.2	0.25	0
55	463.460	87.8	0.27	0

TOTAL = 528.140 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
321.170	Rural	60.8	NORMAL	30	5	0.30	0.05	Low	0.05
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
0.560	Ind.	0.1	NORMAL	60	55	0.15	0.03	Min	0.04
181.050	Bus.Park	34.3	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
0.380	Transp.	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
24.980	Rec.Open	4.7	NORMAL	90	0	0.10	0.10	Hi	0.12
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
528.14 = Total Area			Avg. =	48	31%	0.220			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

IMPERVIOUS AREA: URBAN @ 100 % effective = 31
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 31

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
90B	0.825	1.99	1.18	0.04	15.3	0.22	0.25	4.65	0.38	31	50

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 91

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
GF	3.189	1.1	0.25	0
55	290.291	98.9	0.27	0

TOTAL = 293.480 Acres XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.65
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
288.370	Ind.	98.3	NORMAL	60	55	0.15	0.03	Min	0.02
0.030	Bus.Park	0.0	NORMAL	75	80	0.10	0.02	Min	0.05
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
5.080	Transp.	1.7	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
293.48 = Total Area			Avg. =	60	55%	0.150			

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 55
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 55

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
91	0.459	1.36	0.58	0.03	18.4	0.15	0.25	4.65	0.42	55	23

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 81A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	2.940	0.3	0.01	0
55	858.220	73.9	0.27	0
75	299.840	25.8	0.23	0

TOTAL = 1161.000 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
1014.00	Ind.	87.3	NORMAL	60	55	0.15	0.03	Min	0.02
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
147.000	PubFac	12.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1161.0 = Total Area Avg. = 62 58% 0.140

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 58
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 58

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
81A	1.814	3.27	1.89	0.03	16.4	0.14	0.25	4.70	0.41	58	49

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 81B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
50	72.230	13.4	0.26	0
55	313.200	58.1	0.27	0
75	153.280	28.5	0.23	0

TOTAL = 538.710 Acres XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.70
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
32.910	Ind.	6.1	NORMAL	60	55	0.15	0.03	Min	0.03
158.120	Bus.Park	29.4	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
266.860	PubFac	49.5	NORMAL	75	80	0.10	0.02	Min	0.02
3.500	Transp.	0.6	NORMAL	75	80	0.10	0.02	Min	0.04
	Airport		NORMAL	60	55	0.15	0.03	Min	
76.880	Rec.Open	14.3	NORMAL	90	0	0.10	0.10	Hi	0.10
0.440	Water	0.1	WET	0	0	0.00	1.00	Hi	0.16
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

538.71 = Total Area Avg. = 76 67% 0.100

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 100. %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 67
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 67

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
81B	0.842	1.09	0.43	0.03	6.9	0.10	0.25	4.70	0.45	67	25

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82A1

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	0.442	0.0	0.01	0
50	0.489	0.0	0.26	0
75	1990.212	99.7	0.23	0
77	2.644	0.1	0.05	0
113	1.613	0.1	0.39	0

TOTAL = 1995.400 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1995.40	Desert	100.	DRY	25	0	0.35	0.09	Low	0.03
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1995.4 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82A1	3.118	3.60	0.90	0.09	33.9	0.35	0.36	5.00	0.27	0	103

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82A2

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	2637.600	99.9	0.23	0
77	3.600	0.1	0.05	0

TOTAL = 2641.200 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2600.53	Desert	98.5	DRY	25	0	0.35	0.09	Low	0.03
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
40.740	Ind.	1.5	NORMAL	60	55	0.15	0.03	Min	0.03
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	
2641.2 = Total Area			Avg. =	26	1%	0.350			

PERCENT OF SUBBASIN DRY = 98.0 %
NORMAL = 2.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82A2	4.127	4.60	2.90	0.09	27.2	0.35	0.36	5.00	0.27	1	183

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82A3

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	1294.800	100.	0.23	0

TOTAL = 1294.800 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1293.41	Desert	99.9	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
1.440	Ind.	0.1	NORMAL	60	55	0.15	0.03	Min	0.04
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1294.8 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82A3	2.023	3.60	2.00	0.09	28.3	0.35	0.36	5.00	0.27	0	145

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 82A4

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	1360.000	100.	0.23	0

TOTAL = 1360.000 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1360.00	Desert	100.	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1360.0 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
82A4	2.125	3.50	1.50	0.09	29.1	0.35	0.36	5.00	0.27	0	128

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 65A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
55	1.096	0.1	0.27	0
75	1547.932	95.4	0.23	0
76	0.526	0.0	0.23	0
77	1.100	0.1	0.05	0
78	68.712	4.2	0.05	0
113	3.034	0.2	0.39	0

TOTAL = 1622.400 Acres XKSAT = 0.22 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.10
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2.340	Desert	0.1	DRY	25	0	0.35	0.09	Low	0.07
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
605.970	SLotRes	37.3	NORMAL	50	30	0.25	0.05	Low	0.04
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
978.930	Bus.Park	60.3	NORMAL	75	80	0.10	0.02	Min	0.02
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
0.100	Transp.	0.0	NORMAL	75	80	0.10	0.02	Min	0.05
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
35.100	Water	2.2	WET	0	0	0.00	1.00	Hi	0.11
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1622.4 = Total Area Avg. = 64 59% 0.150

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 98.0 %
WET = 2.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 59
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 59

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
65A	2.535	1.60	0.90	0.05	51.2	0.15	0.25	5.10	0.35	59	42

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
75	1197.100	99.4	0.23	0
77	3.100	0.3	0.05	0
113	4.300	0.4	0.39	0

TOTAL = 1204.500 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1204.50	Desert	100.	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1204.5 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78A	1.882	3.30	1.30	0.09	30.2	0.35	0.36	5.00	0.27	0	118

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 75

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	10.364	0.4	0.41	0
1	31.672	1.2	0.41	0
50	215.491	8.4	0.26	0
55	1.199	0.0	0.27	0
79	178.044	6.9	0.02	0
77	979.798	38.2	0.05	0
78	88.526	3.5	0.05	0
75	839.357	32.8	0.23	0
112	218.677	8.5	0.39	0
115	0.035	0.0	0.39	0

TOTAL = 2563.000 Acres XKSAT = 0.11 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 6.80
Normal = 0.17
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
2468.80	Desert	96.3	DRY	25	0	0.35	0.09	Low	0.03
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
94.200	Bus.Park	3.7	NORMAL	75	80	0.10	0.02	Min	0.03
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

2563.0 = Total Area Avg. = 27 3% 0.340

PERCENT OF SUBBASIN DRY = 96.0 %
NORMAL = 4.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35
SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.13
IMPERVIOUS AREA: URBAN @ 100 % effective = 3
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 3

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
75	4.005	4.00	3.00	0.09	20.0	0.34	0.35	6.80	0.13	3	182

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 79B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	266.970	41.8	0.01	0
55	50.050	7.8	0.27	0
77	183.700	28.8	0.05	0
78	63.040	9.9	0.05	0
75	67.090	10.5	0.23	0
113	7.130	1.1	0.39	0

TOTAL = 637.980 Acres XKSAT = 0.04 %Rock = 0

DTHETA

Dry = 0.25 PSIF = 9.70
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
636.940	Desert	99.8	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
0.390	Airport	0.1	NORMAL	60	55	0.15	0.03	Min	0.04
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
0.650	Ag/Row	0.1	NORMAL	85	0	0.50	0.10	Hi	0.15
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

637.98 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.05

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
79B	0.997	1.37	0.57	0.09	9.0	0.35	0.25	9.70	0.05	0	78

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 78E

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
23	234.240	36.4	0.01	0
77	179.440	27.9	0.05	0
78	61.790	9.6	0.05	0
75	31.690	4.9	0.23	0
113	136.600	21.2	0.39	0

TOTAL = 643.760 Acres XKSAT = 0.05 %Rock = 0

DTHETA

Dry = 0.27 PSIF = 8.80
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
594.310	Desert	92.3	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
48.350	LLotRes	7.5	NORMAL	50	15	0.30	0.05	Low	0.06
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
1.100	Ag/Row	0.2	NORMAL	85	0	0.50	0.10	Hi	0.15
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

643.76 = Total Area Avg. = 27 1% 0.350

PERCENT OF SUBBASIN DRY = 92.0 %
NORMAL = 8.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.06

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 1

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
78E	1.006	1.14	0.47	0.09	17.4	0.35	0.26	8.80	0.06	1	57

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 73A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	0.730	0.1	0.41	0
55	0.850	0.1	0.27	0
77	1.740	0.3	0.05	0
75	601.180	99.2	0.23	0
113	1.590	0.3	0.39	0

TOTAL = 606.090 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
604.450	Desert	99.7	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
1.640	Water	0.3	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

606.09 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
73A	0.947	2.27	1.04	0.09	34.9	0.35	0.36	5.00	0.27	0	95

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 74A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
1	2.500	0.5	0.41	0
77	1.470	0.3	0.05	0
75	478.730	99.2	0.23	0

TOTAL = 482.700 Acres XKSAT = 0.23 %Rock = 0

DTHETA

Dry = 0.36 PSIF = 5.00
Normal = 0.25
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
480.110	Desert	99.5	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
	Bus.Park		NORMAL	75	80	0.10	0.02	Min	
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
2.590	Water	0.5	WET	0	0	0.00	1.00	Hi	0.14
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

482.70 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
74A	0.754	2.37	0.99	0.09	42.2	0.35	0.36	5.00	0.27	0	93

TABLE G-9
Southern Mesa Area
Future Conditions
Subbasin Parameters

LOSS PARAMETERS FOR SUBBASIN: 79A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
2	36.230	2.8	0.41	0
1	4.900	0.4	0.41	0
23	341.420	26.6	0.01	0
50	83.800	6.5	0.26	0
55	7.900	0.6	0.27	0
77	139.460	10.9	0.05	0
78	343.110	26.7	0.05	0
76	7.400	0.6	0.23	0
113	307.260	23.9	0.39	0
115	12.320	1.0	0.39	0

TOTAL = 1283.800 Acres XKSAT = 0.07 %Rock = 0

DTHETA

Dry = 0.30 PSIF = 8.00
Normal = 0.15
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1283.20	Desert	99.9	DRY	25	0	0.35	0.09	Low	0.04
	Rural		NORMAL	30	5	0.30	0.05	Low	
	LLotRes		NORMAL	50	15	0.30	0.05	Low	
	SLotRes		NORMAL	50	30	0.25	0.05	Low	
	MDenRes		NORMAL	50	45	0.25	0.05		
	HDensRes		NORMAL	50	45	0.25	0.05	Low	
	N.Retail		NORMAL	75	80	0.10	0.02	Min	
	C.Retail		NORMAL	75	80	0.10	0.02	Min	
	Reg.Ret		NORMAL	75	80	0.10	0.02	Min	
	Hotel		NORMAL	75	80	0.10	0.02	Min	
	Warehous		NORMAL	75	80	0.10	0.02	Min	
	Ind.		NORMAL	60	55	0.15	0.03	Min	
0.670	Bus.Park	0.1	NORMAL	75	80	0.10	0.02	Min	0.04
	Office		NORMAL	75	80	0.10	0.02	Min	
	Educ.		NORMAL	80	45	0.29	0.05	Hi	
	Instit.		NORMAL	75	80	0.10	0.02	Min	
	PubFac		NORMAL	75	80	0.10	0.02	Min	
	Transp.		NORMAL	75	80	0.10	0.02	Min	
	Airport		NORMAL	60	55	0.15	0.03	Min	
	Rec.Open		NORMAL	90	0	0.10	0.10	Hi	
	Water		WET	0	0	0.00	1.00	Hi	
	Ag/Orch		NORMAL	90	0	0.50	0.10	Hi	
	Ag/Row		NORMAL	85	0	0.50	0.10	Hi	
	MixedUse		NORMAL	75	80	0.10	0.02	Min	
	Vacant		DRY	10	0	0.35	0.09	Hi	

1283.8 = Total Area Avg. = 25 0% 0.350

PERCENT OF SUBBASIN DRY = 100. %
NORMAL = 0.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.30
SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.08
IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 0

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
79A	2.006	2.32	1.23	0.09	23.2	0.35	0.30	8.00	0.08	0	106

MCUHP2 REPORTS
FUTURE CONDITIONS
SOUTHERN MESA AREA

TABLE G-10
Southern Mesa Area
Future Conditions
MCUHP2 Report

Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
59A	0.265	0.230	0.250	4.55	0.420	33	29.7
59B	0.937	0.220	0.240	4.65	0.410	24	58.3
60	2.303	0.180	0.240	4.65	0.430	35	102.0
64	0.811	0.180	0.250	4.70	0.410	54	34.4
61A	0.519	0.190	0.250	4.20	0.560	52	19.1
61B	1.092	0.240	0.250	4.80	0.370	35	33.6
62E	0.153	0.250	0.250	4.65	0.390	45	20.4
62A	0.375	0.100	0.250	4.50	0.520	80	10.2
62B	0.234	0.110	0.250	4.65	0.460	78	8.0
62D	0.462	0.230	0.250	4.65	0.400	50	21.3
62C	0.546	0.230	0.250	4.65	0.400	47	19.8
62F	0.257	0.210	0.250	4.65	0.410	54	18.1
63	0.911	0.180	0.250	4.65	0.430	55	26.8
67A	0.297	0.210	0.250	4.70	0.390	43	25.7
67B	0.532	0.170	0.250	4.90	0.380	56	26.4
67C	0.925	0.250	0.250	5.10	0.320	31	32.3
67D	0.125	0.250	0.250	5.20	0.300	30	20.5
67E	0.583	0.190	0.250	5.40	0.300	50	26.9
68A	0.349	0.160	0.250	5.70	0.270	66	13.7
68B	0.245	0.100	0.250	5.20	0.360	80	7.7
69	0.091	0.100	0.250	4.70	0.450	80	9.0
71	1.087	0.100	0.250	4.65	0.470	80	16.8
65AW	0.433	0.240	0.250	5.30	0.290	32	26.1
65B	1.374	0.180	0.250	6.00	0.240	53	36.6
66A	0.265	0.240	0.250	6.00	0.220	35	17.1
66B	0.668	0.250	0.250	5.00	0.330	30	42.8
66C	0.499	0.190	0.250	5.40	0.290	48	24.3
66D	0.309	0.100	0.170	6.80	0.190	80	13.2
70A	0.538	0.130	0.150	7.60	0.130	67	12.7
70B	0.377	0.110	0.150	8.00	0.120	76	20.7
76B	0.638	0.100	0.150	8.80	0.090	78	18.9
72	0.843	0.100	0.250	5.40	0.330	80	20.3
76A	1.913	0.150	0.150	8.80	0.080	56	42.9
73B	0.421	0.270	0.250	5.30	0.270	21	21.6
73C	0.580	0.100	0.250	5.30	0.340	80	7.0
74B	0.329	0.300	0.250	6.00	0.180	5	23.3
74C	0.345	0.100	0.150	7.00	0.170	80	10.3
77A	1.739	0.350	0.360	5.00	0.270	0	119.0
77B	0.356	0.300	0.250	5.30	0.240	5	19.3
77C	0.281	0.100	0.250	5.80	0.270	79	7.2
78B	0.387	0.300	0.150	8.40	0.070	5	20.9
78C	0.279	0.130	0.100	11.20	0.030	64	9.0
78F	4.192	0.350	0.360	5.00	0.270	0	147.0
78D	0.887	0.150	0.150	8.00	0.110	55	19.5
80A	2.639	0.150	0.150	9.70	0.060	55	58.2
80B	1.116	0.130	0.170	6.80	0.180	48	41.9
82B	0.920	0.150	0.250	5.00	0.360	55	17.2

TABLE G-10
Southern Mesa Area
Future Conditions
MCUHP2 Report
(continued)

Summary of MCUHP2 Subbasin Input Parameters

SUBBASIN	AREA sq.miles	IA ins.	DTHETA	PSIF	XKSAT adj.	RTIMP %	LAG mins.
83	1.007	0.150	0.250	5.00	0.360	55	25.8
84	0.991	0.150	0.250	4.70	0.400	55	26.7
85	1.005	0.150	0.250	4.35	0.510	55	25.8
86	1.001	0.150	0.250	4.55	0.450	55	25.8
87A	0.492	0.100	0.250	5.00	0.400	80	11.7
87B	0.492	0.100	0.250	5.00	0.400	80	12.8
88A	0.502	0.100	0.250	5.00	0.400	80	9.2
88B	0.498	0.100	0.250	5.00	0.400	80	12.8
89A	0.498	0.100	0.250	4.65	0.470	80	13.5
89B	0.496	0.100	0.250	4.80	0.430	80	11.7
90A	0.480	0.100	0.250	4.60	0.490	62	12.8
90B	0.825	0.220	0.250	4.65	0.380	31	49.8
91	0.459	0.150	0.250	4.65	0.420	55	22.7
81A	1.814	0.140	0.250	4.70	0.410	58	49.0
81B	0.842	0.100	0.250	4.70	0.450	67	24.7
82A1	3.118	0.350	0.360	5.00	0.270	0	103.0
82A2	4.127	0.350	0.360	5.00	0.270	1	183.0
82A3	2.023	0.350	0.360	5.00	0.270	0	145.0
82A4	2.125	0.350	0.360	5.00	0.270	0	128.0
65A	2.535	0.150	0.250	5.10	0.350	59	41.5
78A	1.882	0.350	0.360	5.00	0.270	0	118.0
75	4.005	0.340	0.350	6.80	0.130	3	182.0
79B	0.997	0.350	0.250	9.70	0.050	0	77.7
78E	1.006	0.350	0.260	8.80	0.060	1	57.4
73A	0.947	0.350	0.360	5.00	0.270	0	94.5
74A	0.754	0.350	0.360	5.00	0.270	0	92.9
79A	2.006	0.350	0.300	8.00	0.080	0	106.0

LAG REPORTS
FUTURE CONDITIONS
SOUTHERN MESA AREA

TABLE G-11
Southern Mesa Area
Future Conditions
Lag Report

Summary of MCUHP2 Lag Time Calculation Parameters

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
59A	Valley	0.0700	0.85	0.28	34.90	29.7
59B	Valley	0.0870	1.18	0.66	33.90	58.3
60	Valley	0.0870	2.36	1.42	31.80	102.0
64	Valley	0.0510	1.18	0.58	25.40	34.4
61A	Valley	0.0370	0.95	0.43	36.80	19.1
61B	Valley	0.0470	1.37	0.73	39.70	33.6
62E	Valley	0.0500	0.62	0.33	31.90	20.4
62A	Valley	0.0200	0.76	0.47	30.00	10.2
62B	Valley	0.0210	0.63	0.33	47.50	8.0
62D	Mountain	0.0450	0.90	0.33	30.70	21.3
62C	Valley	0.0490	0.62	0.28	24.20	19.8
62F	Valley	0.0420	0.62	0.38	31.90	18.1
63	Valley	0.0350	1.42	0.71	28.20	26.8
67A	Valley	0.0420	1.04	0.66	42.90	25.7
67B	Valley	0.0340	1.23	0.85	28.00	26.4
67C	Valley	0.0490	1.23	0.66	40.20	32.3
67D	Valley	0.0500	0.57	0.38	34.70	20.5
67E	Valley	0.0380	1.23	0.71	32.30	26.9
68A	Valley	0.0320	0.66	0.38	37.70	13.7
68B	Valley	0.0200	0.62	0.28	32.30	7.7
69	Valley	0.0200	0.67	0.33	22.40	9.0
71	Valley	0.0320	2.36	0.92	25.40	33.5
71N	Valley	0.0200	1.71	0.76	26.30	17.1
71S	Valley	0.0200	0.76	0.43	32.90	9.7
65aw	Valley	0.0490	0.95	0.57	54.70	26.1
65B	Valley	0.0360	1.99	1.23	37.50	36.6
66A	Valley	0.0470	0.71	0.28	55.90	17.1
66B	Valley	0.0500	1.61	1.04	43.30	42.8
66C	Valley	0.0390	1.14	0.66	46.50	24.3
66D	Valley	0.0200	1.04	0.66	28.60	13.2
70A	Valley	0.0250	0.76	0.57	26.30	14.1
70AN	Valley	0.0210	0.66	0.43	19.70	10.6
70AS	Valley	0.0280	0.86	0.57	22.10	17.1
70B	Valley	0.0390	1.04	0.71	23.80	27.4
70BN	Valley	0.0220	0.57	0.38	31.60	9.2
70BS	Valley	0.0220	1.04	0.57	24.00	14.2
76B	Valley	0.0210	1.80	0.85	27.40	18.9
72	Valley	0.0540	1.75	0.58	13.10	48.0
72N	Valley	0.0200	0.71	0.48	26.80	10.2
72S	Valley	0.0210	0.66	0.28	28.80	8.4
76A	Valley	0.0300	2.91	1.66	24.10	42.9
73B	Valley	0.0500	0.57	0.38	26.30	21.6
73C	Valley	0.0200	0.57	0.28	43.70	7.0
74B	Valley	0.0500	0.62	0.47	32.10	23.3
74C	Valley	0.0200	0.71	0.47	25.40	10.3
77A	Valley	0.0920	2.89	1.47	31.10	119.0
77B	Valley	0.0500	0.57	0.28	26.30	19.3

TABLE G-11
Southern Mesa Area
Future Conditions
Lag Report
(continued)

SUBBASIN	S-Graph Type	Kn	L miles	Lca miles	Slope ft/mile	Lag mins
77C	Valley	0.0200	0.52	0.28	32.30	7.2
78B	Valley	0.0500	0.57	0.38	31.60	20.9
78C	Valley	0.0260	0.47	0.28	31.70	9.0
78F	Valley	0.0900	3.69	2.08	29.80	147.0
78D	Valley	0.0300	1.23	0.47	21.70	19.5
80A	Valley	0.0300	3.79	2.18	14.20	58.2
80B	Valley	0.0440	1.52	0.95	18.40	41.9
82B	Valley	0.0300	0.95	0.43	21.20	17.2
83	Valley	0.0300	2.00	0.50	15.00	25.8
84	Valley	0.0300	2.00	0.50	12.50	26.7
85	Valley	0.0300	2.00	0.50	15.00	25.8
86	Valley	0.0300	2.00	0.50	15.00	25.8
87A	Valley	0.0200	0.99	0.47	24.80	11.7
87B	Valley	0.0200	0.85	0.47	11.60	12.8
88A	Valley	0.0200	0.76	0.24	13.20	9.2
88B	Valley	0.0200	0.95	0.57	21.20	12.8
89A	Valley	0.0200	1.04	0.57	19.00	13.5
89B	Valley	0.0200	0.95	0.47	23.20	11.7
90A	Valley	0.0380	0.57	0.19	24.20	12.8
90B	Valley	0.0420	1.99	1.18	15.30	49.8
91	Valley	0.0300	1.36	0.58	18.40	22.7
81A	Valley	0.0290	3.27	1.89	16.40	49.0
81B	Valley	0.0330	1.09	0.43	6.90	24.7
82a1	Valley	0.0900	3.60	0.90	33.90	103.0
82a2	Valley	0.0890	4.60	2.90	27.20	183.0
82a3	Valley	0.0900	3.60	2.00	28.30	145.0
82a4	Valley	0.0900	3.50	1.50	29.10	128.0
65a	Valley	0.0530	1.60	0.90	51.20	41.5
78a	Valley	0.0900	3.30	1.30	30.20	118.0
75	Valley	0.0870	4.00	3.00	20.00	182.0
79B	Valley	0.0900	1.37	0.57	9.00	77.7
78E	Valley	0.0870	1.14	0.47	17.40	57.4
73A	Valley	0.0930	2.27	1.04	34.90	94.5
74A	Valley	0.0950	2.37	0.99	42.20	92.9
79A	Valley	0.0900	2.32	1.23	23.20	106.0

SUBBASIN RETENTION VOLUMES
FUTURE CONDITIONS
SOUTHERN MESA AREA

TABLE G-12
Southern Mesa Area
Future Conditions
SUBBASIN RETENTION VOLUMES
'97 MAG Land Uses

SUBBASIN	VOLUME (ac-ft)	% of Future Development	Future Dev. Vol (ac-ft)	80% of future dev.
59A	24	8	2	2
59B	79	100	79	63
60	212	100	212	170
64	86	98	84	67
65AW	40	98	39	31
65B	150	100	150	120
65A	280	Pinal	218	174
67A	29	89	26	21
67B	57	90	51	41
67C	84	100	84	67
67D	11	100	11	9
66A	26	100	26	21
66B	60	100	60	48
66C	52	100	52	42
66D	39	100	39	31
61A	53	100	53	42
61B	101	100	101	81
67E	62	100	62	50
62C	55	71	39	31
62E	15	96	14	12
68A	41	95	39	31
70AN	28	98	27	22
70AS	38	98	37	30
70BN	24	98	24	19
62A	46	90	41	33
62B	28	87	24	19
62D	47	92	43	35
62F	27	84	23	18
63	97	92	89	71
68B	30	100	30	24
69	11	100	11	9
71N	120	99	119	95
72N	64	98	63	50
71S	14	99	14	11
72S	42	98	41	33

TABLE G-12
Southern Mesa Area
Future Conditions
SUBBASIN RETENTION VOLUMES
(continued)
'97 MAG Land Uses

SUBBASIN	VOLUME (ac-ft)	% of Future Development	Future Dev. Vol (ac-ft)	80% of future dev.
70BS	24	98	24	19
76B	83	100	83	66
76A	231	100	231	185
73A	62	Pinal	43	34
73B	36	100	36	29
73C	72	100	72	58
74A	49	Pinal	34	27
74B	27	100	27	22
74C	44	100	44	35
75	313	96	300	240
77A	114	Pinal	79	63
77B	28	73	20	16
77C	35	100	35	28
78A	123	Pinal	76	61
78B	38	0	0	0
78C	36	82	30	24
79A	169	0	0	0
78F	274	Pinal	192	154
82A1	204	Pinal	549	439
82A2	273	Pinal	0	0
82A4	139	Pinal	0	0
82A3	132	Pinal	0	0
78D	105	100	105	84
82B	99	1	1	1
78E	90	0	0	0
83	108	96	104	83
84	106	100	106	85
79B	90	0	0	0
80A	322	13	42	33
80B	125	4	5	4
81A	198	3	6	5
81B	96	46	44	35
SUB258	168	90	151	121
SUB260	37	90	33	27
SUB264	40	90	36	29

TABLE D-12

Southern Mesa Area

Future Conditions

SUBBASIN RETENTION VOLUMES

(continued)

'97 MAG Land Uses

SUBBASIN	VOLUME (ac-ft)	% of Future Development	Future Dev. Vol (ac-ft)	80% of future dev.
SUB268	39	90	35	28
88A	62	100	62	50
89A	62	100	62	50
90A	53	99	52	42
87A	61	100	61	49
87B	61	100	61	49
88B	62	100	62	50
89B	61	100	61	49
90B	74	39	29	23
85	105	100	105	84
86	106	100	106	85
91	49	97	48	38

APPENDIX H

50-YEAR, 24-HOUR
EXISTING CONDITION MODEL
HEC-1 OUTPUT

APPENDIX H

HEC-1 OUTPUT H-1 Northeast Mesa Area, 50-year, 24-hour Storm
Existing Land Use Condition **H-1**

HEC-1 OUTPUT H-2 Northwest Mesa Area, 50-year, 24-hour Storm,
Existing Land Use Conditions **H-15**

HEC-1 OUTPUT H-3 Southern Mesa Area, 50-year, 24-hour Storm,
Existing Land Use Conditions **H-28**

APPENDIX H-1

NORTHEAST MESA AREA
50-YEAR, 24-HOUR STORM
EXISTING LAND USE CONDITIONS
HEC-1 MODEL

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1****************************************                    ****************************************
□
 *                                      *                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *    U.S. ARMY CORPS OF ENGINEERS      *
 *              JUL   1997              *                    *    HYDROLOGIC ENGINEERING CENTER     *
 *           VERSION 4.1                *                    *          609 SECOND STREET           *
 *                                      *                    *       DAVIS, CALIFORNIA 95616        *
 *  RUN DATE   25JUN98  TIME  13:36:23  *                    *           (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   SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
        2           ID   AREA NORTH OF SUPERSTITION FREEWAY
        3           ID
        4           ID
        5           ID   REVISED BY VALERIE SWICK, OCTOBER-NOVEMBER 1996
        6           ID   TO INCORPORATE THE SUPERSITION STRUCTURES AND COMBINE MODELS
        7           ID
        8           ID   FILENAME:  SEMP50N.DAT
        9           ID
       10           ID   THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
       11           ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 17 SQ. MI.
       12           ID
       13           ID    50-YEAR 24-HOUR FREQUENCY
       14           ID
       15           ID
       16           ID   METHODOLOGY
       17           ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
       18           ID   SCS TYPE II RAINFALL DISTRIBUTION
       19           ID   S-GRAPH HYDROGRAPH
       20           ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
       21           ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
       22           ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
       23           ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
       24           ID   DATED 1994
       25           ID   THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS
       26           ID
       27           ID   INITIAL STUDY PERFORMED BY LISA C. YOUNG
       28           ID   REVIEWED BY VALERIE A. SWICK
       29           ID   HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
       30           ID   DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.
       31           ID
       32           ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
       33           ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL
       34           ID
       35           ID
       36           ID    LAST UPDATED ON  3/13/98
       37           ID
       38           ID    UPDATE WAS BASED UPON NEW MAG LAND USE DEFINITIONS FOR SINGLE FAMILY HOUSING
       39           ID
       40           ID   DDM MCUHP2 MESA AREA DRAINAGE MASTER PLAN
                    * *DIAGRAM
       41           IT       5  1APR97    0000    1000
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          42          IO      5
          43          IN     15
          44          JD  3.200     .01
          45          PC   .000     .002    .005    .008    .011    .014    .017    .020    .023    .026
          46          PC   .029     .032    .035    .038    .041    .044    .048    .052    .056    .060
          47          PC   .064     .068    .072    .076    .080    .085    .090    .095    .100    .105
          48          PC   .110     .115    .120    .126    .133    .140    .147    .155    .163    .172
          49          PC   .181     .191    .203    .218    .236    .257    .283    .387    .663    .707
          50          PC   .735     .758    .776    .791    .804    .815    .825    .834    .842    .849
          51          PC   .856     .863    .869    .875    .881    .887    .893    .898    .903    .908
          52          PC   .913     .918    .922    .926    .930    .934    .938    .942    .946    .950
          53          PC   .953     .956    .959    .962    .965    .968    .971    .974    .977    .980
          54          PC   .983     .986    .989    .992    .995    .998   1.000
1                                                HEC-1 INPUT                                          PAGE  2

        LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

          55          JD   3.18     1.0
          56          JD   3.10     5.0
          57          JD   3.00    10.0
          58          JD   2.88    30.0
          59          JD   2.75    60.0
          60          JD   2.71    90.0
                      *
                      * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR 24-HR STORM.
                      *
 *** NOLIST ***
1*****************************************
*****************************************
 *                                    *                                                    *
*
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                                    *    U.S. ARMY CORPS OF ENGINEERS
*
 *              JUL   1997             *                                                    *    HYDROLOGIC ENGINEERING CENTER
*
 *           VERSION 4.1               *                                                    *          609 SECOND STREET
*
 *                                    *                                                    *       DAVIS, CALIFORNIA 95616
*
 *  RUN DATE   25JUN98  TIME  13:36:23  *                                                    *           (916) 756-1104
*
 *                                    *                                                    *
*
 *****************************************
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SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
AREA NORTH OF SUPERSTITION FREEWAY

REVISED BY VALERIE SWICK, OCTOBER-NOVEMBER 1996
TO INCORPORATE THE SUPERSITION STRUCTURES AND COMBINE MODELS

FILENAME: SEMP50N.DAT

THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 17 SQ. MI.

50-YEAR 24-HOUR FREQUENCY

METHODOLOGY
THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
SCS TYPE II RAINFALL DISTRIBUTION
S-GRAPH HYDROGRAPH
GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
NORMAL DEPTH STORAGE CHANNEL ROUTING
APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
DATED 1994
THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS

INITIAL STUDY PERFORMED BY LISA C. YOUNG
REVIEWED BY VALERIE A. SWICK
HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.

ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL

LAST UPDATED ON 3/13/98

UPDATE WAS BASED UPON NEW MAG LAND USE DEFINITIONS FOR SINGLE FAMILY HOUSING

DDM MCUHP2 MESA AREA DRAINAGE MASTER PLAN

42 IO OUTPUT CONTROL VARIABLES

IPRNT	5	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN	5	MINUTES IN COMPUTATION INTERVAL
IDATE	1APR97	STARTING DATE
ITIME	0000	STARTING TIME
NQ	1000	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	4APR97	ENDING DATE
NDTIME	1115	ENDING TIME
ICENT	19	CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 83.25 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

44 JD INDEX STORM NO. 1

STRM	3.20	PRECIPITATION DEPTH
TRDA	.01	TRANSPOSITION DRAINAGE AREA

45 PI PRECIPITATION PATTERN

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.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
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55 JD INDEX STORM NO. 2

STRM	3.18	PRECIPITATION DEPTH
TRDA	1.00	TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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56 JD INDEX STORM NO. 3

STRM 3.10 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
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57 JD INDEX STORM NO. 4

STRM 3.00 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
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58 JD         INDEX STORM NO. 5
                STRM        2.88  PRECIPITATION DEPTH
                TRDA       30.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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59 JD         INDEX STORM NO. 6
                STRM        2.75  PRECIPITATION DEPTH
                TRDA       60.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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60 JD          INDEX STORM NO. 7
                    STRM        2.71  PRECIPITATION DEPTH
                    TRDA       90.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                    .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                    .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00

*** FDKRUT WARNING TIME STEP CALCULATION FAILED TO CONVERGE. STABILITY PROBLEMS MAY RESULT

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  -----DSS---ZOPEN:  Existing File Opened,  File: SEMP50N.DSS
                     Unit:  71;  DSS Version: 6-EA
-----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    1:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    1:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    1:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    1:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/31MAR1997/5MIN/OBSERVED/
-----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/01APR1997/5MIN/OBSERVED/
-----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/02APR1997/5MIN/OBSERVED/
-----DSS---ZWRITE Unit  71; Vers.    1:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/03APR1997/5MIN/OBSERVED/
-----DSS---ZWRITE Unit  71; Vers.    1:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/04APR1997/5MIN/OBSERVED/
-----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
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-----DSS---ZWRITE Unit  71; Vers.    1:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    1:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    1:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    1:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
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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	42	862.	12.58	170.	47.	16.	1.75		
+	ROUTED TO	42T51	792.	13.17	170.	47.	16.	1.75		
+	HYDROGRAPH AT	51	1063.	12.25	133.	39.	13.	1.24		
+	2 COMBINED AT	C51	1163.	12.33	296.	84.	28.	2.99		
+	ROUTED TO	51T53	955.	13.08	296.	84.	28.	2.99		
+	HYDROGRAPH AT	44A	1109.	12.50	239.	77.	26.	1.59		
+	DIVERSION TO	D44A	824.	12.50	185.	60.	20.	1.59		
+	HYDROGRAPH AT	DIV44A	285.	12.50	54.	17.	6.	1.59		
+	HYDROGRAPH AT	43	1143.	12.33	153.	45.	15.	1.42		
+	2 COMBINED AT	C43	1369.	12.33	203.	60.	20.	3.01		
+	ROUTED TO	43T53	901.	13.42	203.	60.	20.	3.01		
+	HYDROGRAPH AT	53	704.	12.42	92.	27.	9.	.78		

+	3 COMBINED AT	C53	1759.	13.33	566.	164.	55.	6.78
+	HYDROGRAPH AT	54	432.	12.42	56.	16.	5.	.49
+	2 COMBINED AT	C54	1773.	13.33	615.	178.	60.	7.27
+	DIVERSION TO	SOUTH	661.	13.33	177.	44.	15.	7.27
+	HYDROGRAPH AT	DCAP12	1111.	13.33	438.	134.	45.	7.27
+	ROUTED TO	CAP12	1008.	13.67	438.	134.	45.	7.27
+	HYDROGRAPH AT	DR44A	824.	12.50	185.	60.	20.	1.59
+	ROUTED TO	44ATB	662.	13.58	185.	60.	20.	1.59
+	HYDROGRAPH AT	44B	1231.	12.25	154.	46.	15.	1.06
+	2 COMBINED AT	C44B	1398.	12.33	340.	107.	36.	1.06
+	ROUTED TO	CAP10+	1299.	12.42	340.	107.	36.	1.06
+	ROUTED TO	RCAP11	1295.	12.42	340.	107.	36.	1.06
+	2 COMBINED AT	C12	1893.	12.50	753.	233.	78.	8.33
+	ROUTED TO	ADOT-W	411.	15.00	385.	230.	78.	8.33
+	ROUTED TO	RADOTW	411.	15.17	385.	230.	78.	8.33
+	HYDROGRAPH AT	36B	503.	12.08	42.	12.	4.	.32
+	2 COMBINED AT	C36B	661.	12.08	392.	241.	82.	8.65
+	HYDROGRAPH AT	RSOUTH	661.	13.33	177.	44.	15.	7.27
+	HYDROGRAPH AT	57	267.	12.00	15.	4.	1.	.18
+	2 COMBINED AT	C57	736.	13.33	214.	53.	18.	.18
+	ROUTED TO	CAP13+	730.	13.42	214.	53.	18.	.18
+	HYDROGRAPH AT	36A	187.	12.00	13.	4.	1.	.10
+	2 COMBINED AT	C36A	732.	13.42	226.	57.	19.	.28
+	ROUTED TO	ADOT-E	234.	14.17	158.	57.	19.	.28
+	2 COMBINED AT	CFAKE	681.	12.08	525.	289.	98.	8.93
+	HYDROGRAPH AT	52	485.	12.25	51.	14.	5.	.43
+	HYDROGRAPH AT	56	744.	12.17	75.	21.	7.	.55

+	2 COMBINED AT	C56	1200.	12.25	126.	35.	12.	.98
+	ROUTED TO	56T58	896.	12.50	126.	35.	12.	.98
+	HYDROGRAPH AT	58	1152.	12.17	88.	23.	8.	.95
+	2 COMBINED AT	C58	1523.	12.25	210.	57.	19.	1.93
+	HYDROGRAPH AT	46B	302.	12.42	43.	13.	4.	.36
+	ROUTED TO	CAP6	228.	12.58	43.	13.	4.	.36
+	ROUTED TO	RCAP6	226.	12.67	43.	13.	4.	.36
+	ROUTED TO	RCAP6B	227.	12.67	43.	13.	4.	.36
+	HYDROGRAPH AT	29A	203.	12.17	14.	4.	1.	.18
+	2 COMBINED AT	C29A	291.	12.17	57.	17.	6.	.54
+	DIVERSION TO	29A-W	0.	.00	0.	0.	0.	.54
+	HYDROGRAPH AT	29A-S	291.	12.17	57.	17.	6.	.54
+	ROUTED TO	29ATB	289.	12.17	57.	17.	6.	.54
+	HYDROGRAPH AT	45A	415.	12.33	51.	14.	5.	.62
+	DIVERSION TO	45ATB	395.	12.33	48.	13.	4.	.62
+	HYDROGRAPH AT	D45A	21.	12.33	3.	1.	0.	.62
+	HYDROGRAPH AT	55B	827.	12.58	153.	43.	14.	1.86
+	2 COMBINED AT	C55B	832.	12.58	154.	43.	14.	2.48
+	ROUTED TO	CAP7	594.	12.92	154.	43.	14.	2.48
+	ROUTED TO	RCAP7	585.	13.17	154.	43.	14.	2.48
+	HYDROGRAPH AT	29B	95.	12.08	5.	1.	0.	.08
+	2 COMBINED AT	C29B1	585.	13.17	159.	44.	15.	2.56
+	2 COMBINED AT	C29B2	737.	12.92	214.	61.	20.	3.10
+	ROUTED TO	29BTC	736.	12.92	214.	61.	20.	3.10
+	HYDROGRAPH AT	RD45A	395.	12.33	48.	13.	4.	.62
+	ROUTED TO	45ATB	281.	13.25	48.	13.	4.	.62
+	HYDROGRAPH AT	45B	614.	12.42	87.	26.	9.	.66

+	2 COMBINED AT C45B	618.	12.42	134.	39.	13.	.66
+	ROUTED TO CAP8	458.	12.83	134.	39.	13.	.66
+	ROUTED TO RCAP8	452.	13.25	134.	39.	13.	.66
+	HYDROGRAPH AT 29C	327.	12.08	20.	5.	2.	.23
+	2 COMBINED AT C29C1	452.	13.25	154.	44.	15.	.89
+	2 COMBINED AT C29C2	1146.	13.00	361.	103.	34.	3.99
+	ROUTED TO 29CT36	1144.	13.00	361.	103.	34.	3.99
+	HYDROGRAPH AT 55	202.	12.08	14.	4.	1.	.14
+	ROUTED TO CAP9	134.	12.17	14.	4.	1.	.14
+	ROUTED TO RCAP9	106.	12.67	14.	4.	1.	.14
+	HYDROGRAPH AT 29D	644.	12.25	55.	14.	5.	.65
+	ROUTED TO 29T36	460.	12.75	55.	14.	5.	.65
+	HYDROGRAPH AT 36C	529.	12.17	43.	12.	4.	.44
+	4 COMBINED AT C36	1565.	12.83	463.	131.	44.	5.22
+	ROUTED TO 36T37	1538.	12.92	463.	131.	44.	5.22
+	HYDROGRAPH AT 29AWST	0.	.00	0.	0.	0.	.54
+	HYDROGRAPH AT 30	750.	12.58	125.	38.	13.	1.12
+	2 COMBINED AT C30	750.	12.58	125.	38.	13.	1.12
+	ROUTED TO 30T37	715.	12.67	125.	38.	13.	1.12
+	HYDROGRAPH AT 37	559.	12.08	42.	12.	4.	.47
+	3 COMBINED AT C37	2065.	12.83	610.	176.	59.	6.81
+	ROUTED TO ADOTEL	17.	24.25	17.	17.	17.	6.81
+	ROUTED TO 37T38	17.	23.92	17.	17.	17.	6.81
+	HYDROGRAPH AT 17A	217.	12.17	22.	7.	2.	.18
+	ROUTED TO 17AT23	214.	12.25	22.	7.	2.	.18
+	HYDROGRAPH AT 23	331.	12.17	28.	8.	3.	.28
+	HYDROGRAPH AT 48	646.	12.33	67.	19.	6.	.77

+	ROUTED TO	CAP3	620.	12.33	67.	19.	6.	.77
+	ROUTED TO	RCAP3A	586.	12.50	67.	19.	6.	.77
+	ROUTED TO	RCAP3B	493.	12.58	67.	19.	6.	.77
+	HYDROGRAPH AT	17B	240.	12.25	26.	8.	3.	.22
+	2 COMBINED AT	C17B	545.	12.58	94.	27.	9.	.99
+	ROUTED TO	17BT22	545.	12.58	94.	27.	9.	.99
+	HYDROGRAPH AT	47	903.	12.58	132.	36.	12.	1.67
+	ROUTED TO	CAP4+5	846.	12.67	132.	36.	12.	1.67
+	ROUTED TO	RCAP4	703.	13.33	132.	36.	12.	1.67
+	HYDROGRAPH AT	22	461.	12.17	47.	15.	5.	.41
+	2 COMBINED AT	C22A	715.	13.33	177.	50.	17.	2.08
+	2 COMBINED AT	C22	926.	12.25	266.	76.	26.	3.07
+	ROUTED TO	22T23	821.	12.58	266.	76.	26.	3.07
+	3 COMBINED AT	C23	916.	12.42	313.	91.	30.	3.53
+	ROUTED TO	23T24	918.	12.50	313.	91.	30.	3.53
+	HYDROGRAPH AT	49	651.	12.33	73.	21.	7.	.79
+	ROUTED TO	CAP2	627.	12.42	73.	21.	7.	.79
+	ROUTED TO	RCAP2	552.	12.75	73.	21.	7.	.79
+	HYDROGRAPH AT	50	307.	12.17	21.	6.	2.	.28
+	ROUTED TO	CAP1	287.	12.17	24.	10.	7.	.28
+	ROUTED TO	RCAP1	217.	12.67	24.	10.	7.	.28
+	HYDROGRAPH AT	18A	986.	12.25	100.	30.	10.	1.01
+	3 COMBINED AT	C18A	1153.	12.33	192.	59.	23.	2.08
+	ROUTED TO	18T24	952.	12.67	192.	59.	23.	2.08
+	HYDROGRAPH AT	24	304.	12.25	39.	12.	4.	.29
+	3 COMBINED AT	C24	1972.	12.42	528.	158.	56.	5.90
+	ROUTED TO	24T31A	1984.	12.58	528.	158.	56.	5.90

+	ROUTED TO 24T31B	1993.	12.67	528.	158.	56.	5.90
+	HYDROGRAPH AT 31B	451.	12.25	43.	12.	4.	.47
+	2 COMBINED AT C31	2057.	12.67	565.	169.	60.	6.37
+	DIVERSION TO D31W	1757.	12.67	360.	90.	30.	6.37
+	HYDROGRAPH AT D31	300.	12.08	205.	79.	30.	6.37
+	ROUTED TO 31T38	300.	12.50	205.	79.	30.	6.37
+	HYDROGRAPH AT 31A	527.	12.25	53.	16.	5.	.53
+	ROUTED TO 31AT38	462.	12.50	53.	16.	5.	.53
+	HYDROGRAPH AT 38	442.	12.33	57.	18.	6.	.47
+	4 COMBINED AT C38	1042.	12.42	316.	119.	54.	14.18
+	ROUTED TO 38T39	1020.	12.50	316.	119.	54.	14.18
+	DIVERSION TO DB10	93.	12.50	4.	1.	0.	14.18
+	HYDROGRAPH AT ADD10	927.	12.50	312.	118.	54.	14.18
+	DIVERSION TO DB9	151.	12.50	11.	3.	1.	14.18
+	HYDROGRAPH AT ADD9	776.	12.50	301.	116.	53.	14.18
+	DIVERSION TO DB8	168.	12.50	17.	4.	1.	14.18
+	HYDROGRAPH AT ADD8	608.	12.50	283.	111.	52.	14.18
+	DIVERSION TO DB7	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT ADD7	608.	12.50	283.	111.	52.	14.18
+	DIVERSION TO DB6	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT ADD6	608.	12.50	283.	111.	52.	14.18
+	DIVERSION TO DB5	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT ADD5	608.	12.50	283.	111.	52.	14.18
+	HYDROGRAPH AT D31W	1757.	12.67	360.	90.	30.	6.37
+	ROUTED TO 31WT32	1558.	12.92	359.	90.	30.	6.37
+	HYDROGRAPH AT 32	352.	12.33	46.	14.	5.	.38
+	2 COMBINED AT C32	1728.	12.92	436.	112.	37.	.38

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          ROUTED TO
+                        32T39      1726.   12.92        436.        112.        37.        .38

          HYDROGRAPH AT
+                           39       326.   12.42         51.         16.         5.        .36

          3 COMBINED AT
+                          C39      2095.   12.83        698.        221.        88.      14.92

          DIVERSION TO
+                        BASIN       295.   12.83         16.          4.         1.      14.92

          HYDROGRAPH AT
+                         SOSS      1800.   12.75        682.        217.        87.      14.92
1
                                   SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                                       (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                                          INTERPOLATED TO
                                                                       COMPUTATION INTERVAL
            ISTAQ    ELEMENT      DT        PEAK    TIME TO     VOLUME      DT        PEAK    TIME TO     VOLUME
                                                      PEAK                                              PEAK

                                (MIN)      (CFS)     (MIN)      (IN)      (MIN)      (CFS)     (MIN)       (IN)

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RCAP11  MANE          1.86   1307.33   745.90      3.80      5.00    1306.54   745.00       3.79

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2144E+03 EXCESS= .0000E+00 OUTFLOW= .2146E+03 BASIN STORAGE= .9574E-05 PERCENT ERROR=  -
.1

          FOR STORM = 2  STORM AREA (SQ MI) =       1.00
            RCAP11  MANE          1.72   1299.50   747.72      3.77      5.00    1296.65   745.00       3.77

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2128E+03 EXCESS= .0000E+00 OUTFLOW= .2130E+03 BASIN STORAGE= .1489E-04 PERCENT ERROR=  -
.1

          FOR STORM = 3  STORM AREA (SQ MI) =       5.00
            RCAP11  MANE          1.77   1259.23   748.20      3.65      5.00    1256.52   745.00       3.65

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2064E+03 EXCESS= .0000E+00 OUTFLOW= .2065E+03 BASIN STORAGE= .1165E-04 PERCENT ERROR=  -
.1

          FOR STORM = 4  STORM AREA (SQ MI) =      10.00
            RCAP11  MANE          1.83   1208.64   747.50      3.51      5.00    1205.83   745.00       3.51

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1983E+03 EXCESS= .0000E+00 OUTFLOW= .1984E+03 BASIN STORAGE= .1212E-04 PERCENT ERROR=  -
.1

          FOR STORM = 5  STORM AREA (SQ MI) =      30.00
            RCAP11  MANE          1.80   1150.68   748.05      3.34      5.00    1145.11   745.00       3.34

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1885E+03 EXCESS= .0000E+00 OUTFLOW= .1887E+03 BASIN STORAGE= .1056E-04 PERCENT ERROR=  -
.1

          FOR STORM = 6  STORM AREA (SQ MI) =      60.00
            RCAP11  MANE          1.91   1083.76   747.43      3.15      5.00    1078.30   745.00       3.15

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1781E+03 EXCESS= .0000E+00 OUTFLOW= .1782E+03 BASIN STORAGE= .9838E-05 PERCENT ERROR=  -
.1

          FOR STORM = 7  STORM AREA (SQ MI) =      90.00
            RCAP11  MANE          1.83   1065.87   747.63      3.10      5.00    1059.34   745.00       3.10

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1749E+03 EXCESS= .0000E+00 OUTFLOW= .1751E+03 BASIN STORAGE= .1460E-04 PERCENT ERROR=  -
.1
```

```
*** NORMAL END OF HEC-1 ***


  -----DSS---ZCLOSE Unit:  71,   File: SEMP50N.DSS
            Pointer Utilization:    .25
            Number of Records:      25
            File Size:      53.2  Kbytes
            Percent Inactive:     .0
```

APPENDIX H-2

NORTHWEST MESA AREA
50-YEAR, 24-HOUR STORM
EXISTING LAND USE CONDITIONS
HEC-1 MODEL

```
1*****************************************
 *                                       *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
 *              JUL   1997               *
 *            VERSION 4.1                *
 *                                       *
 *  RUN DATE   25JUN98  TIME  13:39:26   *
 *                                       *
 *****************************************
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*****************************************
*                                       *
*    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   AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROADS TO THE EAST
    2           ID   ALL THE HYDROGRAPHS ENTERING INTO THE EMF ARE SENT TO TAPE 21
    3           ID
    4           ID   ALL STREET ROUTINGS HAVE N VALUES OF .015 FOR ASPHALT AND .03 FOR OVERLAND
    5           ID   FLOWS
    6           ID
    7           ID   EAST MARICOPA COUNTY AREA DRAINAGE MASTER STUDY - PHASE 2
    8           ID   THIS AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROAD TO THE
    9           ID   EAST, MCDOWELL ROAD TO THE NORTH AND THE SUPERSTITION FREEWAY TO THE SOUTH
   10           ID
   11           ID   FILENAME: PH2-50.DAT
   12           ID
   13           ID   DDMS FILE FAMILY NAME: PHASE2
   14           ID
   15           ID   THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
   16           ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 18.60 SQ. MI.
   17           ID   THIS MODEL USES THE REVISED LAND USE AND A Kn VALUE OF 0.09 FOR DESERT LAND
   18           ID   USES
   19           ID
   20           ID   THIS MODEL WAS REVISED TO ESTABLISH CONCENTRATION POINTS AND HYDROGRAPHS
   21           ID   ENTERING INTO THE EMF.
   22           ID   INITIAL REVISION IN MARCH 1997
   23           ID
   24           ID    50-YEAR 24-HOUR FREQUENCY
   25           ID
   26           ID   METHODOLOGY:
   27           ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
   28           ID   SCS TYPE II RAINFALL DISTRIBUTION
   29           ID   S-GRAPH HYDROGRAPH
   30           ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
   31           ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
   32           ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
   33           ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
   34           ID   DATED 1994
   35           ID   THE NOAA TECHNICAL MEMORANDUM NWS HYDRO-40 DEPTH AREA RATIOS
   36           ID
   37           ID   STUDY INITIALLY PERFORMED BY LISA C. YOUNG
   38           ID   REVISED BY VALERIE A. SWICK
   39           ID   HYDROLOGY BRANCH, ENGINEERING DISTRICT,
   40           ID   FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, SPRING 1996
   41           ID
   42           ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
   43           ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL,  5FT/SEC FOR CONCRETE CHANNEL
```

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          44          ID
          45          ID   THIS MODEL DOES NOT REFLECT THE STORM DRAINS IN THE AREA AS THEY HAVE A LOW
          46          ID   CAPACITY AND OUTLET AT THE SAME LOCATION AS SURFACE FLOW
          47          ID
          48          ID
          49          ID    LAST UPDATED ON  3/13/98
          50          ID
          51          ID
          52          ID   DDM MCUHP2 Phase 2 model, north of Superstition Freeway
                      * *DIAGRAM
          53          IT       5  1APR97    0000    1000
          54          IO       5
1                                                HEC-1 INPUT                                                    PAGE  2

        LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

          55          IN      15
          56          JD    3.30    0.01
          57          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
          58          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
          59          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
          60          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
          61          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
          62          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
          63          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
          64          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
          65          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
          66          PC    .983    .986    .989    .992    .995    .998   1.000
          67          JD    3.18     1.0
          68          JD    3.10     5.0
          69          JD    3.00    10.0
          70          JD    2.88    30.0
          71          JD    2.75    60.0
          72          JD    2.71    90.0
                      *
                      * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR, 24-HR STORM.
                      *
 *** NOLIST ***
1*****************************************
*****************************************
 *                                      *                                                  *
 *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                                  *    U.S. ARMY CORPS OF ENGINEERS
 *
 *              JUL   1997              *                                                  *    HYDROLOGIC ENGINEERING CENTER
 *
 *           VERSION 4.1                *                                                  *          609 SECOND STREET
 *
 *                                      *                                                  *       DAVIS, CALIFORNIA 95616
 *
 *  RUN DATE   25JUN98  TIME  13:39:26  *                                                  *           (916) 756-1104
 *
 *                                      *                                                  *
 *
 *****************************************
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AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROADS TO THE EAST
ALL THE HYDROGRAPHS ENTERING INTO THE EMF ARE SENT TO TAPE 21

ALL STREET ROUTINGS HAVE N VALUES OF .015 FOR ASPHALT AND .03 FOR OVERLAND FLOWS

EAST MARICOPA COUNTY AREA DRAINAGE MASTER STUDY - PHASE 2
THIS AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROAD TO THE EAST, MCDOWELL ROAD TO THE NORTH AND THE SUPERSTITION FREEWAY TO THE SOUTH

FILENAME: PH2-50.DAT

DDMS FILE FAMILY NAME: PHASE2

THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 18.60 SQ. MI.
THIS MODEL USES THE REVISED LAND USE AND A Kn VALUE OF 0.09 FOR DESERT LAND USES

THIS MODEL WAS REVISED TO ESTABLISH CONCENTRATION POINTS AND HYDROGRAPHS

```
                    ENTERING INTO THE EMF.
                    INITIAL REVISION IN MARCH 1997

                     50-YEAR 24-HOUR FREQUENCY

                    METHODOLOGY:
                    THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
                    SCS TYPE II RAINFALL DISTRIBUTION
                    S-GRAPH HYDROGRAPH
                    GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
                    NORMAL DEPTH STORAGE CHANNEL ROUTING
                    APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
                    EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
                    DATED 1994
                    THE NOAA TECHNICAL MEMORANDUM NWS HYDRO-40 DEPTH AREA RATIOS

                    STUDY INITIALLY PERFORMED BY LISA C. YOUNG
                    REVISED BY VALERIE A. SWICK
                    HYDROLOGY BRANCH, ENGINEERING DISTRICT,
                    FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, SPRING 1996

                    ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
                    CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL,  5FT/SEC FOR CONCRETE CHANNEL

                    THIS MODEL DOES NOT REFLECT THE STORM DRAINS IN THE AREA AS THEY HAVE A LOW
                    CAPACITY AND OUTLET AT THE SAME LOCATION AS SURFACE FLOW


                     LAST UPDATED ON  3/13/98


                    DDM MCUHP2 Phase 2 model, north of Superstition Freeway

54 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1APR97  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      4APR97  ENDING DATE
                    NDTIME        1115  ENDING TIME
                     ICENT          19  CENTURY MARK

               COMPUTATION INTERVAL     .08 HOURS
                    TOTAL TIME BASE   83.25 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

56 JD          INDEX STORM NO. 1
                      STRM       3.30  PRECIPITATION DEPTH
                      TRDA        .01  TRANSPOSITION DRAINAGE AREA

57 PI            PRECIPITATION PATTERN
                     .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                     .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                     .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                     .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                     .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                     .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                     .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                     .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

67 JD         INDEX STORM NO. 2
                STRM        3.18  PRECIPITATION DEPTH
                TRDA        1.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

68 JD         INDEX STORM NO. 3
                STRM        3.10  PRECIPITATION DEPTH
                TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00      .00      .00      .00      .00      .00      .00      .00

69 JD        INDEX STORM NO. 4
                   STRM       3.00   PRECIPITATION DEPTH
                   TRDA      10.00   TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .01      .00      .01
                .01      .01      .01      .01      .01      .01      .01      .01      .03      .03
                .03      .09      .09      .09      .01      .01      .01      .01      .01      .01
                .01      .01      .01      .01      .01      .01      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
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70 JD        INDEX STORM NO. 5
                   STRM       2.88   PRECIPITATION DEPTH
                   TRDA      30.00   TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
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                .00      .00      .00      .00      .00      .00      .00      .01      .00      .01
                .01      .01      .01      .01      .01      .01      .01      .01      .03      .03
                .03      .09      .09      .09      .01      .01      .01      .01      .01      .01
                .01      .01      .01      .01      .01      .01      .00      .00      .00      .00
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71 JD        INDEX STORM NO. 6
                   STRM       2.75   PRECIPITATION DEPTH
                   TRDA      60.00   TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
                .00      .00      .00      .00      .00      .00      .00      .00      .00      .00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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72 JD INDEX STORM NO. 7

STRM 2.71 PRECIPITATION DEPTH

TRDA 90.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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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	9	105.	13.58	30.	8.	3.	.44		
+	HYDROGRAPH AT	4	656.	12.75	139.	44.	15.	1.00		
+	ROUTED TO	4T8	533.	13.25	139.	44.	15.	1.00		
+	HYDROGRAPH AT	8	252.	12.92	52.	14.	5.	.50		

+	2 COMBINED AT	C8	717.	13.08	188.	57.	19.	1.50
+	2 COMBINED AT	EMFHOB	771.	13.08	216.	64.	21.	1.94
+	ROUTED TO	C9T15	736.	13.42	215.	64.	21.	1.94
+	HYDROGRAPH AT	3	561.	12.92	125.	37.	12.	1.00
+	DIVERSION TO	RET3	561.	12.92	125.	37.	12.	1.00
+	HYDROGRAPH AT	D3	0.	.00	0.	0.	0.	1.00
+	ROUTED TO	3T7	0.	.00	0.	0.	0.	1.00
+	HYDROGRAPH AT	7	184.	12.58	28.	8.	3.	.28
+	2 COMBINED AT	C7	180.	12.58	28.	8.	3.	1.28
+	ROUTED TO	7T10	146.	12.92	28.	8.	3.	1.28
+	HYDROGRAPH AT	10	532.	12.58	89.	27.	9.	.72
+	DIVERSION TO	RET10	532.	12.58	89.	25.	8.	.72
+	HYDROGRAPH AT	D10	10.	16.33	7.	2.	1.	.72
+	2 COMBINED AT	C10	146.	12.92	30.	10.	3.	2.00
+	ROUTED TO	10T8A	144.	13.00	29.	9.	3.	2.00
+	HYDROGRAPH AT	8A	87.	12.50	10.	3.	1.	.12
+	2 COMBINED AT	C8A	188.	12.58	38.	12.	4.	2.12
+	ROUTED TO	8AT15A	187.	12.67	38.	12.	4.	2.12
+	HYDROGRAPH AT	15A	315.	12.42	46.	14.	5.	.35
+	2 COMBINED AT	C15A	441.	12.50	81.	25.	8.	2.47
+	2 COMBINED AT	EMFBRN	858.	13.25	290.	87.	29.	4.41
+	ROUTED TO	15AT15	849.	13.42	290.	87.	29.	4.41
+	HYDROGRAPH AT	15B	420.	12.50	68.	21.	7.	.51
+	2 COMBINED AT	EMFCLB	886.	13.42	353.	107.	36.	4.92
+	ROUTED TO	15T16	882.	13.50	353.	107.	36.	4.92
+	HYDROGRAPH AT	1	303.	12.42	35.	9.	3.	.39
+	DIVERSION TO	D1W	150.	12.17	26.	7.	2.	.39

+	HYDROGRAPH AT	D1S	153.	12.42	9.	2.	1.	.39
+	ROUTED TO	1T5	129.	12.58	9.	2.	1.	.39
+	HYDROGRAPH AT	5	631.	12.50	99.	30.	10.	.95
+	2 COMBINED AT	C5	741.	12.58	107.	32.	11.	1.15
+	DIVERSION TO	D5S	350.	12.25	84.	26.	9.	1.15
+	HYDROGRAPH AT	DC5	391.	12.58	23.	6.	2.	1.15
+	ROUTED TO	5T6	275.	12.92	23.	6.	2.	1.15
+	HYDROGRAPH AT	2	496.	12.83	101.	29.	10.	1.00
+	ROUTED TO	2T6	396.	13.50	101.	29.	10.	1.00
+	HYDROGRAPH AT	6	740.	12.50	125.	39.	13.	1.00
+	HYDROGRAPH AT	GD1	150.	12.17	26.	7.	2.	.39
+	ROUTED TO	RGD1A	118.	13.33	26.	7.	2.	.39
+	ROUTED TO	RGD1B	114.	13.50	26.	7.	2.	.39
+	4 COMBINED AT	C6	1112.	12.67	268.	78.	26.	2.76
+	DIVERSION TO	D6W	400.	12.17	172.	55.	18.	2.76
+	HYDROGRAPH AT	DC6	712.	12.67	95.	24.	8.	2.76
+	ROUTED TO	6T13B	596.	13.00	95.	24.	8.	2.76
+	HYDROGRAPH AT	11	311.	13.25	79.	21.	7.	1.06
+	DIVERSION TO	D11S	250.	13.17	76.	20.	7.	1.06
+	HYDROGRAPH AT	D11	61.	13.25	3.	1.	0.	1.06
+	ROUTED TO	11T12	46.	13.50	3.	1.	0.	1.06
+	HYDROGRAPH AT	12	519.	12.83	112.	35.	12.	1.03
+	HYDROGRAPH AT	GD5S	350.	12.25	84.	26.	9.	1.15
+	ROUTED TO	RGD5A	335.	13.17	84.	26.	9.	1.15
+	3 COMBINED AT	C12	810.	12.83	196.	60.	20.	2.13
+	DIVERSION TO	D12S	300.	12.17	122.	42.	14.	2.13
+	HYDROGRAPH AT	DC12	510.	12.83	74.	18.	6.	2.13

+	ROUTED TO 12T13A	473.	13.08	74.	18.	6.	2.13
+	HYDROGRAPH AT 13A	484.	12.58	85.	26.	9.	.77
+	2 COMBINED AT C13A	767.	12.67	157.	44.	15.	2.27
+	DIVERSION TO BASIN	735.	12.58	58.	16.	5.	2.27
+	HYDROGRAPH AT UNIVBA	747.	12.75	107.	28.	9.	2.27
+	DIVERSION TO D13AS	740.	12.75	100.	25.	8.	2.27
+	HYDROGRAPH AT D13A	7.	12.67	7.	3.	1.	2.27
+	HYDROGRAPH AT 13B	190.	12.42	29.	9.	3.	.23
+	3 COMBINED AT C13B	651.	13.00	129.	36.	12.	2.15
+	DIVERSION TO D13BS	532.	13.00	82.	20.	7.	2.15
+	HYDROGRAPH AT D13B	119.	12.25	47.	15.	5.	2.15
+	ROUTED TO RD13BW	121.	12.33	47.	15.	5.	2.15
+	HYDROGRAPH AT GD6W	400.	12.17	172.	55.	18.	2.76
+	ROUTED TO R6WT14	393.	14.42	172.	55.	18.	2.76
+	HYDROGRAPH AT 14	811.	12.50	127.	39.	13.	1.00
+	DIVERSION TO D14S	453.	12.50	33.	8.	3.	1.00
+	HYDROGRAPH AT D14	358.	12.08	94.	31.	10.	1.00
+	3 COMBINED AT C14	590.	12.83	312.	100.	34.	2.16
+	ROUTED TO RD14W	575.	12.83	311.	100.	34.	2.16
+	HYDROGRAPH AT 16	111.	12.17	10.	3.	1.	.09
+	2 COMBINED AT C16	608.	12.25	324.	104.	35.	.64
+	2 COMBINED AT EMFUNV	1435.	12.83	665.	207.	70.	5.56
+	ROUTED TO 16T21	1305.	13.92	659.	206.	70.	5.56
+	HYDROGRAPH AT GD13AS	740.	12.75	100.	25.	8.	2.27
+	ROUTED TO 13AT21	563.	13.83	100.	25.	8.	2.27
+	HYDROGRAPH AT GD13BS	532.	13.00	82.	20.	7.	2.15
+	ROUTED TO 13BT21	435.	13.67	82.	20.	7.	2.15

+	HYDROGRAPH AT GD14S	453.	12.50	33.	8.	3.	1.00
+	ROUTED TO 14T21	363.	12.67	33.	8.	3.	1.00
+	HYDROGRAPH AT 21	365.	12.58	67.	21.	7.	.53
+	4 COMBINED AT C21	949.	13.75	255.	68.	23.	6.23
+	2 COMBINED AT EMFAPC	2103.	13.75	862.	259.	87.	11.79
+	ROUTED TO 21T28	2080.	13.83	861.	259.	87.	11.79
+	HYDROGRAPH AT 19	555.	12.50	94.	29.	10.	.76
+	HYDROGRAPH AT GD11S	250.	13.17	76.	20.	7.	1.06
+	ROUTED TO RD11	242.	13.92	76.	20.	7.	1.06
+	HYDROGRAPH AT GD12S	300.	12.17	122.	42.	14.	2.13
+	ROUTED TO RD12	300.	13.50	122.	42.	14.	2.13
+	3 COMBINED AT C19	826.	12.50	286.	91.	30.	1.93
+	ROUTED TO 19T27	722.	12.83	286.	91.	30.	1.93
+	HYDROGRAPH AT 27	280.	12.17	32.	10.	3.	.24
+	2 COMBINED AT C27	744.	12.83	316.	100.	34.	2.17
+	ROUTED TO 27T28	735.	13.08	316.	100.	34.	2.17
+	HYDROGRAPH AT 20	415.	12.67	85.	28.	9.	.58
+	ROUTED TO 20T28	359.	12.92	85.	28.	9.	.58
+	HYDROGRAPH AT 28	674.	12.58	125.	40.	13.	.90
+	3 COMBINED AT C28	1458.	12.67	515.	164.	55.	3.65
+	2 COMBINED AT EMFBRD	2670.	13.75	1321.	407.	138.	15.44
+	ROUTED TO 28T35	2655.	13.92	1319.	407.	138.	15.44
+	HYDROGRAPH AT 26	292.	12.17	32.	10.	3.	.25
+	ROUTED TO 26T34	134.	13.25	32.	10.	3.	.25
+	HYDROGRAPH AT 34	490.	12.83	110.	33.	11.	.90
+	DIVERSION TO RET34	490.	12.83	94.	25.	8.	.90
+	HYDROGRAPH AT D34	184.	13.58	26.	8.	3.	.90

+	2 COMBINED AT	C34	199.	13.58	54.	18.	6.	1.15
+	ROUTED TO	34T35	146.	14.00	54.	18.	6.	1.15
+	HYDROGRAPH AT	35	575.	13.25	163.	49.	16.	1.46
+	DIVERSION TO	RET35	575.	13.25	163.	48.	16.	1.46
+	HYDROGRAPH AT	D35	6.	24.50	1.	0.	0.	1.46
+	2 COMBINED AT	C35	146.	14.00	54.	18.	6.	2.61
+	2 COMBINED AT	EMFSTH	2714.	13.58	1344.	417.	141.	18.05
+	ROUTED TO	35T41	2710.	13.75	1343.	417.	141.	18.05
+	HYDROGRAPH AT	18B	350.	12.33	43.	13.	4.	.38
+	ROUTED TO	18BT25	233.	12.75	43.	13.	4.	.38
+	HYDROGRAPH AT	25	444.	12.42	67.	21.	7.	.50
+	2 COMBINED AT	C25	641.	12.42	109.	34.	11.	.88
+	ROUTED TO	25T33	374.	13.42	109.	34.	11.	.88
+	HYDROGRAPH AT	33	391.	12.92	90.	28.	9.	.73
+	DIVERSION TO	RET33	391.	12.92	90.	25.	8.	.73
+	HYDROGRAPH AT	D33	11.	16.58	7.	2.	1.	.73
+	2 COMBINED AT	C33	374.	13.42	109.	37.	12.	1.61
+	ROUTED TO	33T40	322.	13.92	108.	36.	12.	1.61
+	HYDROGRAPH AT	40	698.	12.25	86.	27.	9.	.58
+	2 COMBINED AT	C40	805.	12.25	191.	62.	21.	2.19
+	DIVERSION TO	DB4	0.	.00	0.	0.	0.	2.19
+	HYDROGRAPH AT	ADD4	805.	12.25	191.	62.	21.	2.19
+	DIVERSION TO	DB3	0.	.00	0.	0.	0.	2.19
+	HYDROGRAPH AT	ADD3	805.	12.25	191.	62.	21.	2.19
+	DIVERSION TO	DB2	0.	.00	0.	0.	0.	2.19
+	HYDROGRAPH AT	ADD2	805.	12.25	191.	62.	21.	2.19
+	DIVERSION TO	DB1	0.	.00	0.	0.	0.	2.19

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          HYDROGRAPH AT
+                          ADD1       805.   12.25        191.        62.        21.       2.19

          ROUTED TO
+                         40T41       426.   12.83        191.        62.        21.       2.19

          HYDROGRAPH AT
+                            41       433.   12.58         84.        28.         9.        .55

          DIVERSION TO
+                         RET41       433.   12.58         84.        27.         9.        .55

          HYDROGRAPH AT
+                           D41         1.   21.08          1.         0.         0.        .55

          2 COMBINED AT
+                           C41       426.   12.83        191.        62.        21.       2.74

          2 COMBINED AT
+                        EMFSPR      2974.   13.67       1489.       467.       159.      20.79
1
                                   SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                                       (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                                          INTERPOLATED TO
                                                                       COMPUTATION INTERVAL
           ISTAQ    ELEMENT      DT        PEAK    TIME TO     VOLUME      DT       PEAK    TIME TO     VOLUME
                                                     PEAK                                     PEAK

                                (MIN)      (CFS)     (MIN)      (IN)     (MIN)     (CFS)     (MIN)       (IN)

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RD13BW  MANE          5.00    122.01    740.00       .27      5.00    122.01    740.00        .27

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .3139E+02 EXCESS= .0000E+00 OUTFLOW= .3138E+02 BASIN STORAGE= .9576E-03 PERCENT ERROR=
.0

          FOR STORM = 2  STORM AREA (SQ MI) =       1.00
            RD13BW  MANE          5.00    122.77    740.00       .27      5.00    122.77    740.00        .27

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .3061E+02 EXCESS= .0000E+00 OUTFLOW= .3060E+02 BASIN STORAGE= .9319E-03 PERCENT ERROR=
.0

          FOR STORM = 3  STORM AREA (SQ MI) =       5.00
            RD13BW  MANE          5.00    120.57    745.00       .26      5.00    120.57    745.00        .26

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .3001E+02 EXCESS= .0000E+00 OUTFLOW= .3000E+02 BASIN STORAGE= .9145E-03 PERCENT ERROR=
.0

          FOR STORM = 4  STORM AREA (SQ MI) =      10.00
            RD13BW  MANE          5.00    121.43    745.00       .25      5.00    121.43    745.00        .25

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2919E+02 EXCESS= .0000E+00 OUTFLOW= .2918E+02 BASIN STORAGE= .8927E-03 PERCENT ERROR=
.0

          FOR STORM = 5  STORM AREA (SQ MI) =      30.00
            RD13BW  MANE          5.00    122.27    745.00       .25      5.00    122.27    745.00        .25

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2818E+02 EXCESS= .0000E+00 OUTFLOW= .2817E+02 BASIN STORAGE= .8663E-03 PERCENT ERROR=
.0

          FOR STORM = 6  STORM AREA (SQ MI) =      60.00
            RD13BW  MANE          5.00    120.22    750.00       .23      5.00    120.22    750.00        .23

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2686E+02 EXCESS= .0000E+00 OUTFLOW= .2685E+02 BASIN STORAGE= .8373E-03 PERCENT ERROR=
.0

          FOR STORM = 7  STORM AREA (SQ MI) =      90.00
            RD13BW  MANE          5.00    120.52    750.00       .23      5.00    120.52    750.00        .23
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CONTINUITY SUMMARY (AC-FT) - INFLOW= .2638E+02 EXCESS= .0000E+00 OUTFLOW= .2638E+02 BASIN STORAGE= .8118E-03 PERCENT ERROR=
.0

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
             RD14W  MANE         3.55    584.50    770.33      1.79      5.00    584.10    770.00        1.79

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2072E+03 EXCESS= .0000E+00 OUTFLOW= .2067E+03 BASIN STORAGE= .5014E-03 PERCENT ERROR=
.3

          FOR STORM = 2  STORM AREA (SQ MI) =       1.00
             RD14W  MANE         3.55    579.50    767.42      1.75      5.00    577.03    770.00        1.75

CONTINUITY SUMMARY (AC-FT) - INFLOW= .2022E+03 EXCESS= .0000E+00 OUTFLOW= .2016E+03 BASIN STORAGE= .5151E-03 PERCENT ERROR=
.3

          FOR STORM = 3  STORM AREA (SQ MI) =       5.00
             RD14W  MANE         3.55    578.75    767.77      1.72      5.00    573.76    765.00        1.72

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1987E+03 EXCESS= .0000E+00 OUTFLOW= .1981E+03 BASIN STORAGE= .4927E-03 PERCENT ERROR=
.3

          FOR STORM = 4  STORM AREA (SQ MI) =      10.00
             RD14W  MANE         3.56    577.17    769.15      1.68      5.00    571.76    765.00        1.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1940E+03 EXCESS= .0000E+00 OUTFLOW= .1935E+03 BASIN STORAGE= .4827E-03 PERCENT ERROR=
.3

          FOR STORM = 5  STORM AREA (SQ MI) =      30.00
             RD14W  MANE         3.57    568.32    763.95      1.63      5.00    567.51    765.00        1.63

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1882E+03 EXCESS= .0000E+00 OUTFLOW= .1876E+03 BASIN STORAGE= .5001E-03 PERCENT ERROR=
.3

          FOR STORM = 6  STORM AREA (SQ MI) =      60.00
             RD14W  MANE         3.57    567.01    764.18      1.57      5.00    564.12    765.00        1.57

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1815E+03 EXCESS= .0000E+00 OUTFLOW= .1809E+03 BASIN STORAGE= .5245E-03 PERCENT ERROR=
.3

          FOR STORM = 7  STORM AREA (SQ MI) =      90.00
             RD14W  MANE         3.57    566.67    764.24      1.55      5.00    563.31    765.00        1.55

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1794E+03 EXCESS= .0000E+00 OUTFLOW= .1788E+03 BASIN STORAGE= .5164E-03 PERCENT ERROR=
.3


*** NORMAL END OF HEC-1 ***
```

APPENDIX H-3

SOUTHERN MESA AREA
50-YEAR, 24-HOUR STORM
EXISTING LAND USE CONDITIONS
HEC-1 MODEL

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUL   1997              *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   25JUN98  TIME  13:37:49  *
*                                      *
****************************************
```

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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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```
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

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

   1          ID   SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
   2          ID   AREA SOUTH OF SUPERSTITION (U.S. HWY 60)
   3          ID   MARCH 1998
   4          ID   SOUTHEAST MESA HIGH RESOLUTION MODEL
   5          ID
   6          ID   FILENAME:  SEMP50S.DAT
   7          ID
   8          ID   THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
   9          ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 73 SQ. MI.
  10          ID   THIS MODEL USES A Kn VALUE OF 0.09 FOR DESERT LAND USE DUE TO SHEET FLOW
  11          ID   CONDITIONS.
  12          ID
  13          ID    50-YEAR 24-HOUR FREQUENCY
  14          ID
  15          ID   THIS MODEL INCLUDES INFLOW FROM NORTH OF THE SUPERSTITION FREEWAY
  16          ID   AND EAST OF THE CAP
  17          ID
  18          ID   METHODOLOGY
  19          ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
  20          ID   SCS TYPE II RAINFALL DISTRIBUTION
  21          ID   S-GRAPH HYDROGRAPH
  22          ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
  23          ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
  24          ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
  25          ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
  26          ID   DATED 1994
  27          ID   THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS
  28          ID
  29          ID   STUDY PERFORMED BY LISA C. YOUNG AND AFSHIN AHOURAIYAN, UPDATED BY
  30          ID   DAVID DEGERNESS (OCT-DEC, 1996). REVIEWED BY VALERIE A. SWICK
  31          ID   AND AMIR MOTAMEDI OF THE FLOOD CONTROL DISTRICT
  32          ID   HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
  33          ID   DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.
  34          ID
  35          ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2-3 FT/SEC FOR WASH/NATURAL
  36          ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL
  37          ID
  38          ID
  39          ID   NOTE: MUST USE SEMP50N.DSS AS THE DSS FILE TO IMPORT FLOWS ACROSS SUPERSTITN
  40          ID
  41          ID
  42          ID     LAST UPDATED ON  6/02/98
  43          ID
```

```
          44          ID
          45          ID   DDM MCUHP2 SOUTH EAST MESA ADMP - SOUTH OF SUPERSTITION FREEWAY
                      * *DIAGRAM
          46          IT       5  1APR97    0000    1000
          47          IO       5
          48          IN      15
          49          JD    3.20    0.01
          50          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
          51          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
          52          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
          53          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
          54          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
1                                                HEC-1 INPUT                                                PAGE  2

        LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

          55          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
          56          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
          57          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
          58          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
          59          PC    .983    .986    .989    .992    .995    .998   1.000
          60          JD    3.18    1.00
          61          JD    3.10    5.00
          62          JD    3.00   10.00
          63          JD    2.88   30.00
          64          JD    2.75   60.00
          65          JD    2.71   90.00
                      *
                      * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR, 24-HR STORM.
                      *
*** NOLIST ***
```

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUL   1997              *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   25JUN98  TIME  13:37:49  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
```

```
SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
AREA SOUTH OF SUPERSTITION (U.S. HWY 60)
MARCH 1998
SOUTHEAST MESA HIGH RESOLUTION MODEL

FILENAME:  SEMP50S.DAT

THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 73 SQ. MI.
THIS MODEL USES A Kn VALUE OF 0.09 FOR DESERT LAND USE DUE TO SHEET FLOW
CONDITIONS.

 50-YEAR 24-HOUR FREQUENCY

THIS MODEL INCLUDES INFLOW FROM NORTH OF THE SUPERSTITION FREEWAY
AND EAST OF THE CAP

METHODOLOGY
THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
SCS TYPE II RAINFALL DISTRIBUTION
S-GRAPH HYDROGRAPH
GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
NORMAL DEPTH STORAGE CHANNEL ROUTING
APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
DATED 1994
THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS

STUDY PERFORMED BY LISA C. YOUNG AND AFSHIN AHOURAIYAN, UPDATED BY
DAVID DEGERNESS (OCT-DEC, 1996). REVIEWED BY VALERIE A. SWICK
AND AMIR MOTAMEDI OF THE FLOOD CONTROL DISTRICT
HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.

ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2-3 FT/SEC FOR WASH/NATURAL
CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL


NOTE: MUST USE SEMP50N.DSS AS THE DSS FILE TO IMPORT FLOWS ACROSS SUPERSTITN


  LAST UPDATED ON  6/02/98


DDM MCUHP2 SOUTH EAST MESA ADMP - SOUTH OF SUPERSTITION FREEWAY

 47 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN           5  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1APR97  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      4APR97  ENDING DATE
                     NDTIME        1115  ENDING TIME
                      ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL     .08 HOURS
                      TOTAL TIME BASE   83.25 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

49 JD INDEX STORM NO. 1
STRM 3.20 PRECIPITATION DEPTH
TRDA .01 TRANSPOSITION DRAINAGE AREA

50 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

60 JD INDEX STORM NO. 2
STRM 3.18 PRECIPITATION DEPTH
TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

61 JD INDEX STORM NO. 3
STRM 3.10 PRECIPITATION DEPTH
TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

62 JD INDEX STORM NO. 4

STRM 3.00 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

63 JD INDEX STORM NO. 5

STRM 2.88 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

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                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

64 JD         INDEX STORM NO. 6
                STRM        2.75  PRECIPITATION DEPTH
                TRDA       60.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

65 JD         INDEX STORM NO. 7
                STRM        2.71  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
```

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                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00
   -----DSS---ZOPEN:  Existing File Opened,  File: SEMP50N.DSS
                    Unit:  71;  DSS Version: 6-EA
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97       JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97       JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97       JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
```

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        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97       JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97       JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97       JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97       JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
-----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97       JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
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        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97        JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97        JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    1:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    1:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:      0
        After ZRDINF, Record found: T
```

```
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    1:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97       JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    1:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97       JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97       JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
-----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97       JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
```

```
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97        JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97        JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    1:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    1:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    1:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    1:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97        JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
```

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        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97        JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
 -----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
 Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97        JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
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	SOSS	1800.	12.75	682.	217.	87.	12.50		
+	ROUTED TO	RSOSS	1800.	12.92	682.	217.	87.	12.50		
+	HYDROGRAPH AT	59A	253.	12.33	35.	11.	4.	.26		
+	2 COMBINED AT	C59A	1846.	12.83	713.	226.	90.	12.76		
+	ROUTED TO	59A59B	1837.	13.08	713.	226.	90.	12.76		
+	HYDROGRAPH AT	59B	488.	12.92	105.	31.	10.	.94		
+	2 COMBINED AT	C59B	2228.	13.00	805.	254.	99.	13.70		
+	ROUTED TO	59BT60	2221.	13.00	805.	254.	99.	13.70		
+	HYDROGRAPH AT	60	714.	13.75	253.	75.	25.	2.30		
+	DIVERSION TO	D60	714.	13.75	188.	50.	17.	2.30		
+	HYDROGRAPH AT	R60	403.	14.58	87.	25.	8.	2.30		
+	2 COMBINED AT	EMFGUA	2220.	13.00	860.	272.	105.	16.00		
+	ROUTED TO	GUATEL	2092.	13.50	853.	271.	105.	16.00		
+	HYDROGRAPH AT	64	358.	13.00	70.	18.	6.	.81		
+	2 COMBINED AT	EMFELL	2251.	13.42	909.	286.	110.	16.81		
+	ROUTED TO	ELTWAR	2107.	13.83	900.	285.	110.	16.81		
+	HYDROGRAPH AT	61A	307.	12.50	43.	12.	4.	.52		
+	ROUTED TO	61ATB	234.	13.08	43.	12.	4.	.52		
	HYDROGRAPH AT									

+	61B	384.	13.00	73.	18.	6.	1.09
2 COMBINED AT +	CP61B	607.	13.00	114.	30.	10.	1.61
ROUTED TO +	61T62E	565.	13.25	114.	30.	10.	1.61
HYDROGRAPH AT +	62E	112.	12.42	13.	3.	1.	.15
2 COMBINED AT +	C62E	572.	13.17	127.	33.	11.	1.76
ROUTED TO +	62ETF	502.	13.67	127.	33.	11.	1.76
HYDROGRAPH AT +	62A	187.	12.67	29.	8.	3.	.38
ROUTED TO +	62ATD	85.	14.25	29.	8.	3.	.38
HYDROGRAPH AT +	62B	176.	12.42	20.	6.	2.	.23
ROUTED TO +	62BTD	140.	12.83	20.	6.	2.	.23
HYDROGRAPH AT +	62D	256.	12.58	33.	8.	3.	.46
3 COMBINED AT +	CP62D	392.	12.67	81.	22.	7.	1.07
ROUTED TO +	62DTF	297.	13.25	81.	22.	7.	1.07
HYDROGRAPH AT +	62C	445.	12.42	52.	14.	5.	.55
ROUTED TO +	62CTF	343.	12.83	52.	14.	5.	.55
HYDROGRAPH AT +	62F	190.	12.42	22.	6.	2.	.26
4 COMBINED AT +	CP62	764.	13.42	274.	72.	24.	3.64
ROUTED TO +	62T63	736.	13.83	274.	72.	24.	3.64
HYDROGRAPH AT +	63	260.	13.58	75.	19.	6.	.91
2 COMBINED AT +	CP63	960.	13.67	343.	90.	30.	4.55
ROUTED TO +	63T71	725.	15.42	330.	90.	30.	4.55
HYDROGRAPH AT +	ADOT-E	234.	14.17	158.	57.	19.	.01
ROUTED TO +	AET67A	233.	14.42	158.	57.	19.	.01
HYDROGRAPH AT +	67A	180.	12.67	29.	8.	3.	.30
2 COMBINED AT +	C67A	238.	14.25	177.	64.	22.	.31
ROUTED TO +	67ATC	236.	14.67	176.	64.	22.	.31
HYDROGRAPH AT +	SUP2	661.	12.08	392.	241.	82.	.01
ROUTED TO							

+		RSUP2	411.	16.00	387.	240.	82.	.01
+	HYDROGRAPH AT	67B	266.	12.92	52.	14.	5.	.53
+	2 COMBINED AT	C67B	665.	12.92	426.	254.	86.	.54
+	ROUTED TO	67BTC	542.	14.08	425.	254.	86.	.54
+	HYDROGRAPH AT	67C	479.	12.83	82.	20.	7.	.93
+	3 COMBINED AT	C67C	977.	12.92	658.	337.	115.	1.78
+	ROUTED TO	67CTE	842.	13.83	645.	336.	115.	1.78
+	HYDROGRAPH AT	67D	94.	12.50	11.	3.	1.	.13
+	ROUTED TO	67DTE	74.	13.00	11.	3.	1.	.13
+	HYDROGRAPH AT	67E	290.	12.92	53.	13.	4.	.58
+	3 COMBINED AT	CP67E	887.	13.83	659.	352.	120.	2.49
+	ROUTED TO	67T68	862.	14.17	658.	352.	120.	2.49
+	HYDROGRAPH AT	68A	271.	12.50	34.	9.	3.	.35
+	2 COMBINED AT	C68A	862.	14.17	659.	360.	123.	2.84
+	ROUTED TO	68ATB	860.	14.25	659.	360.	123.	2.84
+	HYDROGRAPH AT	68B	195.	12.42	22.	5.	2.	.25
+	2 COMBINED AT	CP68B	859.	14.25	659.	365.	124.	3.09
+	ROUTED TO	68BT69	829.	14.75	658.	365.	124.	3.09
+	HYDROGRAPH AT	69	53.	12.58	7.	2.	1.	.09
+	2 COMBINED AT	C69	829.	14.75	658.	366.	125.	3.18
+	ROUTED TO	69T71	810.	15.58	657.	366.	125.	3.18
+	HYDROGRAPH AT	71	330.	13.42	85.	21.	7.	1.09
+	3 COMBINED AT	CP71	1478.	15.42	984.	466.	158.	8.82
+	ROUTED TO	71T72	1396.	16.33	983.	466.	158.	8.82
+	2 COMBINED AT	EMFWAR	2753.	13.92	1799.	733.	263.	25.63
+	ROUTED TO	WARTKN	2703.	14.08	1791.	733.	263.	25.63
+	HYDROGRAPH AT	CAP1A	217.	2.00	217.	217.	217.	.01
	ROUTED TO							

+		RCA1A	217.	3.67	217.	217.	217.	.01
	HYDROGRAPH AT							
+		CAP1B	217.	2.00	217.	217.	217.	.01
	ROUTED TO							
+		RCAP1B	217.	3.50	217.	217.	217.	.01
	HYDROGRAPH AT							
+		65AW	400.	12.25	37.	9.	3.	.43
	3 COMBINED AT							
+		C65AW	834.	12.25	471.	443.	437.	.45
	ROUTED TO							
+		65AWTB	488.	16.42	468.	443.	437.	.45
	HYDROGRAPH AT							
+		65A	1057.	13.00	207.	52.	17.	2.54
	ROUTED TO							
+		65ATB	789.	13.83	207.	52.	17.	2.54
	HYDROGRAPH AT							
+		65B	522.	13.33	130.	32.	11.	1.37
	3 COMBINED AT							
+		CP65B	1543.	13.67	786.	525.	464.	4.36
	ROUTED TO							
+		65T66	1533.	13.83	786.	525.	464.	4.36
	HYDROGRAPH AT							
+		66A	236.	12.33	26.	7.	2.	.26
	ROUTED TO							
+		66ATB	194.	12.75	26.	7.	2.	.26
	HYDROGRAPH AT							
+		66B	276.	13.08	58.	15.	5.	.67
	2 COMBINED AT							
+		CP66B	412.	13.00	85.	22.	7.	.93
	ROUTED TO							
+		66BTC	293.	14.08	85.	22.	7.	.93
	HYDROGRAPH AT							
+		66C	268.	12.75	45.	11.	4.	.50
	2 COMBINED AT							
+		CP66C	428.	12.83	129.	33.	11.	1.43
	ROUTED TO							
+		66CTD	376.	13.42	129.	33.	11.	1.43
	HYDROGRAPH AT							
+		66D	186.	12.83	33.	8.	3.	.31
	2 COMBINED AT							
+		C66D	485.	13.08	160.	40.	13.	1.74
	2 COMBINED AT							
+		CP66	1826.	13.58	928.	561.	476.	6.10
	ROUTED TO							
+		66DT70	1801.	14.17	928.	561.	476.	6.10
	HYDROGRAPH AT							
+		70A	372.	12.67	57.	14.	5.	.54
	2 COMBINED AT							
+		C70A	1801.	14.17	975.	574.	480.	6.64
	ROUTED TO							
+		70ATB	1774.	14.67	974.	574.	480.	6.64
	HYDROGRAPH AT							
+		70B	237.	12.83	46.	11.	4.	.38
	2 COMBINED AT							

+		CP70B	1774.	14.67	1011.	583.	484.	7.02
+	ROUTED TO	70BT76	1741.	15.25	1007.	583.	483.	7.02
+	HYDROGRAPH AT	76B	354.	13.17	86.	22.	7.	.64
+	2 COMBINED AT	CP76B	1742.	15.25	1072.	601.	489.	7.66
+	HYDROGRAPH AT	72	350.	13.08	77.	20.	7.	.84
+	2 COMBINED AT	KNOX	1742.	15.25	1135.	617.	495.	8.50
+	2 COMBINED AT	EMFKNX	4127.	14.08	2776.	1320.	745.	34.13
+	ROUTED TO	KNXTRY	4083.	14.33	2769.	1320.	745.	34.13
+	HYDROGRAPH AT	76A	680.	14.00	251.	63.	21.	1.91
+	2 COMBINED AT	EMFRAY	4571.	14.17	2940.	1371.	762.	36.04
+	HYDROGRAPH AT	73A	306.	13.33	77.	19.	6.	.95
+	ROUTED TO	73ATB	242.	13.92	77.	19.	6.	.95
+	HYDROGRAPH AT	73B	310.	12.50	38.	10.	3.	.42
+	2 COMBINED AT	CP73B	351.	12.50	114.	28.	9.	1.37
+	ROUTED TO	73BTC	245.	13.25	114.	28.	9.	1.37
+	HYDROGRAPH AT	73C	491.	12.42	52.	13.	4.	.58
+	2 COMBINED AT	CP73C	612.	12.42	164.	41.	14.	1.95
+	ROUTED TO	73T74C	527.	12.67	163.	41.	14.	1.95
+	HYDROGRAPH AT	74A	248.	13.33	61.	15.	5.	.75
+	ROUTED TO	74ATB	188.	14.08	61.	15.	5.	.75
+	HYDROGRAPH AT	74B	236.	12.58	31.	8.	3.	.33
+	2 COMBINED AT	CP74B	278.	12.58	92.	23.	8.	1.08
+	ROUTED TO	74BTC	261.	12.75	92.	23.	8.	1.08
+	HYDROGRAPH AT	74C	259.	12.58	38.	9.	3.	.34
+	3 COMBINED AT	CP74C	1003.	12.67	286.	72.	24.	3.37
+	ROUTED TO	74CT75	959.	12.83	285.	72.	24.	3.37
+	HYDROGRAPH AT	75	866.	14.75	391.	105.	35.	4.01
	2 COMBINED AT							

+	CP75	1183.	12.83	647.	169.	56.	7.38
+ ROUTED TO	75TCP	1072.	15.17	647.	169.	56.	7.38
+ HYDROGRAPH AT	77A	449.	13.75	139.	35.	12.	1.74
+ ROUTED TO	77ATB	398.	14.08	139.	35.	12.	1.74
+ HYDROGRAPH AT	77B	316.	12.33	34.	9.	3.	.36
+ 2 COMBINED AT	CP77B	398.	14.08	170.	43.	14.	2.10
+ ROUTED TO	77BTC	388.	14.42	169.	43.	14.	2.10
+ HYDROGRAPH AT	77C	245.	12.42	27.	7.	2.	.28
+ 2 COMBINED AT	C77C	395.	12.67	194.	50.	17.	2.38
+ ROUTED TO	77CT78	379.	14.67	193.	50.	17.	2.38
+ HYDROGRAPH AT	78A	478.	14.17	179.	45.	15.	2.29
+ ROUTED TO	78ATB	399.	14.92	178.	45.	15.	2.29
+ HYDROGRAPH AT	78B	546.	12.17	57.	16.	5.	.39
+ 2 COMBINED AT	C78B	541.	12.17	230.	61.	20.	2.68
+ ROUTED TO	78BTC	446.	12.42	229.	61.	20.	2.68
+ HYDROGRAPH AT	78C	354.	12.33	51.	13.	4.	.28
+ 2 COMBINED AT	C78C	768.	12.42	275.	73.	24.	2.96
+ 2 COMBINED AT	C78C2	970.	12.42	457.	119.	40.	5.34
+ ROUTED TO	78CT79	923.	12.67	455.	119.	40.	5.34
+ HYDROGRAPH AT	79A	793.	13.50	231.	58.	19.	2.01
+ 2 COMBINED AT	C79A1	1242.	13.50	660.	171.	57.	7.35
+ HYDROGRAPH AT	78F	896.	14.17	328.	83.	28.	4.29
+ ROUTED TO	78FTD	850.	14.50	327.	83.	28.	4.29
+ HYDROGRAPH AT	78D	599.	12.83	108.	27.	9.	.89
+ 2 COMBINED AT	C78D	861.	14.50	423.	108.	36.	5.18
+ HYDROGRAPH AT	82A4	401.	13.67	168.	43.	14.	2.13
+ ROUTED TO	R82A4	397.	14.00	167.	43.	14.	2.13
HYDROGRAPH AT							

+	82A3	333.	13.92	155.	40.	13.	2.02
2 COMBINED AT +	C82A3	714.	14.00	315.	81.	27.	4.15
ROUTED TO +	RC82A3	710.	14.17	315.	81.	27.	4.15
HYDROGRAPH AT +	CAP2	64.	20.00	64.	64.	62.	.01
ROUTED TO +	RCAP2	64.	23.33	64.	64.	61.	.01
HYDROGRAPH AT +	82A2	521.	14.42	295.	80.	27.	4.13
2 COMBINED AT +	C82A2	552.	14.50	330.	135.	87.	4.14
HYDROGRAPH AT +	82A1	709.	13.33	244.	61.	20.	3.12
3 COMBINED AT +	C82A	1579.	13.83	809.	258.	128.	11.41
ROUTED TO +	82ATD	1557.	14.17	808.	258.	128.	11.41
2 COMBINED AT +	C78D2	2239.	14.42	1159.	350.	159.	16.59
ROUTED TO +	78DTE	2185.	14.92	1156.	349.	158.	16.59
HYDROGRAPH AT +	78E	715.	12.75	131.	33.	11.	1.01
2 COMBINED AT +	C78E	2185.	14.92	1250.	377.	168.	17.60
ROUTED TO +	78T79B	2169.	15.00	1244.	375.	167.	17.60
HYDROGRAPH AT +	79B	574.	13.08	133.	33.	11.	1.00
2 COMBINED AT +	C79B	2178.	15.00	1346.	403.	176.	18.60
2 COMBINED AT +	C79	2913.	14.75	1908.	548.	225.	25.95
ROUTED TO +	79TCP	2906.	15.00	1897.	547.	224.	25.95
2 COMBINED AT +	CPPWR	3839.	15.00	2421.	683.	270.	33.33
ROUTED TO +	CPT80A	3825.	15.08	2407.	682.	269.	33.33
HYDROGRAPH AT +	80A	1785.	13.00	498.	155.	52.	2.64
2 COMBINED AT +	CPOWER	4641.	13.33	2747.	796.	308.	35.97
2 COMBINED AT +	EMFPOW	7944.	14.08	5309.	2076.	1040.	72.01
ROUTED TO +	POWTWI	7920.	14.17	5304.	2075.	1040.	72.01
HYDROGRAPH AT +	80B	990.	12.58	184.	57.	19.	1.12
2 COMBINED AT +	MFWIL	7957.	14.17	5369.	2115.	1053.	73.13
ROUTED TO							

+	WILTSP	7930.	14.42	5362.	2115.	1053.	73.13
+ HYDROGRAPH AT	82B	1093.	12.17	75.	19.	6.	.92
+ DIVERSION TO	TRW	1093.	12.17	75.	19.	6.	.92
+ HYDROGRAPH AT	DTTRW	0.	.00	0.	0.	0.	.92
+ ROUTED TO	82BT83	0.	.00	0.	0.	0.	.92
+ HYDROGRAPH AT	83	306.	13.17	70.	18.	6.	1.01
+ 2 COMBINED AT	C83	300.	13.17	69.	17.	6.	1.93
+ ROUTED TO	83T84	215.	14.17	68.	17.	6.	1.93
+ HYDROGRAPH AT	84	270.	13.25	63.	16.	5.	.99
+ 2 COMBINED AT	C84	324.	14.00	127.	32.	11.	2.92
+ ROUTED TO	84T85	320.	14.17	127.	32.	11.	2.92
+ HYDROGRAPH AT	85	261.	13.25	59.	15.	5.	1.00
+ 2 COMBINED AT	C85	456.	13.50	181.	46.	15.	3.92
+ ROUTED TO	85T86	451.	13.75	180.	46.	15.	3.92
+ HYDROGRAPH AT	86	274.	13.25	62.	15.	5.	1.00
+ 2 COMBINED AT	C86	618.	13.58	236.	61.	20.	4.92
+ ROUTED TO	86T91	594.	14.17	235.	61.	20.	4.92
+ HYDROGRAPH AT	87A	205.	12.83	33.	8.	3.	.49
+ ROUTED TO	87ATB	149.	13.25	33.	8.	3.	.49
+ HYDROGRAPH AT	87B	190.	12.92	33.	8.	3.	.49
+ 2 COMBINED AT	C87	287.	13.00	66.	17.	6.	.98
+ ROUTED TO	87T88B	259.	13.67	66.	17.	6.	.98
+ HYDROGRAPH AT	88A	251.	12.58	34.	8.	3.	.50
+ ROUTED TO	88ATB	197.	13.00	34.	8.	3.	.50
+ HYDROGRAPH AT	88B	192.	12.92	34.	8.	3.	.50
+ 2 COMBINED AT	C88B	378.	12.92	68.	17.	6.	1.00
+ 2 COMBINED AT	C88	527.	13.00	130.	33.	11.	1.98
ROUTED TO							

+	88T89	463.	13.83	130.	33.	11.	1.98
HYDROGRAPH AT +	89A	170.	12.92	31.	8.	3.	.50
ROUTED TO +	89ATB	117.	13.67	31.	8.	3.	.50
HYDROGRAPH AT +	89B	200.	12.83	32.	8.	3.	.50
2 COMBINED AT +	C89B	213.	12.83	63.	16.	5.	1.00
2 COMBINED AT +	C89	592.	13.75	189.	48.	16.	2.98
ROUTED TO +	89T90	546.	14.83	188.	48.	16.	2.98
HYDROGRAPH AT +	90A	297.	12.42	31.	8.	3.	.48
ROUTED TO +	90ATB	123.	13.58	31.	8.	3.	.48
HYDROGRAPH AT +	90B	308.	13.17	69.	18.	6.	.82
2 COMBINED AT +	C90B	361.	13.25	99.	26.	9.	1.30
2 COMBINED AT +	C90	699.	13.67	280.	72.	24.	4.28
ROUTED TO +	90T91	696.	13.83	279.	72.	24.	4.28
HYDROGRAPH AT +	91	199.	12.92	38.	10.	3.	.46
3 COMBINED AT +	CP91	1247.	13.83	510.	133.	44.	9.66
ROUTED TO +	R91	1246.	14.00	510.	133.	44.	9.66
HYDROGRAPH AT +	81A	1311.	12.75	299.	98.	33.	1.81
ROUTED TO +	81ATB	1209.	13.08	299.	98.	33.	1.81
HYDROGRAPH AT +	81B	556.	12.67	98.	29.	10.	.84
3 COMBINED AT +	RITTEN	1974.	13.50	857.	248.	83.	12.31
2 COMBINED AT +	EMFRIT	9044.	14.33	5976.	2301.	1115.	85.44

*** NORMAL END OF HEC-1 ***

```
-----DSS---ZCLOSE Unit:  71,   File: SEMP50N.DSS
          Pointer Utilization:    .25
          Number of Records:      25
          File Size:      53.2  Kbytes
          Percent Inactive:     .0
```

APPENDIX I

50-YEAR, 24-HOUR
FUTURE CONDITION MODEL
HEC-1 OUTPUT

APPENDIX I

HEC-1 OUTPUT I-1 Northeast Mesa Area, 50-year, 24-hour Storm Future Land Use Condition **I-1**

HEC-1 OUTPUT I-2 Northwest Mesa Area, 50-year, 24-hour Storm, Future Land Use Conditions **I-18**

HEC-1 OUTPUT I-3 Southern Mesa Area, 50-year, 24-hour Storm, Future Land Use Conditions **I-34**

APPENDIX I-1

NORTHEAST MESA AREA
50-YEAR, 24-HOUR STORM
FUTURE LAND USE CONDITIONS
HEC-1 MODEL

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUL   1997              *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   25JUN98  TIME  14:20:40  *
*                                      *
****************************************
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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
```

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   FUTURE LAND USE WITH RETENTION AND EXISTING ROUTING
   2          ID   ASSUMING 80% RETENTION EFFECTIVENESS
   3          ID
   4          ID   SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
   5          ID   AREA NORTH OF SUPERSTITION FREEWAY
   6          ID
   7          ID
   8          ID   REVISED BY VALERIE SWICK, OCTOBER-NOVEMBER 1996
   9          ID   TO INCORPORATE THE SUPERSITION STRUCTURES AND COMBINE MODELS
  10          ID
  11          ID   FILENAME:  FUTN50YR.DAT
  12          ID
  13          ID   THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
  14          ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 17 SQ. MI.
  15          ID
  16          ID    50-YEAR 24-HOUR FREQUENCY
  17          ID
  18          ID
  19          ID   METHODOLOGY
  20          ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
  21          ID   SCS TYPE II RAINFALL DISTRIBUTION
  22          ID   S-GRAPH HYDROGRAPH
  23          ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
  24          ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
  25          ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
  26          ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
  27          ID   DATED 1994
  28          ID   THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS
  29          ID
  30          ID   INITIAL STUDY PERFORMED BY LISA C. YOUNG
  31          ID   REVIEWED BY VALERIE A. SWICK
  32          ID   HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
  33          ID   DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.
  34          ID
  35          ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
  36          ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL
  37          ID
  38          ID
  39          ID    LAST UPDATED ON 3/13/98
  40          ID
  41          ID    UPDATE WAS BASED UPON NEW MAG LAND USE DEFINITIONS FOR SINGLE FAMILY HOUSING
  42          ID
  43          ID   DDM MCUHPZ MESA AREA DRAINAGE MASTER PLAN
```

```
                    * *DIAGRAM
        44          IT       5  1APR97    0000    1000
        45          IO       5
        46          IN      15
        47          JD    3.20     .01
        48          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
        49          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
        50          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
        51          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
        52          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
        53          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
        54          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
1                                                HEC-1 INPUT                                          PAGE  2

      LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

        55          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
        56          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
        57          PC    .983    .986    .989    .992    .995    .998   1.000
        58          JD    3.18     1.0
        59          JD    3.10     5.0
        60          JD    3.00    10.0
        61          JD    2.88    30.0
        62          JD    2.75    60.0
        63          JD    2.71    90.0
                    *
                    * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR, 24-HR STORM.
                    *
*** NOLIST ***
```

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1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUL   1997              *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   25JUN98  TIME  14:20:40  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************
```

FUTURE LAND USE WITH RETENTION AND EXISTING ROUTING
ASSUMING 80% RETENTION EFFECTIVENESS

SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
AREA NORTH OF SUPERSTITION FREEWAY

REVISED BY VALERIE SWICK, OCTOBER-NOVEMBER 1996
TO INCORPORATE THE SUPERSITION STRUCTURES AND COMBINE MODELS

FILENAME: FUTN50YR.DAT

THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 17 SQ. MI.

50-YEAR 24-HOUR FREQUENCY

METHODOLOGY
THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
SCS TYPE II RAINFALL DISTRIBUTION
S-GRAPH HYDROGRAPH
GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
NORMAL DEPTH STORAGE CHANNEL ROUTING
APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
DATED 1994
THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS

INITIAL STUDY PERFORMED BY LISA C. YOUNG
REVIEWED BY VALERIE A. SWICK
HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.

ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL

LAST UPDATED ON 3/13/98

UPDATE WAS BASED UPON NEW MAG LAND USE DEFINITIONS FOR SINGLE FAMILY HOUSING

DDM MCUHP2 MESA AREA DRAINAGE MASTER PLAN

```
 45 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN           5  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1APR97  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      4APR97  ENDING DATE
                     NDTIME        1115  ENDING TIME
                      ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL     .08 HOURS
                      TOTAL TIME BASE   83.25 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

47 JD INDEX STORM NO. 1
STRM 3.20 PRECIPITATION DEPTH
TRDA .01 TRANSPOSITION DRAINAGE AREA

48 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

58 JD INDEX STORM NO. 2
STRM 3.18 PRECIPITATION DEPTH
TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

59 JD INDEX STORM NO. 3
STRM 3.10 PRECIPITATION DEPTH
TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

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          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
          .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
          .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
          .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00
60 JD     INDEX STORM NO. 4
               STRM        3.00  PRECIPITATION DEPTH
               TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI       PRECIPITATION PATTERN
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
          .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
          .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
          .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00
61 JD     INDEX STORM NO. 5
               STRM        2.88  PRECIPITATION DEPTH
               TRDA       30.00  TRANSPOSITION DRAINAGE AREA

 0 PI       PRECIPITATION PATTERN
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
          .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
          .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
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.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

62 JD INDEX STORM NO. 6

STRM 2.75 PRECIPITATION DEPTH

TRDA 60.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

63 JD INDEX STORM NO. 7

STRM 2.71 PRECIPITATION DEPTH

TRDA 90.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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                    .00       .00       .00       .00       .00       .00       .00       .00
  -----DSS---ZOPEN:  Existing File Opened,  File: FUTN50YR.DSS
                    Unit:  71;  DSS Version: 6-EA
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/31MAR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/01APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/02APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/03APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/04APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.   13:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   13:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   13:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   14:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   14:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   14:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   15:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   15:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   15:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   16:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   16:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   16:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   17:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   17:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   17:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   18:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   18:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   18:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
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
+                           42      1140.   12.75         235.        72.         24.      1.75

        DIVERSION TO
+                           D42      861.   12.50          95.        27.          9.      1.75

        HYDROGRAPH AT
+                         RET42     1140.   12.75         163.        45.         15.      1.75

        ROUTED TO
+                         42T51      910.   13.42         161.        45.         15.      1.75
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+	HYDROGRAPH AT	51	1300.	12.33	193.	63.	21.	1.24
+	DIVERSION TO	D51	1014.	12.17	85.	25.	8.	1.24
+	HYDROGRAPH AT	RET51	1300.	12.33	134.	38.	13.	1.24
+	2 COMBINED AT	C51	1277.	12.33	286.	81.	27.	2.99
+	ROUTED TO	51T53	857.	14.08	282.	81.	27.	2.99
+	HYDROGRAPH AT	44A	1002.	12.75	201.	62.	21.	1.59
+	DIVERSION TO	D44A	788.	12.50	84.	24.	8.	1.59
+	HYDROGRAPH AT	RET44A	1002.	12.75	138.	38.	13.	1.59
+	DIVERSION TO	D44A	751.	12.75	107.	30.	10.	1.59
+	HYDROGRAPH AT	DIV44A	251.	12.75	31.	8.	3.	1.59
+	HYDROGRAPH AT	43	1378.	12.42	226.	74.	25.	1.42
+	DIVERSION TO	D43	1133.	12.25	107.	31.	10.	1.42
+	HYDROGRAPH AT	RET43	1378.	12.42	151.	43.	14.	1.42
+	2 COMBINED AT	C43	1357.	12.42	176.	50.	17.	3.01
+	ROUTED TO	43T53	732.	13.75	172.	50.	17.	3.01
+	HYDROGRAPH AT	53	692.	12.50	113.	35.	12.	.78
+	DIVERSION TO	D53	519.	12.25	47.	14.	5.	.78
+	HYDROGRAPH AT	RET53	692.	12.50	78.	22.	7.	.78
+	3 COMBINED AT	C53	1481.	13.83	499.	144.	48.	6.78
+	HYDROGRAPH AT	54	421.	12.50	68.	21.	7.	.49
+	DIVERSION TO	D54	197.	12.08	18.	6.	2.	.49
+	HYDROGRAPH AT	RET54	421.	12.50	56.	15.	5.	.49
+	2 COMBINED AT	C54	1495.	13.83	544.	157.	52.	7.27
+	DIVERSION TO	SOUTH	522.	13.83	134.	34.	11.	7.27
+	HYDROGRAPH AT	DCAP12	972.	13.83	410.	124.	41.	7.27
+	ROUTED TO	CAP12	883.	14.17	408.	124.	41.	7.27
+	HYDROGRAPH AT	DR44A	788.	12.50	84.	24.	8.	1.59

+	ROUTED TO 44ATB	380.	13.42	85.	24.	8.	1.59
+	HYDROGRAPH AT 44B	1141.	12.42	171.	53.	18.	1.06
+	DIVERSION TO D44B	324.	11.92	38.	12.	4.	1.06
+	HYDROGRAPH AT RET44B	1141.	12.42	151.	41.	14.	1.06
+	2 COMBINED AT C44B	1328.	12.42	222.	65.	22.	1.06
+	ROUTED TO CAP10+	1245.	12.50	222.	65.	22.	1.06
+	ROUTED TO RCAP11	1228.	12.50	222.	65.	22.	1.06
+	2 COMBINED AT C12	1622.	12.67	609.	184.	62.	8.33
+	ROUTED TO ADOT-W	367.	15.33	347.	184.	62.	8.33
+	ROUTED TO RADOTW	367.	15.42	347.	184.	62.	8.33
+	HYDROGRAPH AT 36B	275.	12.58	45.	13.	4.	.32
+	DIVERSION TO D36B	275.	12.58	38.	10.	3.	.32
+	HYDROGRAPH AT RET36B	94.	13.08	10.	3.	1.	.32
+	2 COMBINED AT C36B	371.	15.33	352.	185.	62.	8.65
+	HYDROGRAPH AT RSOUTH	522.	13.83	134.	34.	11.	7.27
+	HYDROGRAPH AT 57	369.	12.00	32.	10.	3.	.18
+	DIVERSION TO D57	369.	12.00	27.	8.	3.	.18
+	HYDROGRAPH AT RET57	38.	12.17	9.	3.	1.	.18
+	2 COMBINED AT C57	594.	13.75	169.	43.	14.	.18
+	ROUTED TO CAP13+	591.	13.83	169.	43.	14.	.18
+	HYDROGRAPH AT 36A	114.	12.25	13.	4.	1.	.10
+	DIVERSION TO D36A	114.	12.25	9.	3.	1.	.10
+	HYDROGRAPH AT RET36A	77.	12.42	5.	1.	0.	.10
+	2 COMBINED AT C36A	593.	13.83	173.	44.	15.	.28
+	ROUTED TO ADOT-E	183.	14.50	121.	44.	15.	.28
+	2 COMBINED AT CFAKE	508.	14.67	449.	220.	74.	8.93
+	HYDROGRAPH AT 52	441.	12.42	73.	23.	8.	.43

+	DIVERSION TO	D52	441.	12.42	47.	13.	4.	.43
+	HYDROGRAPH AT	RET52	372.	12.58	35.	10.	3.	.43
+	HYDROGRAPH AT	56	623.	12.42	102.	33.	11.	.55
+	DIVERSION TO	D56	465.	12.17	43.	13.	4.	.55
+	HYDROGRAPH AT	RET56	623.	12.42	72.	20.	7.	.55
+	2 COMBINED AT	C56	829.	12.58	106.	30.	10.	.98
+	ROUTED TO	56T58	562.	12.92	105.	30.	10.	.98
+	HYDROGRAPH AT	58	1102.	12.33	167.	55.	18.	.95
+	DIVERSION TO	D58	1102.	12.33	132.	37.	12.	.95
+	HYDROGRAPH AT	RET58	449.	12.67	58.	18.	6.	.95
+	2 COMBINED AT	C58	830.	12.67	158.	47.	16.	1.93
+	HYDROGRAPH AT	46B	343.	12.42	56.	19.	6.	.36
+	DIVERSION TO	D46B	12.	9.92	8.	3.	1.	.36
+	HYDROGRAPH AT	RET46B	343.	12.42	56.	16.	5.	.36
+	ROUTED TO	CAP6	255.	12.58	56.	16.	5.	.36
+	ROUTED TO	RCAP6	251.	12.67	56.	16.	5.	.36
+	ROUTED TO	RCAP6B	251.	12.67	56.	16.	5.	.36
+	HYDROGRAPH AT	29A	181.	12.25	21.	7.	2.	.18
+	DIVERSION TO	D29A	181.	12.25	17.	5.	2.	.18
+	HYDROGRAPH AT	RET29A	92.	12.50	7.	2.	1.	.18
+	2 COMBINED AT	C29A	319.	12.50	62.	18.	6.	.54
+	DIVERSION TO	29A-W	0.	.00	0.	0.	0.	.54
+	HYDROGRAPH AT	29A-S	319.	12.50	62.	18.	6.	.54
+	ROUTED TO	29ATB	326.	12.58	62.	18.	6.	.54
+	HYDROGRAPH AT	45A	336.	12.67	61.	18.	6.	.62
+	DIVERSION TO	D45A	336.	12.67	45.	12.	4.	.62
+	HYDROGRAPH AT	RET45A	186.	13.08	21.	6.	2.	.62

+	DIVERSION TO 45ATB	177.	13.08	20.	6.	2.	.62
+	HYDROGRAPH AT D45A	9.	13.08	1.	0.	0.	.62
+	HYDROGRAPH AT 55B	860.	13.00	222.	70.	23.	1.86
+	DIVERSION TO D55B	860.	13.00	169.	46.	15.	1.86
+	HYDROGRAPH AT RET55B	481.	13.58	79.	23.	8.	1.86
+	2 COMBINED AT C55B	479.	13.58	77.	23.	8.	2.48
+	ROUTED TO CAP7	463.	13.67	77.	23.	8.	2.48
+	ROUTED TO RCAP7	360.	14.08	77.	23.	8.	2.48
+	HYDROGRAPH AT 29B	74.	12.25	7.	2.	1.	.08
+	DIVERSION TO D29B	74.	12.25	7.	2.	1.	.08
+	HYDROGRAPH AT RET29B	0.	.00	0.	0.	0.	.08
+	2 COMBINED AT C29B1	360.	14.08	77.	23.	8.	2.56
+	2 COMBINED AT C29B2	377.	14.08	128.	41.	14.	3.10
+	ROUTED TO 29BTC	373.	14.08	128.	41.	14.	3.10
+	HYDROGRAPH AT RD45A	177.	13.08	20.	6.	2.	.62
+	ROUTED TO 45ATB	95.	14.00	19.	6.	2.	.62
+	HYDROGRAPH AT 45B	612.	12.50	111.	36.	12.	.66
+	DIVERSION TO D45B	383.	12.17	40.	12.	4.	.66
+	HYDROGRAPH AT RET45B	612.	12.50	86.	24.	8.	.66
+	2 COMBINED AT C45B	612.	12.50	103.	30.	10.	.66
+	ROUTED TO CAP8	434.	12.75	102.	30.	10.	.66
+	ROUTED TO RCAP8	398.	13.25	102.	30.	10.	.66
+	HYDROGRAPH AT 29C	238.	12.33	32.	10.	3.	.23
+	DIVERSION TO D29C	238.	12.33	32.	9.	3.	.23
+	HYDROGRAPH AT RET29C	8.	13.83	4.	1.	0.	.23
+	2 COMBINED AT C29C1	398.	13.25	105.	31.	10.	.89
+	2 COMBINED AT C29C2	540.	13.08	222.	69.	23.	3.99

+	ROUTED TO 29CT36	541.	13.17	222.	69.	23.	3.99
+	HYDROGRAPH AT 55	217.	12.08	18.	6.	2.	.14
+	DIVERSION TO D55	217.	12.08	17.	5.	2.	.14
+	HYDROGRAPH AT RET55	8.	12.75	3.	1.	0.	.14
+	ROUTED TO CAP9	6.	13.00	3.	1.	0.	.14
+	ROUTED TO RCAP9	6.	13.50	3.	1.	0.	.14
+	HYDROGRAPH AT 29D	553.	12.50	99.	32.	11.	.65
+	DIVERSION TO D29D	445.	12.33	47.	14.	5.	.65
+	HYDROGRAPH AT RET29D	553.	12.50	64.	18.	6.	.65
+	ROUTED TO 29T36	325.	13.25	62.	18.	6.	.65
+	HYDROGRAPH AT 36C	740.	12.08	93.	32.	11.	.44
+	DIVERSION TO D36C	740.	12.08	67.	19.	6.	.44
+	HYDROGRAPH AT RET36C	455.	12.25	42.	13.	4.	.44
+	4 COMBINED AT C36	851.	13.25	315.	98.	33.	5.22
+	ROUTED TO 36T37	837.	13.33	314.	98.	33.	5.22
+	HYDROGRAPH AT 29AWST	0.	.00	0.	0.	0.	.54
+	HYDROGRAPH AT 30	807.	12.58	163.	53.	18.	1.12
+	DIVERSION TO D30	95.	11.75	31.	11.	4.	1.12
+	HYDROGRAPH AT RET30	807.	12.58	154.	43.	14.	1.12
+	2 COMBINED AT C30	807.	12.58	154.	43.	14.	1.12
+	ROUTED TO 30T37	779.	12.75	154.	43.	14.	1.12
+	HYDROGRAPH AT 37	788.	12.08	96.	33.	11.	.47
+	DIVERSION TO D37	788.	12.08	66.	19.	6.	.47
+	HYDROGRAPH AT RET37	507.	12.25	46.	14.	5.	.47
+	3 COMBINED AT C37	1197.	12.75	485.	148.	49.	6.81
+	ROUTED TO ADOTEL	17.	25.33	17.	17.	16.	6.81
+	ROUTED TO 37T38	17.	25.58	17.	17.	16.	6.81

+	HYDROGRAPH AT	17A	219.	12.17	26.	8.	3.	.18
+	DIVERSION TO	D17A	31.	11.83	6.	2.	1.	.18
+	HYDROGRAPH AT	RET17A	219.	12.17	23.	6.	2.	.18
+	ROUTED TO	17AT23	218.	12.25	23.	6.	2.	.18
+	HYDROGRAPH AT	23	323.	12.17	39.	13.	4.	.28
+	DIVERSION TO	D23	249.	12.08	17.	5.	2.	.28
+	HYDROGRAPH AT	RET23	323.	12.17	27.	8.	3.	.28
+	HYDROGRAPH AT	48	564.	12.50	82.	25.	8.	.77
+	DIVERSION TO	D48	564.	12.50	52.	14.	5.	.77
+	HYDROGRAPH AT	RET48	444.	12.58	38.	11.	4.	.77
+	ROUTED TO	CAP3	381.	12.67	38.	11.	4.	.77
+	ROUTED TO	RCAP3A	402.	12.75	38.	11.	4.	.77
+	ROUTED TO	RCAP3B	235.	13.00	37.	11.	4.	.77
+	HYDROGRAPH AT	17B	276.	12.25	36.	12.	4.	.22
+	DIVERSION TO	D17B	19.	11.33	7.	3.	1.	.22
+	HYDROGRAPH AT	RET17B	276.	12.25	34.	10.	3.	.22
+	2 COMBINED AT	C17B	275.	12.25	70.	20.	7.	.99
+	ROUTED TO	17BT22	278.	12.25	70.	20.	7.	.99
+	HYDROGRAPH AT	47	763.	12.92	161.	47.	16.	1.67
+	DIVERSION TO	D47	763.	12.92	129.	34.	11.	1.67
+	HYDROGRAPH AT	RET47	334.	13.50	44.	13.	4.	1.67
+	ROUTED TO	CAP4+5	347.	13.50	44.	13.	4.	1.67
+	ROUTED TO	RCAP4	220.	14.25	43.	13.	4.	1.67
+	HYDROGRAPH AT	22	494.	12.25	64.	21.	7.	.41
+	DIVERSION TO	D22	117.	11.83	17.	6.	2.	.41
+	HYDROGRAPH AT	RET22	494.	12.25	56.	16.	5.	.41
+	2 COMBINED AT	C22A	486.	12.25	94.	28.	9.	2.08

+	2 COMBINED AT						
	C22	754.	12.25	158.	47.	16.	3.07
+	ROUTED TO						
	22T23	532.	12.50	153.	47.	16.	3.07
+	3 COMBINED AT						
	C23	850.	12.33	200.	60.	20.	3.53
+	ROUTED TO						
	23T24	839.	12.42	199.	60.	20.	3.53
+	HYDROGRAPH AT						
	49	583.	12.50	86.	26.	9.	.79
+	DIVERSION TO						
	D49	581.	12.42	50.	14.	5.	.79
+	HYDROGRAPH AT						
	RET49	498.	12.58	44.	12.	4.	.79
+	ROUTED TO						
	CAP2	447.	12.67	44.	12.	4.	.79
+	ROUTED TO						
	RCAP2	385.	13.00	43.	12.	4.	.79
+	HYDROGRAPH AT						
	50	317.	12.25	40.	13.	4.	.28
+	DIVERSION TO						
	D50	304.	12.17	23.	7.	2.	.28
+	HYDROGRAPH AT						
	RET50	284.	12.33	22.	6.	2.	.28
+	ROUTED TO						
	CAP1	246.	12.42	22.	9.	6.	.28
+	ROUTED TO						
	RCAP1	152.	12.92	22.	9.	6.	.28
+	HYDROGRAPH AT						
	18A	1014.	12.33	142.	46.	15.	1.01
+	DIVERSION TO						
	D18A	652.	12.08	55.	17.	6.	1.01
+	HYDROGRAPH AT						
	RET18A	1014.	12.33	105.	29.	10.	1.01
+	3 COMBINED AT						
	C18A	1004.	12.33	164.	50.	20.	2.08
+	ROUTED TO						
	18T24	831.	12.50	163.	50.	20.	2.08
+	HYDROGRAPH AT						
	24	319.	12.25	41.	13.	4.	.29
+	DIVERSION TO						
	D24	5.	7.00	4.	1.	0.	.29
+	HYDROGRAPH AT						
	RET24	319.	12.25	41.	12.	4.	.29
+	3 COMBINED AT						
	C24	1867.	12.33	379.	117.	42.	5.90
+	ROUTED TO						
	24T31A	1723.	12.67	377.	117.	42.	5.90
+	ROUTED TO						
	24T31B	1711.	12.75	377.	117.	42.	5.90
+	HYDROGRAPH AT						
	31B	425.	12.42	64.	20.	7.	.47
+	DIVERSION TO						
	D31B	425.	12.42	42.	12.	4.	.47

+	HYDROGRAPH AT	RET31B	314.	12.58	31.	9.	3.	.47
+	2 COMBINED AT	C31	1880.	12.75	400.	124.	45.	6.37
+	DIVERSION TO	D31W	1580.	12.75	188.	47.	16.	6.37
+	HYDROGRAPH AT	D31	300.	12.58	212.	77.	29.	6.37
+	ROUTED TO	31T38	300.	13.00	211.	77.	29.	6.37
+	HYDROGRAPH AT	31A	547.	12.33	80.	26.	9.	.53
+	DIVERSION TO	D31A	254.	12.00	26.	8.	3.	.53
+	HYDROGRAPH AT	RET31A	547.	12.33	65.	18.	6.	.53
+	ROUTED TO	31AT38	496.	12.58	65.	18.	6.	.53
+	HYDROGRAPH AT	38	533.	12.25	78.	26.	9.	.47
+	DIVERSION TO	D38	189.	11.92	24.	8.	3.	.47
+	HYDROGRAPH AT	RET38	533.	12.25	66.	18.	6.	.47
+	4 COMBINED AT	C38	881.	12.67	327.	121.	54.	14.18
+	ROUTED TO	38T39	877.	12.67	326.	121.	54.	14.18
+	DIVERSION TO	DB10	28.	12.67	1.	0.	0.	14.18
+	HYDROGRAPH AT	ADD10	849.	12.67	325.	120.	54.	14.18
+	DIVERSION TO	DB9	103.	12.67	6.	1.	0.	14.18
+	HYDROGRAPH AT	ADD9	745.	12.67	319.	119.	54.	14.18
+	DIVERSION TO	DB8	148.	12.67	15.	4.	1.	14.18
+	HYDROGRAPH AT	ADD8	597.	12.67	304.	115.	53.	14.18
+	DIVERSION TO	DB7	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD7	597.	12.67	304.	115.	53.	14.18
+	DIVERSION TO	DB6	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD6	597.	12.67	304.	115.	53.	14.18
+	DIVERSION TO	DB5	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD5	597.	12.67	304.	115.	53.	14.18
+	HYDROGRAPH AT	D31W	1580.	12.75	188.	47.	16.	6.37

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          ROUTED TO
+                        31WT32      1249.   13.00        188.        47.        16.       6.37

          HYDROGRAPH AT
+                            32       352.   12.33         46.        14.         5.        .38

          2 COMBINED AT
+                           C32      1468.   12.92        270.        70.        23.        .38

          ROUTED TO
+                        32T39      1444.   13.00        270.        70.        23.        .38

          HYDROGRAPH AT
+                            39       346.   12.42         54.        17.         6.        .36

          DIVERSION TO
+                           D39        10.    9.58          6.         2.         1.        .36

          HYDROGRAPH AT
+                         RET39       346.   12.42         54.        15.         5.        .36

          3 COMBINED AT
+                           C39      1710.   13.00        544.       179.        74.      14.92

          DIVERSION TO
+                         BASIN         0.     .00          0.         0.         0.      14.92

          HYDROGRAPH AT
+                          SOSS      1710.   13.00        544.       179.        74.      14.92
1
                                   SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                                       (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                                          INTERPOLATED TO
                                                                       COMPUTATION INTERVAL
           ISTAQ    ELEMENT      DT       PEAK    TIME TO     VOLUME      DT       PEAK    TIME TO     VOLUME
                                                    PEAK                                     PEAK

                               (MIN)     (CFS)     (MIN)      (IN)     (MIN)     (CFS)     (MIN)       (IN)

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RCAP11  MANE        1.82   1248.02    753.89      2.31      5.00   1238.14    750.00       2.30

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1302E+03 EXCESS= .0000E+00 OUTFLOW= .1303E+03 BASIN STORAGE= .1268E-04 PERCENT ERROR=   -
.1

          FOR STORM = 2  STORM AREA (SQ MI) =       1.00
            RCAP11  MANE        1.81   1240.24    752.55      2.29      5.00   1229.60    750.00       2.29

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1294E+03 EXCESS= .0000E+00 OUTFLOW= .1295E+03 BASIN STORAGE= .1116E-04 PERCENT ERROR=   -
.1

          FOR STORM = 3  STORM AREA (SQ MI) =       5.00
            RCAP11  MANE        1.92   1203.51    752.68      2.23      5.00   1193.15    750.00       2.23

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1261E+03 EXCESS= .0000E+00 OUTFLOW= .1263E+03 BASIN STORAGE= .1087E-04 PERCENT ERROR=   -
.1

          FOR STORM = 4  STORM AREA (SQ MI) =      10.00
            RCAP11  MANE        1.85   1163.14    753.44      2.17      5.00   1147.86    750.00       2.17

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1223E+03 EXCESS= .0000E+00 OUTFLOW= .1225E+03 BASIN STORAGE= .9802E-05 PERCENT ERROR=   -
.1

          FOR STORM = 5  STORM AREA (SQ MI) =      30.00
            RCAP11  MANE        1.96   1106.30    753.99      2.08      5.00   1092.62    755.00       2.08

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1177E+03 EXCESS= .0000E+00 OUTFLOW= .1178E+03 BASIN STORAGE= .1217E-04 PERCENT ERROR=   -
.1

          FOR STORM = 6  STORM AREA (SQ MI) =      60.00
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          RCAP11  MANE          1.84   1049.72    753.39      1.99      5.00   1034.25    755.00        1.99

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1125E+03 EXCESS= .0000E+00 OUTFLOW= .1127E+03 BASIN STORAGE= .8628E-05 PERCENT ERROR=   -
.1

        FOR STORM = 7  STORM AREA (SQ MI) =       90.00
          RCAP11  MANE          1.86   1027.44    754.15      1.97      5.00   1017.11    755.00        1.97

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1113E+03 EXCESS= .0000E+00 OUTFLOW= .1114E+03 BASIN STORAGE= .1030E-04 PERCENT ERROR=   -
.1



*** NORMAL END OF HEC-1 ***


  -----DSS---ZCLOSE Unit:  71,   File: FUTN50YR.DSS
            Pointer Utilization:    .25
            Number of Records:      25
            File Size:      53.2  Kbytes
            Percent Inactive:     .0
```

APPENDIX I-2

NORTHWEST MESA AREA
50-YEAR, 24-HOUR STORM
FUTURE LAND USE CONDITIONS
HEC-1 MODEL

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUL   1997              *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   25JUN98  TIME  15:43:47  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*    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   FILENAME: FUTP2-50.DAT
  2           ID
  3           ID   ASSUME 80% RETENTION EFFECTIVENESS
  4           ID
  5           ID   AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROADS TO THE EAST
  6           ID
  7           ID   ALL STREET ROUTINGS HAVE N VALUES OF .015 FOR ASPHALT AND .03 FOR OVERLAND
  8           ID   FLOWS
  9           ID
 10           ID   EAST MARICOPA COUNTY AREA DRAINAGE MASTER STUDY - PHASE 2
 11           ID   THIS AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROAD TO THE
 12           ID   EAST, MCDOWELL ROAD TO THE NORTH AND THE SUPERSTITION FREEWAY TO THE SOUTH
 13           ID
 14           ID   THIS MODEL REPRESENTS THE FUTURE CONDITION OF THE WATERSHED.
 15           ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 18.60 SQ. MI.
 16           ID   THIS MODEL USES THE REVISED LAND USE AND A Kn VALUE OF 0.09 FOR DESERT LAND
 17           ID   USES
 18           ID
 19           ID   THIS MODEL WAS REVISED TO ESTABLISH CONCENTRATION POINTS AND HYDROGRAPHS
 20           ID   ENTERING INTO THE EMF.
 21           ID   INITIAL REVISION IN MARCH 1997
 22           ID
 23           ID    50-YEAR 24-HOUR FREQUENCY
 24           ID
 25           ID   METHODOLOGY:
 26           ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
 27           ID   SCS TYPE II RAINFALL DISTRIBUTION
 28           ID   S-GRAPH HYDROGRAPH
 29           ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
 30           ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
 31           ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
 32           ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
 33           ID   DATED 1994
 34           ID   THE NOAA TECHNICAL MEMORANDUM NWS HYDRO-40 DEPTH AREA RATIOS
 35           ID
 36           ID   STUDY INITIALLY PERFORMED BY LISA C. YOUNG
 37           ID   REVISED BY VALERIE A. SWICK
 38           ID   HYDROLOGY BRANCH, ENGINEERING DISTRICT,
 39           ID   FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, SPRING 1996
 40           ID
 41           ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
 42           ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL,  5FT/SEC FOR CONCRETE CHANNEL
 43           ID
```

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 44          ID   THIS MODEL DOES NOT REFLECT THE STORM DRAINS IN THE AREA AS THEY HAVE A LOW
 45          ID   CAPACITY AND OUTLET AT THE SAME LOCATION AS SURFACE FLOW
 46          ID
 47          ID
 48          ID     ******************************************************************
 49          ID     * THIS FUTURE CONDITIONS MODEL MUST USE USE THE DSS FILE FROM THE   *
 50          ID     * FUTNORTH MODEL (FUTNORTH.DSS) BECAUSE THERE IS A SPLIT FLOW AT    *
 51          ID     * BROADWAY AND HAWES ROADS.  THIS IS MODELED AS A 50/50 SPLIT, IF   *
 52          ID     * IT WILL ACTUALLY OCCUR IN THE FUTURE IS NOT KNOWN. THIS FLOW IS   *
 53          ID     * BROUGHT INTO THE MODEL AT SUBBASIN 25 WHICH IS WEST OF HAWES ROAD *
 54          ID     ******************************************************************
 55          ID
1                                        HEC-1 INPUT                                    PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 56          ID     ******************************************************************
 57          ID     * RETENTION VOLUME WERE OBTAINED BY USE OF THE 100-YR 2-HR MODEL.   *
 58          ID     * BASINS WITH OLDER DEVELOPMENT WILL NOT HAVE 100% OF THIS VOLUME   *
 59          ID     * AS RETENTION, BUT INSTEAD WILL HAVE A PERCENTAGE BASED UPON THE   *
 60          ID     * AMOUNT THAT CAN BE DEVELOPED IN THE FUTURE. THIS WAS BASED UPON   *
 61          ID     * EXAMINATION OF AERIAL PHOTOS AND FIELD OBSERVATION.               *
 62          ID     * 100% OF THE VOLUME FROM THE 100-YR 2-HR MODEL IS TERMED ULTIMATE  *
 63          ID     ******************************************************************
 64          ID
 65          ID
 66          ID     LAST UPDATED ON  3/13/98
 67          ID
 68          ID
 69          ID   DDM MCUHP2 Phase 2 model, north of Superstition Freeway
             * *DIAGRAM
 70          IT       5  1APR97    0000    1000
 71          IO       5
 72          IN      15
             *
 73          JD    3.20    0.01
 74          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 75          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 76          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 77          PC    .110    .115    .120    .126    .133    .140    .147    .150    .163    .172
 78          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 79          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 80          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 81          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 82          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 83          PC    .983    .986    .999    .992    .995    .998   1.000
 84          JD    3.18     1.0
 85          JD    3.10     5.0
 86          JD    3.00    10.0
 87          JD    2.88    30.0
 88          JD    2.75    60.0
 89          JD    2.71    90.0
             *
             * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR, 24-HR STORM.
             *
*** NOLIST ***
```

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUL   1997               *
*            VERSION 4.1                *
*                                       *
*  RUN DATE   25JUN98  TIME  15:43:47   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

FILENAME: FUTP2-50.DAT

ASSUME 80% RETENTION EFFECTIVENESS

AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROADS TO THE EAST

ALL STREET ROUTINGS HAVE N VALUES OF .015 FOR ASPHALT AND .03 FOR OVERLAND FLOWS

EAST MARICOPA COUNTY AREA DRAINAGE MASTER STUDY - PHASE 2
THIS AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROAD TO THE EAST, MCDOWELL ROAD TO THE NORTH AND THE SUPERSTITION FREEWAY TO THE SOUTH

THIS MODEL REPRESENTS THE FUTURE CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 18.60 SQ. MI.
THIS MODEL USES THE REVISED LAND USE AND A Kn VALUE OF 0.09 FOR DESERT LAND USES

THIS MODEL WAS REVISED TO ESTABLISH CONCENTRATION POINTS AND HYDROGRAPHS ENTERING INTO THE EMF.
INITIAL REVISION IN MARCH 1997

50-YEAR 24-HOUR FREQUENCY

METHODOLOGY:
THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
SCS TYPE II RAINFALL DISTRIBUTION
S-GRAPH HYDROGRAPH
GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
NORMAL DEPTH STORAGE CHANNEL ROUTING
APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS DATED 1994
THE NOAA TECHNICAL MEMORANDUM NWS HYDRO-40 DEPTH AREA RATIOS

STUDY INITIALLY PERFORMED BY LISA C. YOUNG
REVISED BY VALERIE A. SWICK
HYDROLOGY BRANCH, ENGINEERING DISTRICT,
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, SPRING 1996

ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 5FT/SEC FOR CONCRETE CHANNEL

THIS MODEL DOES NOT REFLECT THE STORM DRAINS IN THE AREA AS THEY HAVE A LOW CAPACITY AND OUTLET AT THE SAME LOCATION AS SURFACE FLOW

```
*******************************************************************
* THIS FUTURE CONDITIONS MODEL MUST USE USE THE DSS FILE FROM THE   *
* FUTNORTH MODEL (FUTNORTH.DSS) BECAUSE THERE IS A SPLIT FLOW AT    *
* BROADWAY AND HAWES ROADS.  THIS IS MODELED AS A 50/50 SPLIT, IF   *
* IT WILL ACTUALLY OCCUR IN THE FUTURE IS NOT KNOWN. THIS FLOW IS   *
* BROUGHT INTO THE MODEL AT SUBBASIN 25 WHICH IS WEST OF HAWES ROAD *
*******************************************************************
```

```
*******************************************************************
* RETENTION VOLUME WERE OBTAINED BY USE OF THE 100-YR 2-HR MODEL.   *
* BASINS WITH OLDER DEVELOPMENT WILL NOT HAVE 100% OF THIS VOLUME   *
* AS RETENTION, BUT INSTEAD WILL HAVE A PERCENTAGE BASED UPON THE   *
* AMOUNT THAT CAN BE DEVELOPED IN THE FUTURE. THIS WAS BASED UPON   *
* EXAMINATION OF AERIAL PHOTOS AND FIELD OBSERVATION.               *
* 100% OF THE VOLUME FROM THE 100-YR 2-HR MODEL IS TERMED ULTIMATE  *
*******************************************************************
```

LAST UPDATED ON 3/13/98

```
                    DDM MCUHP2 Phase 2 model, north of Superstition Freeway

71 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1APR97  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      4APR97  ENDING DATE
                    NDTIME        1115  ENDING TIME
                     ICENT          19  CENTURY MARK

                COMPUTATION INTERVAL      .08 HOURS
                     TOTAL TIME BASE   83.25 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

73 JD          INDEX STORM NO. 1
                      STRM        3.20  PRECIPITATION DEPTH
                      TRDA         .01  TRANSPOSITION DRAINAGE AREA

74 PI            PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                 .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                 .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                 .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00

84 JD          INDEX STORM NO. 2
                      STRM        3.18  PRECIPITATION DEPTH
                      TRDA        1.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

85 JD INDEX STORM NO. 3

STRM 3.10 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

86 JD INDEX STORM NO. 4

STRM 3.00 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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                .00       .00       .00       .00       .00       .00       .00       .00

87 JD         INDEX STORM NO. 5
                STRM        2.88  PRECIPITATION DEPTH
                TRDA       30.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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88 JD         INDEX STORM NO. 6
                STRM        2.75  PRECIPITATION DEPTH
                TRDA       60.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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89 JD         INDEX STORM NO. 7
                STRM        2.71  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA
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0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.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	9	248.	13.33	91.	32.	11.	.44		
+	DIVERSION TO	RET9	248.	13.33	72.	21.	7.	.44		
+	HYDROGRAPH AT	D9	146.	14.17	35.	11.	4.	.44		
+	HYDROGRAPH AT	4	824.	12.50	150.	48.	16.	1.00		
+	DIVERSION TO	RET4	573.	12.25	60.	18.	6.	1.00		
+	HYDROGRAPH AT	D4	824.	12.50	108.	30.	10.	1.00		
+	ROUTED TO	4T8	566.	13.08	107.	30.	10.	1.00		
+	HYDROGRAPH AT	8	760.	12.17	102.	35.	12.	.50		
+	DIVERSION TO	RET8	760.	12.17	68.	20.	7.	.50		
+	HYDROGRAPH AT	D8	487.	12.33	50.	15.	5.	.50		
+	2 COMBINED AT	C8	623.	13.08	154.	45.	15.	1.50		
+	2 COMBINED AT	EMFHOB	618.	13.08	182.	55.	18.	1.94		
+	ROUTED TO	C9T15	517.	13.33	174.	55.	18.	1.94		
+	HYDROGRAPH AT	3	627.	12.83	135.	41.	14.	1.00		

+	DIVERSION TO	RET3	627.	12.83	133.	36.	12.	1.00
+	HYDROGRAPH AT	D3	29.	14.75	14.	5.	2.	1.00
+	ROUTED TO	3T7	22.	15.42	14.	5.	2.	1.00
+	HYDROGRAPH AT	7	249.	12.50	42.	13.	4.	.28
+	DIVERSION TO	RET7	249.	12.50	27.	8.	3.	.28
+	HYDROGRAPH AT	D7	185.	12.67	20.	6.	2.	.28
+	2 COMBINED AT	C7	183.	12.67	28.	10.	3.	1.28
+	ROUTED TO	7T10	122.	13.00	27.	10.	3.	1.28
+	HYDROGRAPH AT	10	524.	12.50	80.	23.	8.	.72
+	DIVERSION TO	RET10	524.	12.50	80.	23.	8.	.72
+	HYDROGRAPH AT	D10	0.	.00	0.	0.	0.	.72
+	2 COMBINED AT	C10	122.	13.00	27.	10.	3.	2.00
+	ROUTED TO	10T8A	117.	13.08	25.	10.	3.	2.00
+	HYDROGRAPH AT	8A	163.	12.17	17.	5.	2.	.12
+	DIVERSION TO	RET8A	163.	12.17	16.	5.	2.	.12
+	HYDROGRAPH AT	D8A	4.	14.00	2.	1.	0.	.12
+	2 COMBINED AT	C8A	117.	13.08	27.	10.	3.	2.12
+	ROUTED TO	8AT15A	115.	13.17	26.	10.	3.	2.12
+	HYDROGRAPH AT	15A	299.	12.42	38.	11.	4.	.35
+	DIVERSION TO	RET15A	2.	7.58	2.	1.	0.	.35
+	HYDROGRAPH AT	D15A	299.	12.42	38.	10.	3.	.35
+	2 COMBINED AT	C15A	292.	12.42	57.	20.	7.	2.47
+	2 COMBINED AT	EMFBRN	612.	13.25	218.	73.	24.	4.41
+	ROUTED TO	15AT15	591.	13.50	216.	73.	24.	4.41
+	HYDROGRAPH AT	15B	428.	12.42	57.	17.	6.	.51
+	DIVERSION TO	RET15B	4.	8.50	3.	1.	0.	.51
+	HYDROGRAPH AT	D15B	428.	12.42	57.	16.	5.	.51

+	2 COMBINED AT EMFCLB	610.	13.42	263.	87.	29.	4.92
+	ROUTED TO 15T16	597.	13.58	261.	87.	29.	4.92
+	HYDROGRAPH AT 1	600.	12.08	63.	21.	7.	.39
+	DIVERSION TO RET1	600.	12.08	39.	11.	4.	.39
+	HYDROGRAPH AT D1	540.	12.17	34.	10.	3.	.39
+	DIVERSION TO D1W	150.	12.17	24.	7.	2.	.39
+	HYDROGRAPH AT D1S	390.	12.17	10.	2.	1.	.39
+	ROUTED TO 1T5	196.	12.42	10.	2.	1.	.39
+	HYDROGRAPH AT 5	895.	12.25	99.	30.	10.	.95
+	DIVERSION TO RET5	399.	12.00	27.	8.	3.	.95
+	HYDROGRAPH AT D5	895.	12.25	80.	22.	7.	.95
+	2 COMBINED AT C5	941.	12.33	89.	24.	8.	1.15
+	DIVERSION TO D5S	350.	12.17	55.	15.	5.	1.15
+	HYDROGRAPH AT DC5	591.	12.33	34.	9.	3.	1.15
+	ROUTED TO 5T6	395.	12.75	34.	9.	3.	1.15
+	HYDROGRAPH AT 2	742.	12.50	106.	31.	10.	1.00
+	DIVERSION TO RET2	430.	12.17	30.	9.	3.	1.00
+	HYDROGRAPH AT D2	742.	12.50	83.	22.	7.	1.00
+	ROUTED TO 2T6	494.	13.17	82.	22.	7.	1.00
+	HYDROGRAPH AT 6	724.	12.50	109.	32.	11.	1.00
+	DIVERSION TO RET6	689.	12.42	53.	15.	5.	1.00
+	HYDROGRAPH AT D6	690.	12.50	65.	18.	6.	1.00
+	HYDROGRAPH AT GD1	150.	12.17	24.	7.	2.	.39
+	ROUTED TO RGD1A	92.	13.00	23.	7.	2.	.39
+	ROUTED TO RGD1B	90.	13.08	23.	7.	2.	.39
+	4 COMBINED AT C6	1187.	12.58	195.	54.	18.	2.76
+	DIVERSION TO D6W	400.	12.50	117.	34.	11.	2.76

+	HYDROGRAPH AT	DIV6	787.	12.58	78.	19.	6.	2.76
+	ROUTED TO	6T13B	618.	13.00	78.	19.	6.	2.76
+	HYDROGRAPH AT	11	952.	12.25	95.	27.	9.	1.06
+	DIVERSION TO	RET11	952.	12.25	65.	17.	6.	1.06
+	HYDROGRAPH AT	D11	691.	12.42	36.	10.	3.	1.06
+	DIVERSION TO	D11S	250.	12.42	25.	7.	2.	1.06
+	HYDROGRAPH AT	DIV11	441.	12.42	11.	3.	1.	1.06
+	ROUTED TO	11T12	238.	12.58	11.	3.	1.	1.06
+	HYDROGRAPH AT	12	936.	12.33	110.	33.	11.	1.03
+	DIVERSION TO	RET12	374.	12.00	25.	8.	3.	1.03
+	HYDROGRAPH AT	D12	936.	12.33	94.	25.	8.	1.03
+	HYDROGRAPH AT	GD5S	350.	12.17	55.	15.	5.	1.15
+	ROUTED TO	RGD5A	311.	12.92	54.	15.	5.	1.15
+	3 COMBINED AT	C12	1112.	12.33	155.	42.	14.	2.13
+	DIVERSION TO	D12S	300.	12.08	82.	24.	8.	2.13
+	HYDROGRAPH AT	DC12	812.	12.33	72.	18.	6.	2.13
+	ROUTED TO	12T13A	680.	12.67	72.	18.	6.	2.13
+	HYDROGRAPH AT	13A	520.	12.50	76.	22.	7.	.77
+	DIVERSION TO	RET13A	204.	12.08	17.	5.	2.	.77
+	HYDROGRAPH AT	DET13A	520.	12.50	66.	17.	6.	.77
+	DIVERSION TO	D13AS	513.	12.50	59.	15.	5.	.77
+	HYDROGRAPH AT	D13A	7.	12.17	7.	3.	1.	.77
+	2 COMBINED AT	C13A	684.	12.67	78.	21.	7.	2.27
+	DIVERSION TO	BASIN	684.	12.67	63.	16.	5.	2.27
+	HYDROGRAPH AT	UNIVBA	206.	12.92	16.	5.	2.	2.27
+	HYDROGRAPH AT	13B	188.	12.42	24.	7.	2.	.23
+	DIVERSION TO	RET13B	2.	9.08	2.	1.	0.	.23

+	HYDROGRAPH AT	DET13B	188.	12.42	24.	6.	2.	.23
+	DIVERSION TO	D13BS	69.	12.42	3.	1.	0.	.23
+	HYDROGRAPH AT	D13B	119.	12.17	21.	6.	2.	.23
+	3 COMBINED AT	C13B	851.	12.92	114.	30.	10.	2.15
+	ROUTED TO	RD13BW	482.	13.33	99.	27.	9.	2.15
+	HYDROGRAPH AT	GD6W	400.	12.50	117.	34.	11.	2.76
+	ROUTED TO	R6WT14	345.	14.33	116.	34.	11.	2.76
+	HYDROGRAPH AT	14	757.	12.42	102.	29.	10.	1.00
+	DIVERSION TO	RET14	4.	3.92	2.	1.	0.	1.00
+	HYDROGRAPH AT	DET14	757.	12.42	102.	29.	10.	1.00
+	DIVERSION TO	D14S	399.	12.42	26.	7.	2.	1.00
+	HYDROGRAPH AT	D14	358.	12.17	76.	22.	7.	1.00
+	3 COMBINED AT	C14	665.	13.50	284.	83.	28.	2.16
+	ROUTED TO	RD14W	663.	13.50	284.	83.	28.	2.16
+	HYDROGRAPH AT	16	155.	12.00	9.	3.	1.	.09
+	DIVERSION TO	RET16	72.	11.92	4.	1.	0.	.09
+	HYDROGRAPH AT	D16	155.	12.00	6.	2.	1.	.09
+	2 COMBINED AT	C16	701.	13.50	300.	87.	29.	.64
+	2 COMBINED AT	EMFUNV	1200.	13.58	532.	166.	56.	5.56
+	ROUTED TO	16T21	1078.	14.00	511.	166.	56.	5.56
+	HYDROGRAPH AT	GD13AS	513.	12.50	59.	15.	5.	.77
+	ROUTED TO	13AT21	355.	13.25	59.	15.	5.	.77
+	HYDROGRAPH AT	GD13BS	69.	12.42	3.	1.	0.	.23
+	ROUTED TO	13BT21	34.	12.83	3.	1.	0.	.23
+	HYDROGRAPH AT	GD14S	399.	12.42	26.	7.	2.	1.00
+	ROUTED TO	14T21	317.	12.58	26.	7.	2.	1.00
+	HYDROGRAPH AT	21	372.	12.58	61.	18.	6.	.53

+	DIVERSION TO	RET21	7.	9.58	5.	2.	1.	.53
+	HYDROGRAPH AT	D21	372.	12.58	61.	17.	6.	.53
+	4 COMBINED AT	C21	789.	12.67	136.	36.	12.	6.23
+	2 COMBINED AT	EMFARC	1114.	13.33	582.	184.	62.	11.79
+	ROUTED TO	21T28	1096.	13.50	578.	184.	62.	11.79
+	HYDROGRAPH AT	19	898.	12.17	110.	36.	12.	.76
+	DIVERSION TO	RET19	833.	12.17	61.	18.	6.	.76
+	HYDROGRAPH AT	D19	893.	12.25	64.	18.	6.	.76
+	HYDROGRAPH AT	GD11S	250.	12.42	25.	7.	2.	1.06
+	ROUTED TO	RD11	101.	13.75	25.	7.	2.	1.06
+	HYDROGRAPH AT	GD12S	300.	12.08	82.	24.	8.	2.13
+	ROUTED TO	RD12	300.	13.08	82.	24.	8.	2.13
+	3 COMBINED AT	C19	1073.	12.25	168.	49.	16.	1.93
+	ROUTED TO	19T27	645.	12.67	166.	49.	16.	1.93
+	HYDROGRAPH AT	27	359.	12.08	37.	12.	4.	.24
+	DIVERSION TO	RET27	20.	11.33	7.	3.	1.	.24
+	HYDROGRAPH AT	D27	359.	12.08	35.	10.	3.	.24
+	2 COMBINED AT	C27	670.	12.67	196.	58.	19.	2.17
+	ROUTED TO	27T28	650.	12.83	195.	58.	19.	2.17
+	HYDROGRAPH AT	20	430.	12.50	74.	23.	8.	.58
+	DIVERSION TO	RET20	11.	9.75	8.	3.	1.	.58
+	HYDROGRAPH AT	D20	430.	12.50	74.	21.	7.	.58
+	ROUTED TO	20T28	358.	12.83	73.	21.	7.	.58
+	HYDROGRAPH AT	28	860.	12.42	132.	43.	14.	.90
+	DIVERSION TO	RET28	105.	11.75	27.	9.	3.	.90
+	HYDROGRAPH AT	D28	860.	12.42	122.	34.	11.	.90
+	3 COMBINED AT	C28	1335.	12.42	379.	110.	37.	3.65

+	2 COMBINED AT	EMFBRD	1953.	12.83	904.	281.	94.	15.44
+	ROUTED TO	28T35	1886.	13.17	893.	281.	94.	15.44
+	HYDROGRAPH AT	26	292.	12.17	27.	8.	3.	.25
+	DIVERSION TO	RET26	2.	6.83	2.	1.	0.	.25
+	HYDROGRAPH AT	D26	292.	12.17	27.	8.	3.	.25
+	ROUTED TO	26T34	125.	13.17	27.	8.	3.	.25
+	HYDROGRAPH AT	34	531.	12.75	97.	28.	9.	.90
+	DIVERSION TO	RET34	531.	12.75	97.	28.	9.	.90
+	HYDROGRAPH AT	D34	0.	.00	0.	0.	0.	.90
+	2 COMBINED AT	C34	125.	13.17	27.	8.	3.	1.15
+	ROUTED TO	34T35	118.	13.42	27.	8.	3.	1.15
+	HYDROGRAPH AT	35	702.	12.92	143.	40.	13.	1.46
+	DIVERSION TO	RET35	702.	12.92	143.	40.	13.	1.46
+	HYDROGRAPH AT	D35	0.	.00	0.	0.	0.	1.46
+	2 COMBINED AT	C35	118.	13.42	27.	8.	3.	2.61
+	2 COMBINED AT	EMFSTH	1959.	13.17	905.	284.	95.	18.05
+	ROUTED TO	35T41	1938.	13.33	898.	284.	95.	18.05
+	HYDROGRAPH AT	18B	415.	12.25	47.	15.	5.	.38
+	DIVERSION TO	RET18B	43.	11.75	9.	3.	1.	.38
+	HYDROGRAPH AT	D	415.	12.25	43.	12.	4.	.38
+	ROUTED TO	18BT25	253.	12.67	43.	12.	4.	.38
+	HYDROGRAPH AT	25	433.	12.33	59.	18.	6.	.50
+	DIVERSION TO	RET25	433.	12.33	34.	10.	3.	.50
+	HYDROGRAPH AT	D25	346.	12.50	30.	9.	3.	.50
+	2 COMBINED AT	C25	584.	12.50	73.	20.	7.	.88
+	ROUTED TO	25T33	256.	13.58	72.	20.	7.	.88
+	HYDROGRAPH AT	33	412.	12.75	77.	22.	7.	.73

	DIVERSION TO							
+		RET33	412.	12.75	77.	22.	7.	.73
	HYDROGRAPH AT							
+		D33	0.	.00	0.	0.	0.	.73
	2 COMBINED AT							
+		C33	256.	13.58	72.	20.	7.	1.61
	ROUTED TO							
+		33T40	226.	14.00	71.	20.	7.	1.61
	HYDROGRAPH AT							
+		40	1008.	12.08	98.	32.	11.	.58
	DIVERSION TO							
+		RET40	293.	11.83	32.	10.	3.	.58
	HYDROGRAPH AT							
+		D40	1008.	12.08	80.	22.	7.	.58
	2 COMBINED AT							
+		C40	995.	12.08	147.	42.	14.	2.19
	DIVERSION TO							
+		DB4	36.	12.08	1.	0.	0.	2.19
	HYDROGRAPH AT							
+		ADD4	959.	12.08	147.	41.	14.	2.19
	DIVERSION TO							
+		DB3	0.	.00	0.	0.	0.	2.19
	HYDROGRAPH AT							
+		ADD3	959.	12.08	147.	41.	14.	2.19
	DIVERSION TO							
+		DB2	0.	.00	0.	0.	0.	2.19
	HYDROGRAPH AT							
+		ADD2	959.	12.08	147.	41.	14.	2.19
	DIVERSION TO							
+		DB1	0.	.00	0.	0.	0.	2.19
	HYDROGRAPH AT							
+		ADD1	959.	12.08	147.	41.	14.	2.19
	ROUTED TO							
+		40T41	367.	12.67	146.	41.	14.	2.19
	HYDROGRAPH AT							
+		41	723.	12.25	104.	35.	12.	.55
	DIVERSION TO							
+		RET41	723.	12.25	98.	28.	9.	.55
	HYDROGRAPH AT							
+		D41	59.	13.25	23.	8.	3.	.55
	2 COMBINED AT							
+		C41	367.	12.67	164.	49.	16.	2.74
	2 COMBINED AT							
+		EMFSPR	2185.	13.33	1006.	322.	108.	20.79

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT	PEAK	TIME TO PEAK	VOLUME	INTERPOLATED TO COMPUTATION INTERVAL DT	PEAK	TIME TO PEAK	VOLUME
		(MIN)	(CFS)	(MIN)	(IN)	(MIN)	(CFS)	(MIN)	(IN)
FOR STORM = 1 STORM AREA (SQ MI) =				.01					
RD13BW	MANE	5.00	537.49	800.00	.51	5.00	537.49	800.00	.51

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6775E+02 EXCESS= .0000E+00 OUTFLOW= .5826E+02 BASIN STORAGE= .5450E-02 PERCENT ERROR= 14.0

```
FOR STORM = 2  STORM AREA (SQ MI) =        1.00
  RD13BW  MANE          5.00    521.73    800.00        .49       5.00    521.73    800.00          .49

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .6556E+02 EXCESS= .0000E+00 OUTFLOW= .5658E+02 BASIN STORAGE= .5426E-02 PERCENT ERROR=
13.7

FOR STORM = 3  STORM AREA (SQ MI) =        5.00
  RD13BW  MANE          5.00    439.01    800.00        .42       5.00    439.01    800.00          .42

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .5453E+02 EXCESS= .0000E+00 OUTFLOW= .4823E+02 BASIN STORAGE= .5153E-02 PERCENT ERROR=
11.5

FOR STORM = 4  STORM AREA (SQ MI) =       10.00
  RD13BW  MANE          5.00    347.06    805.00        .32       5.00    347.06    805.00          .32

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .4158E+02 EXCESS= .0000E+00 OUTFLOW= .3698E+02 BASIN STORAGE= .3711E-02 PERCENT ERROR=
11.1

FOR STORM = 5  STORM AREA (SQ MI) =       30.00
  RD13BW  MANE          5.00    279.80    805.00        .25       5.00    279.80    805.00          .25

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .3148E+02 EXCESS= .0000E+00 OUTFLOW= .2814E+02 BASIN STORAGE= .4309E-02 PERCENT ERROR=
10.6

FOR STORM = 6  STORM AREA (SQ MI) =       60.00
  RD13BW  MANE          5.00    201.33    805.00        .18       5.00    201.33    805.00          .18

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2301E+02 EXCESS= .0000E+00 OUTFLOW= .2095E+02 BASIN STORAGE= .3984E-02 PERCENT ERROR=
8.9

FOR STORM = 7  STORM AREA (SQ MI) =       90.00
  RD13BW  MANE          5.00    179.53    805.00        .17       5.00    179.53    805.00          .17

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2085E+02 EXCESS= .0000E+00 OUTFLOW= .1908E+02 BASIN STORAGE= .3945E-02 PERCENT ERROR=
8.5

FOR STORM = 1  STORM AREA (SQ MI) =        .01
   RD14W  MANE          1.89    715.00    806.98       1.49       5.00    714.42    805.00         1.49

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1719E+03 EXCESS= .0000E+00 OUTFLOW= .1719E+03 BASIN STORAGE= .2656E-03 PERCENT ERROR=
.0

FOR STORM = 2  STORM AREA (SQ MI) =        1.00
   RD14W  MANE          1.90    698.49    806.96       1.47       5.00    697.85    810.00         1.47

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1695E+03 EXCESS= .0000E+00 OUTFLOW= .1695E+03 BASIN STORAGE= .2695E-03 PERCENT ERROR=
.0

FOR STORM = 3  STORM AREA (SQ MI) =        5.00
   RD14W  MANE          1.94    626.24    810.79       1.38       5.00    625.47    810.00         1.38

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1590E+03 EXCESS= .0000E+00 OUTFLOW= .1590E+03 BASIN STORAGE= .2666E-03 PERCENT ERROR=
.0

FOR STORM = 4  STORM AREA (SQ MI) =       10.00
   RD14W  MANE          2.01    537.71    814.04       1.26       5.00    537.33    815.00         1.26

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1452E+03 EXCESS= .0000E+00 OUTFLOW= .1452E+03 BASIN STORAGE= .2705E-03 PERCENT ERROR=
.0
```

```
FOR STORM = 5  STORM AREA (SQ MI) =      30.00
   RD14W  MANE         2.04    484.03    766.44      1.15      5.00    475.92    765.00        1.15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1322E+03 EXCESS= .0000E+00 OUTFLOW= .1322E+03 BASIN STORAGE= .2750E-03 PERCENT ERROR=
.0

FOR STORM = 6  STORM AREA (SQ MI) =      60.00
   RD14W  MANE         2.08    440.34    766.03      1.05      5.00    438.17    765.00        1.05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1205E+03 EXCESS= .0000E+00 OUTFLOW= .1205E+03 BASIN STORAGE= .2664E-03 PERCENT ERROR=
.0

FOR STORM = 7  STORM AREA (SQ MI) =      90.00
   RD14W  MANE         2.10    427.03    765.57      1.02      5.00    426.54    765.00        1.02

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1171E+03 EXCESS= .0000E+00 OUTFLOW= .1171E+03 BASIN STORAGE= .2673E-03 PERCENT ERROR=
.0


*** NORMAL END OF HEC-1 ***
```

APPENDIX I-3

SOUTHERN MESA AREA
50-YEAR, 24-HOUR STORM
FUTURE LAND USE CONDITIONS
HEC-1 MODEL

```
1****************************************                    ****************************************
 *                                      *                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *    U.S. ARMY CORPS OF ENGINEERS      *
 *              JUL   1997              *                    *    HYDROLOGIC ENGINEERING CENTER     *
 *           VERSION 4.1                *                    *          609 SECOND STREET           *
 *                                      *                    *       DAVIS, CALIFORNIA 95616        *
 *  RUN DATE   29JUN98  TIME  10:24:49  *                    *           (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

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1                                          HEC-1 INPUT                                                    PAGE  1

      LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

         1          ID   SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
         2          ID   AREA SOUTH OF SUPERSTITION (U.S. HWY 60)
         3          ID   MARCH 1998
         4          ID   SOUTHEAST MESA HIGH RESOLUTION MODEL
         5          ID
         6          ID   FILENAME:  FUTS50YR.DAT
         7          ID
         8          ID   THIS MODEL REPRESENTS THE FUTURE LAND USE CONDITIONS OF THE WATERSHED.
         9          ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 85.5 SQ. MI.
        10          ID   THIS MODEL USES A Kn VALUE OF 0.09 FOR DESERT LAND USE DUE TO SHEET FLOW
        11          ID   CONDITIONS.
        12          ID
        13          ID    50-YEAR 24-HOUR FREQUENCY
        14          ID
        15          ID   THIS MODEL INCLUDES INFLOW FROM NORTH OF THE SUPERSTITION FREEWAY
        16          ID   AND EAST OF THE CAP
        17          ID
        18          ID   METHODOLOGY
        19          ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
        20          ID   SCS TYPE II RAINFALL DISTRIBUTION
        21          ID   S-GRAPH HYDROGRAPH
        22          ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
        23          ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
        24          ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
        25          ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
        26          ID   DATED 1994
        27          ID   THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS
        28          ID
        29          ID   STUDY PERFORMED BY LISA C. YOUNG AND AFSHIN AHOURAIYAN, UPDATED BY
        30          ID   DAVID DEGERNESS (OCT-DEC, 1996). REVIEWED BY VALERIE A. SWICK
        31          ID   AND AMIR MOTAMEDI OF THE FLOOD CONTROL DISTRICT
        32          ID   HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
        33          ID   DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.
        34          ID
        35          ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2-3 FT/SEC FOR WASH/NATURAL
        36          ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL
        37          ID
        38          ID   LAND USES ARE UPDATED FROM MAG 97 LAND USES
        39          ID
        40          ID   RETENTION VOLUMES ARE BASED FROM A 100 YR 2 HR.  VOLUMES WERE ONLY ASSUMED
        41          ID   FOR AREAS THAT WILL HAVE FUTURE DEVELOPMENT.  MANY OF THE CURRENT
        42          ID   DEVELOPMENTS DO NOT HAVE RETENTION, OR IT IS NOT EFFECTIVE.  IF THERE IS
```

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 43          ID   SIGNIFICANT CURRENT RETENTION IT IS ACCOUNTED FOR.  FUTURE VOLUMES ARE
 44          ID   ASSUMED TO ONLY BE 80% EFFECTIVE.  THIS TAKES INTO ACCOUNT SMALL AREAS SUCH
 45          ID   AS STREETS THAT DO NOT FLOW INTO THE RETENTION BASINS.
 46          ID
 47          ID   RETENTION IN PINAL COUNTY FOR FUTURE DEVELOPMENT IS NOT CONSIDERED BECAUSE
 48          ID   THERE IS NO GUARANTEE OF RETENTION REQUIREMENT ENFORCEMENT.
 49          ID
 50          ID   NOTE: MUST USE FUTN50YR.DSS AS THE DSS FILE TO IMPORT FLOWS ACROSS
 51          ID         THE SUPERSTITION.
 52          ID
 53          ID     LAST UPDATED ON  6/03/98
 54          ID
 55          ID
1                                        HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 56          ID   DDM MCUHP2 SOUTH EAST MESA ADMP - SOUTH OF SUPERSTITION FREEWAY, FUTURE CONDI
 57          IT       5  1APR97    0000    1000
 58          IO       5
 59          IN      15
 60          JD    3.20     0.01
 61          PC    .000     .002    .005    .008    .011    .014    .017    .020    .023    .026
 62          PC    .029     .032    .035    .038    .041    .044    .048    .052    .056    .060
 63          PC    .064     .068    .072    .076    .080    .085    .090    .095    .100    .105
 64          PC    .110     .115    .120    .126    .133    .140    .147    .155    .163    .172
 65          PC    .181     .191    .203    .218    .236    .257    .283    .387    .663    .707
 66          PC    .735     .758    .776    .791    .804    .815    .825    .834    .842    .849
 67          PC    .856     .863    .869    .875    .881    .887    .893    .898    .903    .908
 68          PC    .913     .918    .922    .926    .930    .934    .938    .942    .946    .950
 69          PC    .953     .956    .959    .962    .965    .968    .971    .974    .977    .980
 70          PC    .983     .986    .989    .992    .995    .998   1.000
 71          JD    3.18     1.00
 72          JD    3.10     5.00
 73          JD    3.00    10.00
 74          JD    2.88    30.00
 75          JD    2.75    60.00
 76          JD    2.71    90.00
             *
             * INPUT FROM THIS POINT IS THE SAME AS THE 100 YEAR FUTURE MODEL
             *
*** NOLIST ***
```

```
1****************************************
 *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUL   1997              *
 *           VERSION 4.1                *
 *                                      *
 *  RUN DATE   29JUN98  TIME  10:24:49  *
 *                                      *
 ****************************************
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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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                    SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
                    AREA SOUTH OF SUPERSTITION (U.S. HWY 60)
                    MARCH 1998
                    SOUTHEAST MESA HIGH RESOLUTION MODEL

                    FILENAME:  FUTS50YR.DAT

                    THIS MODEL REPRESENTS THE FUTURE LAND USE CONDITIONS OF THE WATERSHED.
                    TOTAL DRAINAGE AREA IS APPROXIMATELY 85.5 SQ. MI.
                    THIS MODEL USES A Kn VALUE OF 0.09 FOR DESERT LAND USE DUE TO SHEET FLOW
                    CONDITIONS.

                     50-YEAR 24-HOUR FREQUENCY

                    THIS MODEL INCLUDES INFLOW FROM NORTH OF THE SUPERSTITION FREEWAY
                    AND EAST OF THE CAP

                    METHODOLOGY
                    THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
                    SCS TYPE II RAINFALL DISTRIBUTION
                    S-GRAPH HYDROGRAPH
                    GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
                    NORMAL DEPTH STORAGE CHANNEL ROUTING
                    APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
                    EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
                    DATED 1994
                    THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS

                    STUDY PERFORMED BY LISA C. YOUNG AND AFSHIN AHOURAIYAN, UPDATED BY
                    DAVID DEGERNESS (OCT-DEC, 1996). REVIEWED BY VALERIE A. SWICK
                    AND AMIR MOTAMEDI OF THE FLOOD CONTROL DISTRICT
                    HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
                    DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.

                    ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2-3 FT/SEC FOR WASH/NATURAL
                    CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL

                    LAND USES ARE UPDATED FROM MAG 97 LAND USES

                    RETENTION VOLUMES ARE BASED FROM A 100 YR 2 HR.  VOLUMES WERE ONLY ASSUMED
                    FOR AREAS THAT WILL HAVE FUTURE DEVELOPMENT.  MANY OF THE CURRENT
                    DEVELOPMENTS DO NOT HAVE RETENTION, OR IT IS NOT EFFECTIVE.  IF THERE IS
                    SIGNIFICANT CURRENT RETENTION IT IS ACCOUNTED FOR.  FUTURE VOLUMES ARE
                    ASSUMED TO ONLY BE 80% EFFECTIVE.  THIS TAKES INTO ACCOUNT SMALL AREAS SUCH
                    AS STREETS THAT DO NOT FLOW INTO THE RETENTION BASINS.

                    RETENTION IN PINAL COUNTY FOR FUTURE DEVELOPMENT IS NOT CONSIDERED BECAUSE
                    THERE IS NO GUARANTEE OF RETENTION REQUIREMENT ENFORCEMENT.

                    NOTE: MUST USE FUTN50YR.DSS AS THE DSS FILE TO IMPORT FLOWS ACROSS
                          THE SUPERSTITION.

                      LAST UPDATED ON  6/03/98


                    DDM MCUHP2 SOUTH EAST MESA ADMP - SOUTH OF SUPERSTITION FREEWAY, FUTURE CONDI

 58 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN           5  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1APR97  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
```

```
           NDDATE      4APR97  ENDING DATE
           NDTIME        1115  ENDING TIME
           ICENT           19  CENTURY MARK

        COMPUTATION INTERVAL      .08 HOURS
             TOTAL TIME BASE    83.25 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
```

```
60 JD          INDEX STORM NO. 1
                   STRM         3.20  PRECIPITATION DEPTH
                   TRDA          .01  TRANSPOSITION DRAINAGE AREA

61 PI            PRECIPITATION PATTERN
```

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

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71 JD          INDEX STORM NO. 2
                   STRM         3.18  PRECIPITATION DEPTH
                   TRDA         1.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

72 JD         INDEX STORM NO. 3
                STRM        3.10  PRECIPITATION DEPTH
                TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

73 JD         INDEX STORM NO. 4
                STRM        3.00  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

74 JD         INDEX STORM NO. 5
                STRM        2.88  PRECIPITATION DEPTH
                TRDA       30.00  TRANSPOSITION DRAINAGE AREA

 0 PI          PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

75 JD         INDEX STORM NO. 6
                STRM        2.75  PRECIPITATION DEPTH
                TRDA       60.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00

76 JD         INDEX STORM NO. 7
                STRM        2.71  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                    .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                    .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                    .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                    .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00
  -----DSS---ZOPEN:  Existing File Opened,  File: FUTN50YR.DSS
                    Unit:  71;  DSS Version: 6-EA
      ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
      Time Window set.  Interval:     5  Number of data values:      1
      Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
      Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
      Input time offset:      0
      After ZRDINF, Record found: T
      Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      Number of actual data:  288  Header length:   0
      Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
     ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
      NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
      NLDATA:  288   JULSD:   35519
      JULS: 31MAR97       JULSD: 31MAR97
      Quality Read: F,  Quality Requested: F
      ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
     ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
      Offset:       0,  Units: CFS      ,  Type:INST-VAL
      ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
      Time Window set.  Interval:     5  Number of data values:    744
      Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
      Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
      Input time offset:      0
      After ZRDINF, Record found: T
      Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      Number of actual data:  288  Header length:   0
      Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
     ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
      NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
      NLDATA:  288   JULSD:   35519
      JULS: 31MAR97       JULSD: 31MAR97
      Quality Read: F,  Quality Requested: F
      ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      After ZRDINF, Record found: T
      Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      Number of actual data:  288  Header length:   0
      Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
     ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
      NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
      NLDATA:  288   JULSD:   35520
      JULS: 31MAR97       JULSD: 01APR97
      Quality Read: F,  Quality Requested: F
      ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
      After ZRDINF, Record found: T
      Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      Number of actual data:  288  Header length:   0
      Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
     ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
      NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
      NLDATA:  288   JULSD:   35521
      JULS: 31MAR97       JULSD: 02APR97
      Quality Read: F,  Quality Requested: F
      ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
      After ZRDINF, Record found: T
      Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      Number of actual data:  288  Header length:   0
      Compression:   0  Quality:   0
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-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97        JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97        JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
-----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97        JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
```

```
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97       JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97       JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97       JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97       JULSD: 03APR97
```

```
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97       JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97       JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97       JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
-----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97       JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
```

```
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97        JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97        JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
```

```
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97        JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97        JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
-----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97        JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
         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
+                          SOSS    1710.   13.00        544.        179.         74.     12.50

        ROUTED TO
+                         RSOSS    1625.   13.08        542.        179.         74.     12.50

        HYDROGRAPH AT
+                           59A     257.   12.33         35.         11.          4.       .26

        DIVERSION TO
+                          D59A       5.    9.00          3.          1.          0.       .26

        HYDROGRAPH AT
+                        RET59A     257.   12.33         35.         10.          3.       .26

        2 COMBINED AT
+                           C59A    1649.   13.08        571.        188.         77.     12.76

        ROUTED TO
+                        59A59B    1581.   13.33        569.        188.         77.     12.76

        HYDROGRAPH AT
+                           59B     538.   12.83        112.         33.         11.       .94

        DIVERSION TO
+                          D59B     538.   12.83        112.         32.         11.       .94

        HYDROGRAPH AT
+                        RET59B       9.   18.33          6.          2.          1.       .94

        2 COMBINED AT
+                           C59B    1581.   13.33        569.        188.         77.     13.70

        ROUTED TO
+                        59BT60    1567.   13.33        568.        188.         77.     13.70

        HYDROGRAPH AT
+                            60     910.   13.50        307.         96.         32.      2.30

        DIVERSION TO
+                           D60     910.   13.50        303.         86.         29.      2.30

        HYDROGRAPH AT
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+	RET60	49.	16.92	32.	11.	4.	2.30
+ 2 COMBINED AT	EMFGUA	1567.	13.33	568.	192.	78.	16.00
+ ROUTED TO	GUATEL	1375.	13.75	549.	191.	78.	16.00
+ HYDROGRAPH AT	64	800.	12.42	136.	45.	15.	.81
+ DIVERSION TO	D64	800.	12.42	122.	34.	11.	.81
+ HYDROGRAPH AT	RET64	159.	13.08	33.	11.	4.	.81
+ 2 COMBINED AT	EMFELL	1402.	13.75	568.	198.	80.	16.81
+ ROUTED TO	ELTWAR	1221.	14.25	548.	198.	80.	16.81
+ HYDROGRAPH AT	61A	684.	12.17	82.	27.	9.	.52
+ DIVERSION TO	D61A	684.	12.17	76.	21.	7.	.52
+ HYDROGRAPH AT	RET61A	53.	12.92	18.	6.	2.	.52
+ ROUTED TO	61ATB	33.	14.00	17.	6.	2.	.52
+ HYDROGRAPH AT	61B	1004.	12.42	151.	47.	16.	1.09
+ DIVERSION TO	D61B	1004.	12.42	149.	41.	14.	1.09
+ HYDROGRAPH AT	RET61B	35.	14.17	18.	6.	2.	1.09
+ 2 COMBINED AT	CP61B	54.	14.17	32.	12.	4.	1.61
+ ROUTED TO	61T62E	49.	14.67	32.	12.	4.	1.61
+ HYDROGRAPH AT	62E	197.	12.17	24.	8.	3.	.15
+ DIVERSION TO	D62E	197.	12.17	22.	6.	2.	.15
+ HYDROGRAPH AT	RET62E	13.	13.00	5.	2.	1.	.15
+ 2 COMBINED AT	C62E	52.	14.67	35.	13.	4.	1.76
+ ROUTED TO	62ETF	46.	15.92	35.	13.	4.	1.76
+ HYDROGRAPH AT	62A	709.	12.00	78.	27.	9.	.38
+ DIVERSION TO	D62A	709.	12.00	58.	17.	6.	.38
+ HYDROGRAPH AT	RET62A	377.	12.17	33.	10.	3.	.38
+ ROUTED TO	62ATD	71.	14.17	32.	10.	3.	.38
+ HYDROGRAPH AT	62B	479.	12.00	48.	16.	5.	.23
DIVERSION TO							

+	D62B	479.	12.00	33.	10.	3.	.23
+ HYDROGRAPH AT	RET62B	318.	12.08	22.	7.	2.	.23
+ ROUTED TO	62BTD	86.	12.67	21.	7.	2.	.23
+ HYDROGRAPH AT	62D	525.	12.17	74.	24.	8.	.46
+ DIVERSION TO	D62D	525.	12.17	64.	18.	6.	.46
+ HYDROGRAPH AT	ET62D	125.	12.75	21.	7.	2.	.46
+ 3 COMBINED AT	CP62D	240.	12.75	73.	24.	8.	1.07
+ ROUTED TO	62DTF	206.	13.00	72.	24.	8.	1.07
+ HYDROGRAPH AT	62C	720.	12.17	85.	28.	9.	.55
+ DIVERSION TO	D62C	720.	12.17	56.	16.	5.	.55
+ HYDROGRAPH AT	RET62C	513.	12.33	41.	12.	4.	.55
+ ROUTED TO	62CTF	256.	12.75	40.	12.	4.	.55
+ HYDROGRAPH AT	62F	366.	12.17	43.	14.	5.	.26
+ DIVERSION TO	D62F	366.	12.17	32.	9.	3.	.26
+ HYDROGRAPH AT	RET62F	191.	12.33	17.	5.	2.	.26
+ 4 COMBINED AT	CP62	336.	12.92	140.	50.	17.	3.64
+ ROUTED TO	62T63	314.	13.25	137.	50.	17.	3.64
+ HYDROGRAPH AT	63	1031.	12.33	154.	51.	17.	.91
+ DIVERSION TO	D63	1031.	12.33	129.	36.	12.	.91
+ HYDROGRAPH AT	RET63	316.	12.67	47.	15.	5.	.91
+ 2 COMBINED AT	CP63	402.	13.17	176.	63.	21.	4.55
+ ROUTED TO	63T71	205.	16.08	151.	63.	21.	4.55
+ HYDROGRAPH AT	ADOT-E	183.	14.50	121.	44.	15.	.01
+ ROUTED TO	AET67A	182.	14.75	121.	44.	15.	.01
+ HYDROGRAPH AT	67A	333.	12.25	45.	14.	5.	.30
+ DIVERSION TO	D67A	333.	12.25	39.	11.	4.	.30
+ HYDROGRAPH AT	RET67A	78.	12.67	12.	4.	1.	.30
2 COMBINED AT							

+	C67A	191.	14.67	128.	48.	16.	.31
ROUTED TO +	67ATC	189.	15.08	128.	48.	16.	.31
HYDROGRAPH AT +	SUP2	371.	15.33	352.	185.	62.	.01
ROUTED TO +	RSUP2	369.	16.17	350.	185.	62.	.01
HYDROGRAPH AT +	67B	619.	12.25	91.	30.	10.	.53
DIVERSION TO +	D67B	619.	12.25	74.	21.	7.	.53
HYDROGRAPH AT +	RET67B	211.	12.67	30.	10.	3.	.53
2 COMBINED AT +	C67B	384.	16.17	364.	195.	65.	.54
ROUTED TO +	67BTC	383.	16.75	364.	195.	65.	.54
HYDROGRAPH AT +	67C	872.	12.42	125.	38.	13.	.93
DIVERSION TO +	D67C	872.	12.42	124.	34.	11.	.93
HYDROGRAPH AT +	RET67C	24.	14.42	13.	5.	2.	.93
3 COMBINED AT +	C67C	562.	15.25	501.	245.	82.	1:78
ROUTED TO +	67CTE	556.	16.50	497.	245.	82.	1.78
HYDROGRAPH AT +	67D	157.	12.17	17.	5.	2.	.13
DIVERSION TO +	D67D	157.	12.17	17.	5.	2.	.13
HYDROGRAPH AT +	RET67D	3.	14.17	2.	1.	0.	.13
ROUTED TO +	67DTE	2.	15.75	2.	1.	0.	.13
HYDROGRAPH AT +	67E	670.	12.33	97.	31.	10.	.58
DIVERSION TO +	D67E	670.	12.33	91.	25.	8.	.58
HYDROGRAPH AT +	RET67E	54.	13.25	18.	6.	2.	.58
3 COMBINED AT +	CP67E	569.	16.58	508.	251.	84.	2.49
ROUTED TO +	67T68	568.	16.92	508.	251.	84.	2.49
HYDROGRAPH AT +	68A	610.	12.08	67.	22.	7.	.35
DIVERSION TO +	D68A	610.	12.08	56.	16.	5.	.35
HYDROGRAPH AT +	RET68A	121.	12.33	21.	7.	2.	.35
2 COMBINED AT +	C68A	576.	16.92	515.	257.	86.	2.84
ROUTED TO							

+	68ATB	576.	17.00	515.	257.	86.	2.84
HYDROGRAPH AT +	68B	513.	12.00	51.	18.	6.	.25
DIVERSION TO +	D68B	513.	12.00	43.	12.	4.	.25
HYDROGRAPH AT +	RET68B	88.	12.25	17.	6.	2.	.25
2 COMBINED AT +	CP68B	583.	17.00	522.	262.	88.	3.09
ROUTED TO +	68BT69	582.	17.50	520.	262.	88.	3.09
HYDROGRAPH AT +	69	183.	12.00	19.	7.	2.	.09
DIVERSION TO +	D69	183.	12.00	16.	5.	2.	.09
HYDROGRAPH AT +	RET69	28.	12.33	6.	2.	1.	.09
2 COMBINED AT +	C69	584.	17.50	522.	263.	89.	3.18
ROUTED TO +	69T71	582.	18.33	521.	263.	89.	3.18
HYDROGRAPH AT +	71	1725.	12.17	227.	78.	26.	1.09
DIVERSION TO +	D71	1725.	12.17	189.	53.	18.	1.09
HYDROGRAPH AT +	RET71	399.	12.50	77.	25.	8.	1.09
3 COMBINED AT +	CP71	733.	17.83	649.	333.	112.	8.82
ROUTED TO +	71T72	732.	18.00	649.	333.	112.	8.82
2 COMBINED AT +	EMFWAR	1315.	14.25	982.	507.	184.	25.63
ROUTED TO +	WARTKN	1260.	14.50	974.	507.	184.	25.63
HYDROGRAPH AT +	CAP1A	217.	2.00	217.	217.	217.	.01
ROUTED TO +	RCAP1A	217.	2.50	217.	217.	217.	.01
HYDROGRAPH AT +	CAP1B	217.	2.00	217.	217.	217.	.01
ROUTED TO +	RCAP1B	217.	2.58	217.	217.	217.	.01
HYDROGRAPH AT +	65AW	475.	12.25	60.	18.	6.	.43
DIVERSION TO +	D65AW	475.	12.25	58.	16.	5.	.43
HYDROGRAPH AT +	RE65AW	20.	13.42	8.	3.	1.	.43
3 COMBINED AT +	C65AW	454.	13.42	442.	437.	435.	.45
ROUTED TO +	65AWTB	447.	15.17	442.	437.	435.	.45
HYDROGRAPH AT							

+	65A	2253.	12.50	443.	147.	49.	2.54
ROUTED TO +	65ATB	538.	16.83	389.	145.	49.	2.54
HYDROGRAPH AT +	65B	1345.	12.42	236.	77.	26.	1.37
DIVERSION TO +	D65B	1345.	12.42	218.	61.	20.	1.37
HYDROGRAPH AT +	RET65B	145.	13.25	49.	16.	5.	1.37
3 COMBINED AT +	CP65B	1007.	16.83	855.	595.	488.	4.36
ROUTED TO +	65T66	1005.	17.08	854.	595.	488.	4.36
HYDROGRAPH AT +	66A	385.	12.17	39.	12.	4.	.26
DIVERSION TO +	D66A	385.	12.17	39.	11.	4.	.26
HYDROGRAPH AT +	RET66A	8.	14.00	4.	2.	1.	.26
ROUTED TO +	66ATB	6.	15.58	4.	2.	1.	.26
HYDROGRAPH AT +	66B	516.	12.58	89.	27.	9.	.67
DIVERSION TO +	D66B	516.	12.58	88.	24.	8.	.67
HYDROGRAPH AT +	RET66B	15.	14.92	9.	3.	1.	.67
2 COMBINED AT +	CP66B	18.	15.42	13.	4.	1.	.93
ROUTED TO +	66BTC	17.	16.00	12.	4.	1.	.93
HYDROGRAPH AT +	66C	613.	12.25	81.	26.	9.	.50
DIVERSION TO +	D66C	613.	12.25	77.	21.	7.	.50
HYDROGRAPH AT +	RET66C	41.	13.17	15.	5.	2.	.50
2 COMBINED AT +	CP66C	32.	13.17	22.	9.	3.	1.43
ROUTED TO +	66CTD	25.	16.75	21.	9.	3.	1.43
HYDROGRAPH AT +	66D	576.	12.08	66.	23.	8.	.31
DIVERSION TO +	D66D	576.	12.08	55.	16.	5.	.31
HYDROGRAPH AT +	RET66D	113.	12.42	22.	7.	2.	.31
2 COMBINED AT +	C66D	105.	12.42	36.	16.	5.	1.74
2 COMBINED AT +	CP66	1014.	17.17	871.	605.	492.	6.10
ROUTED TO +	66DT70	1013.	17.42	870.	605.	492.	6.10
HYDROGRAPH AT							

+	70A	1010.	12.08	109.	36.	12.	.54
DIVERSION TO							
+	D70A	1010.	12.08	94.	26.	9.	.54
HYDROGRAPH AT							
+	RET70A	168.	12.42	30.	10.	3.	.54
2 COMBINED AT							
+	C70A	1023.	17.42	880.	612.	494.	6.64
ROUTED TO							
+	70ATB	1022.	17.75	880.	612.	494.	6.64
HYDROGRAPH AT							
+	70B	572.	12.17	81.	27.	9.	.38
DIVERSION TO							
+	D70B	572.	12.17	68.	19.	6.	.38
HYDROGRAPH AT							
+	RET70B	154.	12.58	25.	8.	3.	.38
2 COMBINED AT							
+	CP70B	1030.	17.75	887.	618.	496.	7.02
ROUTED TO							
+	70BT76	1023.	18.42	886.	618.	496.	7.02
HYDROGRAPH AT							
+	76B	1024.	12.17	140.	47.	16.	.64
DIVERSION TO							
+	D76B	1024.	12.17	119.	33.	11.	.64
HYDROGRAPH AT							
+	RET76B	230.	12.58	43.	14.	5.	.64
2 COMBINED AT							
+	CP76B	1034.	18.42	898.	628.	499.	7.66
HYDROGRAPH AT							
+	72	1252.	12.17	178.	61.	20.	.84
DIVERSION TO							
+	D72	1252.	12.17	157.	44.	15.	.84
HYDROGRAPH AT							
+	RET72	196.	12.75	51.	17.	6.	.84
2 COMBINED AT							
+	KNOX	1051.	18.50	916.	639.	503.	8.50
2 COMBINED AT							
+	EMFKNX	1936.	18.25	1763.	1103.	674.	34.13
ROUTED TO							
+	KNXTRY	1931.	18.50	1758.	1103.	674.	34.13
HYDROGRAPH AT							
+	76A	1880.	12.58	372.	119.	40.	1.91
DIVERSION TO							
+	D76A	1880.	12.58	339.	93.	31.	1.91
HYDROGRAPH AT							
+	RET76A	306.	13.50	79.	26.	9.	1.91
2 COMBINED AT							
+	EMFRAY	1958.	18.42	1786.	1113.	677.	36.04
HYDROGRAPH AT							
+	73A	306.	13.33	77.	19.	6.	.95
ROUTED TO							
+	73ATB	242.	13.92	77.	19.	6.	.95
HYDROGRAPH AT							
+	73B	499.	12.25	52.	15.	5.	.42
DIVERSION TO							

+	D73B	499.	12.25	52.	15.	5.	.42
HYDROGRAPH AT +	RET73B	3.	19.50	2.	0.	0.	.42
2 COMBINED AT +	CP73B	242.	13.92	77.	20.	7.	1.37
ROUTED TO +	73BTC	210.	14.83	76.	19.	6.	1.37
HYDROGRAPH AT +	73C	1235.	12.00	122.	42.	14.	.58
DIVERSION TO +	D73C	1235.	12.00	104.	29.	10.	.58
HYDROGRAPH AT +	RET73C	194.	12.25	39.	13.	4.	.58
2 COMBINED AT +	CP73C	234.	14.83	113.	32.	11.	1.95
ROUTED TO +	73T74C	231.	15.17	111.	32.	11.	1.95
HYDROGRAPH AT +	74A	248.	13.33	61.	15.	5.	.75
ROUTED TO +	74ATB	188.	14.08	61.	15.	5.	.75
HYDROGRAPH AT +	74B	384.	12.25	36.	9.	3.	.33
DIVERSION TO +	D74B	384.	12.25	36.	9.	3.	.33
HYDROGRAPH AT +	RET74B	0.	.00	0.	0.	0.	.33
2 COMBINED AT +	CP74B	188.	14.08	61.	15.	5.	1.08
ROUTED TO +	74BTC	185.	14.25	61.	15.	5.	1.08
HYDROGRAPH AT +	74C	679.	12.00	75.	26.	9.	.34
DIVERSION TO +	D74C	679.	12.00	63.	18.	6.	.34
HYDROGRAPH AT +	RET74C	136.	12.33	24.	8.	3.	.34
3 COMBINED AT +	CP74C	389.	14.42	189.	53.	18.	3.37
ROUTED TO +	74CT75	387.	14.67	188.	53.	18.	3.37
HYDROGRAPH AT +	75	866.	14.75	391.	105.	35.	4.01
2 COMBINED AT +	CP75	1206.	14.75	550.	150.	50.	7.38
ROUTED TO +	75TCP	1088.	15.17	550.	150.	50.	7.38
HYDROGRAPH AT +	77A	449.	13.75	139.	35.	12.	1.74
ROUTED TO +	77ATB	398.	14.08	139.	35.	12.	1.74
HYDROGRAPH AT +	77B	444.	12.17	36.	10.	3.	.36
DIVERSION TO							

+	D77B	444.	12.17	32.	8.	3.	.36
HYDROGRAPH AT +	RET77B	121.	12.42	5.	1.	0.	.36
2 COMBINED AT +	CP77B	398.	14.08	142.	36.	12.	2.10
ROUTED TO +	77BTC	388.	14.42	141.	36.	12.	2.10
HYDROGRAPH AT +	77C	599.	12.00	59.	20.	7.	.28
DIVERSION TO +	D77C	599.	12.00	50.	14.	5.	.28
HYDROGRAPH AT +	RET77C	94.	12.25	19.	6.	2.	.28
2 COMBINED AT +	C77C	402.	14.42	157.	42.	14.	2.38
ROUTED TO +	77CT78	395.	14.58	157.	42.	14.	2.38
HYDROGRAPH AT +	78A	485.	13.75	150.	38.	13.	1.88
ROUTED TO +	78ATB	397.	14.42	150.	38.	13.	1.88
HYDROGRAPH AT +	78B	551.	12.17	56.	15.	5.	.39
2 COMBINED AT +	C78B	549.	12.17	202.	52.	17.	2.27
ROUTED TO +	78BTC	454.	12.50	202.	52.	17.	2.27
HYDROGRAPH AT +	78C	588.	12.00	62.	20.	7.	.28
DIVERSION TO +	D78C	588.	12.00	44.	12.	4.	.28
HYDROGRAPH AT +	RET78C	304.	12.17	26.	8.	3.	.28
2 COMBINED AT +	C78C	629.	12.17	226.	59.	20.	2.55
2 COMBINED AT +	C78C2	778.	14.58	372.	98.	33.	4.93
ROUTED TO +	78CT79	771.	14.83	369.	98.	33.	4.93
HYDROGRAPH AT +	79A	793.	13.50	231.	58.	19.	2.01
2 COMBINED AT +	C79A1	1173.	13.58	573.	150.	50.	6.94
HYDROGRAPH AT +	78F	865.	14.17	321.	81.	27.	4.19
ROUTED TO +	78FTD	822.	14.50	319.	81.	27.	4.19
HYDROGRAPH AT +	78D	1361.	12.17	169.	54.	18.	.89
DIVERSION TO +	D78D	1361.	12.17	154.	42.	14.	.89
HYDROGRAPH AT +	RET78D	140.	12.83	36.	12.	4.	.89
2 COMBINED AT							

+		C78D	851.	14.50	347.	91.	30.	5.08
+	HYDROGRAPH AT	82A4	508.	13.92	168.	42.	14.	2.13
+	ROUTED TO	82A4T3	432.	14.42	167.	42.	14.	2.13
+	HYDROGRAPH AT	82A3	433.	14.17	159.	40.	13.	2.02
+	2 COMBINED AT	C82A3	806.	14.25	318.	81.	27.	4.15
+	ROUTED TO	82A3T2	750.	14.75	316.	81.	27.	4.15
+	HYDROGRAPH AT	CAP2	64.	20.00	64.	64.	62.	.01
+	ROUTED TO	RCAP2	64.	22.83	64.	64.	61.	.01
+	HYDROGRAPH AT	82A2	707.	14.75	313.	83.	28.	4.13
+	2 COMBINED AT	C82A2	739.	14.75	348.	137.	88.	4.14
+	HYDROGRAPH AT	82A1	907.	13.50	245.	61.	20.	3.12
+	3 COMBINED AT	C82A1	1591.	14.67	826.	260.	129.	11.41
+	ROUTED TO	82ATD	1543.	15.00	825.	260.	129.	11.41
+	2 COMBINED AT	C78D2	2133.	14.83	1105.	334.	153.	16.49
+	ROUTED TO	78DTE	2094.	15.25	1102.	333.	153.	16.49
+	HYDROGRAPH AT	78E	715.	12.75	131.	33.	11.	1.01
+	2 COMBINED AT	C78E	2094.	15.25	1181.	361.	163.	17.50
+	ROUTED TO	78T79B	2080.	15.42	1175.	359.	162.	17.50
+	HYDROGRAPH AT	79B	574.	13.08	133.	33.	11.	1.00
+	2 COMBINED AT	C79B	2084.	15.42	1275.	386.	171.	18.50
+	2 COMBINED AT	C79	2634.	15.00	1750.	511.	213.	25.44
+	ROUTED TO	79TCP	2630.	15.25	1741.	510.	212.	25.44
+	2 COMBINED AT	CPPWR	3569.	15.00	2174.	628.	251.	32.82
+	ROUTED TO	CPT80A	3562.	15.17	2162.	627.	251.	32.82
+	HYDROGRAPH AT	80A	2129.	12.83	518.	165.	55.	2.64
+	DIVERSION TO	D80A	78.	9.50	51.	17.	6.	2.64
+	HYDROGRAPH AT	RET80A	2129.	12.83	518.	149.	50.	2.64
	2 COMBINED AT							

+	CPOWER	3626.	15.17	2481.	746.	291.	35.46
+ 2 COMBINED AT	EMTPOW	5065.	15.00	3605.	1762.	936.	71.50
+ ROUTED TO	POWTWI	5047.	15.08	3604.	1762.	936.	71.50
+ HYDROGRAPH AT	80B	1044.	12.50	195.	62.	21.	1.12
+ DIVERSION TO	D80B	15.	4.33	8.	2.	1.	1.12
+ HYDROGRAPH AT	RET80B	1044.	12.50	195.	60.	20.	1.12
+ 2 COMBINED AT	MFWIL	5072.	15.08	3658.	1806.	950.	72.62
+ ROUTED TO	WILTSP	5043.	15.33	3654.	1805.	950.	72.62
+ HYDROGRAPH AT	82B	1357.	12.17	158.	52.	17.	.92
+ DIVERSION TO	TRW	1357.	12.17	158.	52.	17.	.92
+ HYDROGRAPH AT	D82B	0.	.00	0.	0.	0.	.92
+ ROUTED TO	82BT83	0.	.00	0.	0.	0.	.92
+ HYDROGRAPH AT	83	1196.	12.25	172.	57.	19.	1.01
+ DIVERSION TO	D83	1196.	12.25	151.	42.	14.	1.01
+ HYDROGRAPH AT	RET83	261.	12.75	46.	15.	5.	1.01
+ 2 COMBINED AT	C83	166.	12.83	44.	14.	5.	1.93
+ ROUTED TO	83T84	72.	14.50	39.	14.	5.	1.93
+ HYDROGRAPH AT	84	1135.	12.33	168.	55.	19.	.99
+ DIVERSION TO	D84	1135.	12.33	155.	43.	14.	.99
+ HYDROGRAPH AT	RET84	141.	13.00	37.	13.	4.	.99
+ 2 COMBINED AT	C84	108.	14.42	69.	26.	9.	2.92
+ ROUTED TO	84T85	106.	14.75	67.	26.	9.	2.92
+ HYDROGRAPH AT	85	1144.	12.25	167.	55.	18.	1.00
+ DIVERSION TO	D85	1144.	12.25	152.	42.	14.	1.00
+ HYDROGRAPH AT	RET85	142.	13.00	39.	13.	4.	1.00
+ 2 COMBINED AT	C85	139.	14.67	97.	37.	12.	3.92
+ ROUTED TO	85T86	138.	15.00	96.	37.	12.	3.92
HYDROGRAPH AT							

+	86	1159.	12.25	168.	56.	19.	1.00
DIVERSION TO							
+	D86	1159.	12.25	154.	43.	14.	1.00
HYDROGRAPH AT							
+	RET86	142.	13.00	38.	13.	4.	1.00
2 COMBINED AT							
+	C86	167.	14.92	123.	47.	16.	4.92
ROUTED TO							
+	86T91	167.	15.25	122.	47.	16.	4.92
HYDROGRAPH AT							
+	87A	917.	12.08	102.	35.	12.	.49
DIVERSION TO							
+	D87A	917.	12.08	88.	25.	8.	.49
HYDROGRAPH AT							
+	RET87A	139.	12.42	32.	11.	4.	.49
ROUTED TO							
+	87ATB	64.	13.33	30.	11.	4.	.49
HYDROGRAPH AT							
+	87B	900.	12.08	103.	35.	12.	.49
DIVERSION TO							
+	D87B	900.	12.08	88.	25.	8.	.49
HYDROGRAPH AT							
+	RET87B	164.	12.42	33.	11.	4.	.49
2 COMBINED AT							
+	C87	164.	12.42	62.	21.	7.	.98
ROUTED TO							
+	87T88B	115.	13.50	60.	21.	7.	.98
HYDROGRAPH AT							
+	88A	1004.	12.00	105.	36.	12.	.50
DIVERSION TO							
+	D88A	1004.	12.00	89.	25.	8.	.50
HYDROGRAPH AT							
+	RET88A	154.	12.33	33.	11.	4.	.50
ROUTED TO							
+	88ATB	75.	13.08	32.	11.	4.	.50
HYDROGRAPH AT							
+	88B	911.	12.08	104.	36.	12.	.50
DIVERSION TO							
+	D88B	911.	12.08	89.	25.	8.	.50
HYDROGRAPH AT							
+	RET88B	163.	12.42	32.	11.	4.	.50
2 COMBINED AT							
+	C88B	163.	12.42	63.	22.	7.	1.00
2 COMBINED AT							
+	C88	217.	13.33	115.	41.	14.	1.98
ROUTED TO							
+	88T89	216.	13.50	114.	41.	14.	1.98
HYDROGRAPH AT							
+	89A	888.	12.08	104.	36.	12.	.50
DIVERSION TO							
+	89A	888.	12.08	89.	25.	8.	.50
HYDROGRAPH AT							
+	RET89A	132.	12.42	33.	11.	4.	.50
ROUTED TO							

+	89ATB	59.	13.75	30.	11.	4.	.50
HYDROGRAPH AT +	89B	923.	12.08	103.	36.	12.	.50
DIVERSION TO +	D89B	923.	12.08	87.	25.	8.	.50
HYDROGRAPH AT +	RET89B	140.	12.42	33.	11.	4.	.50
2 COMBINED AT +	C89B	140.	12.42	61.	22.	7.	1.00
2 COMBINED AT +	C89	296.	13.58	163.	61.	20.	2.98
ROUTED TO +	89T90	292.	14.17	162.	61.	20.	2.98
HYDROGRAPH AT +	90A	818.	12.08	85.	29.	10.	.48
DIVERSION TO +	D90A	818.	12.08	76.	21.	7.	.48
HYDROGRAPH AT +	RET90A	75.	12.50	22.	8.	3.	.48
ROUTED TO +	90ATB	32.	14.83	20.	8.	3.	.48
HYDROGRAPH AT +	90B	568.	12.67	109.	34.	11.	.82
DIVERSION TO +	D90B	382.	12.42	40.	12.	4.	.82
HYDROGRAPH AT +	RET90B	568.	12.67	80.	22.	7.	.82
2 COMBINED AT +	C90B	564.	12.67	96.	29.	10.	1.30
2 COMBINED AT +	C90	549.	12.67	237.	87.	29.	4.28
ROUTED TO +	90T91	547.	12.92	233.	87.	29.	4.28
HYDROGRAPH AT +	91	579.	12.25	78.	26.	9.	.46
DIVERSION TO +	D91	579.	12.25	69.	19.	6.	.46
HYDROGRAPH AT +	RET91	94.	12.75	20.	7.	2.	.46
3 COMBINED AT +	CP91	547.	12.92	316.	128.	43.	9.66
ROUTED TO +	91TEMF	456.	13.08	289.	122.	41.	9.66
HYDROGRAPH AT +	81A	1437.	12.67	313.	104.	35.	1.81
DIVERSION TO +	D81A	26.	2.67	10.	3.	1.	1.81
HYDROGRAPH AT +	RET81A	1437.	12.67	313.	102.	34.	1.81
ROUTED TO +	81ATB	1320.	13.00	313.	102.	34.	1.81
HYDROGRAPH AT +	81B	1060.	12.25	158.	53.	18.	.84
DIVERSION TO							

```
+                          D81B      557.   12.00        56.        18.        6.        .84

        HYDROGRAPH AT
+                          RET81B   1060.   12.25       127.        36.       12.        .84

        3 COMBINED AT
+                          RITTEN   1756.   13.08       635.       242.       81.      12.31

        2 COMBINED AT
+                          EMFRIT   5122.   15.33      3961.      1965.     1004.      84.93


*** NORMAL END OF HEC-1 ***


   -----DSS---ZCLOSE Unit:  71,   File: FUTN50YR.DSS
            Pointer Utilization:    .25
            Number of Records:      25
            File Size:      53.2  Kbytes
            Percent Inactive:     .0
```

APPENDIX J

10-YEAR, 24-HOUR
EXISTING CONDITION MODEL
HEC-1 OUTPUT

APPENDIX J

HEC-1 OUTPUT J-1 Northeast Mesa Area, 10-year, 24-hour Storm Existing Land Use Condition **J-1**

HEC-1 OUTPUT J-2 Northwest Mesa Area, 10-year, 24-hour Storm, Existing Land Use Conditions **J-17**

HEC-1 OUTPUT J-3 Southern Mesa Area, 10-year, 24-hour Storm, Existing Land Use Conditions **J-31**

APPENDIX J-1

NORTHEAST MESA AREA
10-YEAR, 24-HOUR STORM
EXISTING LAND USE CONDITIONS
HEC-1 MODEL

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1****************************************
□
 *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUL   1997              *
 *           VERSION 4.1                *
 *                                      *
 *  RUN DATE   25JUN98  TIME  08:50:40  *
 *                                      *
 ****************************************
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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
```

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   SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
  2           ID   AREA NORTH OF SUPERSTITION FREEWAY
  3           ID
  4           ID
  5           ID   REVISED BY VALERIE SWICK, OCTOBER-NOVEMBER 1996
  6           ID   TO INCORPORATE THE SUPERSITION STRUCTURES AND COMBINE MODELS
  7           ID
  8           ID   FILENAME:  SEMP10N.DAT
  9           ID
 10           ID   THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
 11           ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 17 SQ. MI.
 12           ID
 13           ID   10-YEAR 24-HOUR FREQUENCY
 14           ID
 15           ID
 16           ID   METHODOLOGY
 17           ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
 18           ID   SCS TYPE II RAINFALL DISTRIBUTION
 19           ID   S-GRAPH HYDROGRAPH
 20           ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
 21           ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
 22           ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
 23           ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
 24           ID   DATED 1994
 25           ID   THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS
 26           ID
 27           ID   INITIAL STUDY PERFORMED BY LISA C. YOUNG
```

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28          ID   REVIEWED BY VALERIE A. SWICK
29          ID   HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
30          ID   DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.
31          ID
32          ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
33          ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL
34          ID
35          ID
36          ID    LAST UPDATED ON  3/13/98
37          ID
38          ID    UPDATE WAS BASED UPON NEW MAG LAND USE DEFINITIONS FOR SINGLE FAMILY HOUSING
39          ID
40          ID   DDM MCUHP2 MESA AREA DRAINAGE MASTER PLAN
            * *DIAGRAM
41          IT       5  1APR97    0000    1000
42          IO       5
43          IN      15
44          JD   2.300     .01
45          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
46          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
47          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
48          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
49          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
50          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
51          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
52          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
53          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
54          PC    .983    .986    .989    .992    .995    .998   1.000
```



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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

55          JD    2.29     1.0
56          JD    2.23     5.0
57          JD    2.16    10.0
58          JD    2.07    30.0
59          JD    1.98    60.0
60          JD    1.95    90.0
            *
            * INPUT FROM THIS POINT IS THE SAME AS THE 100 YEAR 24-HOUR STORM
            *
*** NOLIST ***
```

```
1*****************************************
 *                                       *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
 *              JUL   1997               *
 *            VERSION 4.1                *
 *                                       *
 *  RUN DATE   25JUN98  TIME  08:50:40   *
 *                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
```

SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
AREA NORTH OF SUPERSTITION FREEWAY

REVISED BY VALERIE SWICK, OCTOBER-NOVEMBER 1996
TO INCORPORATE THE SUPERSITION STRUCTURES AND COMBINE MODELS

FILENAME: SEMP10N.DAT

THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 17 SQ. MI.

10-YEAR 24-HOUR FREQUENCY

METHODOLOGY
THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
SCS TYPE II RAINFALL DISTRIBUTION
S-GRAPH HYDROGRAPH
GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
NORMAL DEPTH STORAGE CHANNEL ROUTING
APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
DATED 1994
THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS

INITIAL STUDY PERFORMED BY LISA C. YOUNG
REVIEWED BY VALERIE A. SWICK
HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.

ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL

LAST UPDATED ON 3/13/98

UPDATE WAS BASED UPON NEW MAG LAND USE DEFINITIONS FOR SINGLE FAMILY HOUSING

DDM MCUHP2 MESA AREA DRAINAGE MASTER PLAN

```
42 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          5  MINUTES IN COMPUTATION INTERVAL
                     IDATE     1APR97  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE     4APR97  ENDING DATE
                    NDTIME       1115  ENDING TIME
                    ICENT         19  CENTURY MARK
```

```
                    COMPUTATION INTERVAL      .08 HOURS
                         TOTAL TIME BASE    83.25 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

   44 JD          INDEX STORM NO. 1
                        STRM        2.30  PRECIPITATION DEPTH
                        TRDA         .01  TRANSPOSITION DRAINAGE AREA

   45 PI             PRECIPITATION PATTERN
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
 .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
 .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
 .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00

   55 JD          INDEX STORM NO. 2
                        STRM        2.29  PRECIPITATION DEPTH
                        TRDA        1.00  TRANSPOSITION DRAINAGE AREA

    0 PI             PRECIPITATION PATTERN
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
 .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
 .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
 .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
 .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
```

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

56 JD INDEX STORM NO. 3

STRM 2.23 PRECIPITATION DEPTH

TRDA 5.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

57 JD INDEX STORM NO. 4

STRM 2.16 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

58 JD INDEX STORM NO. 5

STRM 2.07 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

59 JD INDEX STORM NO. 6

STRM 1.98 PRECIPITATION DEPTH

TRDA 60.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00       .00       .00       .00       .00       .00       .00       .00

  60 JD          INDEX STORM NO. 7
                       STRM        1.95  PRECIPITATION DEPTH
                       TRDA       90.00  TRANSPOSITION DRAINAGE AREA

   0 PI            PRECIPITATION PATTERN
.00       .00       .00       .00       .00       .00       .00       .00       .00       .00
.00       .00       .00       .00       .00       .00       .00       .00       .00       .00
.00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.00       .00       .00       .00       .00       .00       .00       .00       .00       .00
.00       .00       .00       .00       .00       .00       .00       .01       .00       .01
.01       .01       .01       .01       .01       .01       .01       .01       .03       .03
.03       .09       .09       .09       .01       .01       .01       .01       .01       .01
.01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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.00       .00       .00       .00       .00       .00       .00       .00
    -----DSS---ZOPEN:  Existing File Opened,  File: SEMP10N.DSS
                       Unit:  71;  DSS Version: 6-EA
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /CONCENTRATION POINT C58/FLOW TO
OVERCHUTES/FLOW/31MAR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /CONCENTRATION POINT C58/FLOW TO
OVERCHUTES/FLOW/01APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /CONCENTRATION POINT C58/FLOW TO
OVERCHUTES/FLOW/02APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO
OVERCHUTES/FLOW/03APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO
OVERCHUTES/FLOW/04APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.   13:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
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-----DSS---ZWRITE Unit  71; Vers.   13:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   13:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   14:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   14:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   14:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   15:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   15:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   15:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   16:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   16:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   16:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   17:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   17:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   17:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   18:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   18:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   18:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
-----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
-----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
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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	42	474.	12.67	95.	27.	9.	1.75		
+	ROUTED TO	42T51	442.	13.08	95.	27.	9.	1.75		
+	HYDROGRAPH AT	51	609.	12.25	79.	24.	8.	1.24		
+	2 COMBINED AT	C51	629.	12.33	169.	49.	17.	2.99		
+	ROUTED TO	51T53	602.	12.67	169.	49.	17.	2.99		
+	HYDROGRAPH AT	44A	711.	12.50	158.	52.	17.	1.59		
+	DIVERSION TO	D44A	548.	12.50	125.	41.	14.	1.59		
+	HYDROGRAPH AT	DIV44A	163.	12.50	33.	11.	4.	1.59		
+	HYDROGRAPH AT	43	662.	12.33	91.	27.	9.	1.42		

+	2 COMBINED AT	C43	786.	12.33	121.	37.	12.	3.01
+	ROUTED TO	43T53	501.	13.50	121.	37.	12.	3.01
+	HYDROGRAPH AT	53	419.	12.42	55.	16.	5.	.78
+	3 COMBINED AT	C53	956.	13.42	331.	99.	33.	6.78
+	HYDROGRAPH AT	54	255.	12.42	33.	10.	3.	.49
+	2 COMBINED AT	C54	1135.	12.50	359.	107.	36.	7.27
+	DIVERSION TO	SOUTH	342.	12.50	66.	16.	5.	7.27
+	HYDROGRAPH AT	DCAP12	792.	12.50	293.	91.	30.	7.27
+	ROUTED TO	CAP12	669.	13.58	293.	91.	30.	7.27
+	HYDROGRAPH AT	DR44A	548.	12.50	125.	41.	14.	1.59
+	ROUTED TO	44ATB	432.	13.75	125.	41.	14.	1.59
+	HYDROGRAPH AT	44B	783.	12.25	98.	30.	10.	1.06
+	2 COMBINED AT	C44B	929.	12.33	223.	71.	24.	1.06
+	ROUTED TO	CAP10+	867.	12.42	223.	71.	24.	1.06
+	ROUTED TO	RCAP11	854.	12.50	224.	72.	24.	1.06
+	2 COMBINED AT	C12	1320.	12.50	500.	157.	53.	8.33
+	ROUTED TO	ADOT-W	345.	14.75	319.	157.	53.	8.33
+	ROUTED TO	RADOTW	345.	14.83	319.	157.	53.	8.33
+	HYDROGRAPH AT	36B	323.	12.08	25.	7.	2.	.32
+	2 COMBINED AT	C36B	451.	12.17	323.	163.	55.	8.65
+	HYDROGRAPH AT	RSOUTH	342.	12.50	66.	16.	5.	7.27
+	HYDROGRAPH AT	57	147.	12.00	8.	2.	1.	.18
+	2 COMBINED AT	C57	388.	12.50	85.	21.	7.	.18
	ROUTED TO							

+		CAP13+	374.	12.58	85.	21.	7.	.18
+	HYDROGRAPH AT	36A	120.	12.00	8.	2.	1.	.10
+	2 COMBINED AT	C36A	378.	12.58	93.	24.	8.	.28
+	ROUTED TO	ADOT-E	99.	14.00	66.	23.	8.	.28
+	2 COMBINED AT	CFAKE	464.	12.17	376.	182.	61.	8.93
+	HYDROGRAPH AT	52	291.	12.25	30.	8.	3.	.43
+	HYDROGRAPH AT	56	473.	12.17	46.	13.	4.	.55
+	2 COMBINED AT	C56	749.	12.25	76.	22.	7.	.98
+	ROUTED TO	56T58	521.	12.58	75.	22.	7.	.98
+	HYDROGRAPH AT	58	652.	12.17	46.	12.	4.	.95
+	2 COMBINED AT	C58	890.	12.25	120.	33.	11.	1.93
+	HYDROGRAPH AT	46B	181.	12.42	27.	9.	3.	.36
+	ROUTED TO	CAP6	163.	12.50	27.	9.	3.	.36
+	ROUTED TO	RCAP6	161.	12.58	27.	9.	3.	.36
+	ROUTED TO	RCAP6B	160.	12.58	27.	9.	3.	.36
+	HYDROGRAPH AT	29A	105.	12.17	8.	2.	1.	.18
+	2 COMBINED AT	C29A	166.	12.58	34.	11.	4.	.54
+	DIVERSION TO	29A-W	0.	.00	0.	0.	0.	.54
+	HYDROGRAPH AT	29A-S	166.	12.58	34.	11.	4.	.54
+	ROUTED TO	29ATB	166.	12.58	34.	11.	4.	.54
+	HYDROGRAPH AT	45A	217.	12.33	28.	8.	3.	.62
+	DIVERSION TO	45ATB	206.	12.33	26.	7.	2.	.62
+	HYDROGRAPH AT	D45A	11.	12.33	1.	0.	0.	.62
+	HYDROGRAPH AT	55B	434.	12.58	84.	24.	8.	1.86

+	2 COMBINED AT	C55B	435.	12.58	84.	24.	8.	2.48
+	ROUTED TO	CAP7	435.	12.58	84.	24.	8.	2.48
+	ROUTED TO	RCAP7	407.	12.92	84.	24.	8.	2.48
+	HYDROGRAPH AT	29B	45.	12.08	2.	1.	0.	.08
+	2 COMBINED AT	C29B1	407.	12.92	87.	25.	8.	2.56
+	2 COMBINED AT	C29B2	510.	12.83	119.	35.	12.	3.10
+	ROUTED TO	29BTC	508.	12.83	119.	35.	12.	3.10
+	HYDROGRAPH AT	RD45A	206.	12.33	26.	7.	2.	.62
+	ROUTED TO	45ATB	180.	12.92	26.	7.	2.	.62
+	HYDROGRAPH AT	45B	376.	12.42	54.	16.	5.	.66
+	2 COMBINED AT	C45B	379.	12.42	79.	24.	8.	.66
+	ROUTED TO	CAP8	286.	12.58	79.	24.	8.	.66
+	ROUTED TO	RCAP8	268.	13.17	79.	24.	8.	.66
+	HYDROGRAPH AT	29C	183.	12.08	10.	3.	1.	.23
+	2 COMBINED AT	C29C1	268.	13.17	89.	26.	9.	.89
+	2 COMBINED AT	C29C2	719.	13.00	203.	60.	20.	3.99
+	ROUTED TO	29CT36	721.	13.00	203.	60.	20.	3.99
+	HYDROGRAPH AT	55	118.	12.08	8.	2.	1.	.14
+	ROUTED TO	CAP9	78.	12.17	8.	2.	1.	.14
+	ROUTED TO	RCAP9	61.	12.67	8.	2.	1.	.14
+	HYDROGRAPH AT	29D	350.	12.25	29.	8.	3.	.65
+	ROUTED TO	29T36	207.	12.92	29.	8.	3.	.65
+	HYDROGRAPH AT	36C	297.	12.17	24.	7.	2.	.44
+	4 COMBINED AT	C36	921.	13.00	258.	75.	25.	5.22

+	ROUTED TO 36T37	900.	13.08	258.	75.	25.	5.22
+	HYDROGRAPH AT 29AWST	0.	.00	0.	0.	0.	.54
+	HYDROGRAPH AT 30	442.	12.58	77.	25.	8.	1.12
+	2 COMBINED AT C30	442.	12.58	77.	25.	8.	1.12
+	ROUTED TO 30T37	418.	12.75	77.	25.	8.	1.12
+	HYDROGRAPH AT 37	296.	12.17	24.	7.	2.	.47
+	3 COMBINED AT C37	1167.	13.00	345.	103.	35.	6.81
+	ROUTED TO ADOTEL	16.	22.33	16.	16.	16.	6.81
+	ROUTED TO 37T38	16.	21.83	16.	16.	16.	6.81
+	HYDROGRAPH AT 17A	129.	12.17	14.	5.	2.	.18
+	ROUTED TO 17AT23	127.	12.25	14.	5.	2.	.18
+	HYDROGRAPH AT 23	185.	12.17	17.	5.	2.	.28
+	HYDROGRAPH AT 48	347.	12.33	38.	11.	4.	.77
+	ROUTED TO CAP3	330.	12.33	38.	11.	4.	.77
+	ROUTED TO RCAP3A	331.	12.42	38.	11.	4.	.77
+	ROUTED TO RCAP3B	255.	12.58	38.	11.	4.	.77
+	HYDROGRAPH AT 17B	143.	12.25	17.	5.	2.	.22
+	2 COMBINED AT C17B	298.	12.50	54.	16.	5.	.99
+	ROUTED TO 17BT22	295.	12.50	54.	16.	5.	.99
+	HYDROGRAPH AT 47	465.	12.58	71.	20.	7.	1.67
+	ROUTED TO CAP4+5	463.	12.58	71.	20.	7.	1.67
+	ROUTED TO RCAP4	351.	13.42	71.	20.	7.	1.67
+	HYDROGRAPH AT 22	270.	12.17	30.	10.	3.	.41
	2 COMBINED AT						

+	C22A	358.	13.42	99.	29.	10.	2.08
2 COMBINED AT +	C22	528.	12.25	150.	45.	15.	3.07
ROUTED TO +	22T23	484.	12.75	150.	45.	15.	3.07
3 COMBINED AT +	C23	511.	12.67	178.	54.	18.	3.53
ROUTED TO +	23T24	510.	12.75	178.	54.	18.	3.53
HYDROGRAPH AT +	49	356.	12.33	42.	12.	4.	.79
ROUTED TO +	CAP2	348.	12.33	42.	12.	4.	.79
ROUTED TO +	RCAP2	325.	12.67	42.	12.	4.	.79
HYDROGRAPH AT +	50	158.	12.17	11.	3.	1.	.28
ROUTED TO +	CAP1	157.	12.17	14.	7.	6.	.28
ROUTED TO +	RCAP1	101.	12.75	14.	7.	6.	.28
HYDROGRAPH AT +	18A	552.	12.25	60.	18.	6.	1.01
3 COMBINED AT +	C18A	623.	12.33	113.	37.	16.	2.08
ROUTED TO +	18T24	615.	12.33	113.	37.	16.	2.08
HYDROGRAPH AT +	24	187.	12.25	25.	8.	3.	.29
3 COMBINED AT +	C24	1185.	12.33	305.	96.	36.	5.90
ROUTED TO +	24T31A	1109.	12.75	305.	96.	36.	5.90
ROUTED TO +	24T31B	1108.	12.75	305.	96.	36.	5.90
HYDROGRAPH AT +	31B	247.	12.25	24.	7.	2.	.47
2 COMBINED AT +	C31	1128.	12.75	325.	102.	38.	6.37
DIVERSION TO +	D31W	828.	12.75	142.	35.	12.	6.37
HYDROGRAPH AT +	D31	300.	12.25	183.	67.	26.	6.37
ROUTED TO +	31T38	300.	12.67	183.	67.	26.	6.37
HYDROGRAPH AT +	31A	295.	12.25	31.	10.	3.	.53

+	ROUTED TO 31AT38	246.	12.50	31.	10.	3.	.53
+	HYDROGRAPH AT 38	266.	12.33	36.	12.	4.	.47
+	4 COMBINED AT C38	709.	12.42	253.	95.	46.	14.18
+	ROUTED TO 38T39	697.	12.50	253.	95.	46.	14.18
+	DIVERSION TO DB10	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT ADD10	697.	12.50	253.	95.	46.	14.18
+	DIVERSION TO DB9	27.	12.50	1.	0.	0.	14.18
+	HYDROGRAPH AT ADD9	671.	12.50	252.	95.	46.	14.18
+	DIVERSION TO DB8	103.	12.50	8.	2.	1.	14.18
+	HYDROGRAPH AT ADD8	567.	12.50	244.	93.	45.	14.18
+	DIVERSION TO DB7	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT ADD7	567.	12.50	244.	93.	45.	14.18
+	DIVERSION TO DB6	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT ADD6	567.	12.50	244.	93.	45.	14.18
+	DIVERSION TO DB5	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT ADD5	567.	12.50	244.	93.	45.	14.18
+	HYDROGRAPH AT D31W	828.	12.75	142.	35.	12.	6.37
+	ROUTED TO 31WT32	683.	13.08	141.	35.	12.	6.37
+	HYDROGRAPH AT 32	212.	12.33	28.	9.	3.	.38
+	2 COMBINED AT C32	806.	13.08	190.	50.	17.	.38
+	ROUTED TO 32T39	803.	13.08	190.	50.	17.	.38
+	HYDROGRAPH AT 39	206.	12.42	33.	11.	4.	.36
+	3 COMBINED AT C39	997.	13.08	419.	141.	61.	14.92
+	DIVERSION TO BASIN	0.	.00	0.	0.	0.	14.92

```
          HYDROGRAPH AT
+                         SOSS        997.   13.08          419.         141.          61.       14.92
1
                                          SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                                              (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                                                   INTERPOLATED TO
                                                                                COMPUTATION INTERVAL
           ISTAQ     ELEMENT       DT        PEAK     TIME TO      VOLUME       DT        PEAK     TIME TO      VOLUME
                                                        PEAK                                          PEAK

                                  (MIN)      (CFS)     (MIN)       (IN)      (MIN)      (CFS)     (MIN)        (IN)

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RCAP11  MANE          2.02     867.73    747.34       2.54       5.00     859.33    750.00        2.54

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1435E+03 EXCESS= .0000E+00 OUTFLOW= .1437E+03 BASIN STORAGE= .1172E-04
PERCENT ERROR=   -.1

          FOR STORM = 2  STORM AREA (SQ MI) =       1.00
            RCAP11  MANE          1.99     864.52    749.23       2.53       5.00     854.76    750.00        2.53

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1428E+03 EXCESS= .0000E+00 OUTFLOW= .1429E+03 BASIN STORAGE= .1077E-04
PERCENT ERROR=   -.1

          FOR STORM = 3  STORM AREA (SQ MI) =       5.00
            RCAP11  MANE          2.09     834.32    747.87       2.44       5.00     826.95    750.00        2.44

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1381E+03 EXCESS= .0000E+00 OUTFLOW= .1382E+03 BASIN STORAGE= .1092E-04
PERCENT ERROR=   -.1

          FOR STORM = 4  STORM AREA (SQ MI) =      10.00
            RCAP11  MANE          2.06     804.53    748.88       2.35       5.00     794.34    745.00        2.35

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1327E+03 EXCESS= .0000E+00 OUTFLOW= .1328E+03 BASIN STORAGE= .1068E-04
PERCENT ERROR=   -.1

          FOR STORM = 5  STORM AREA (SQ MI) =      30.00
            RCAP11  MANE          2.11     762.18    748.53       2.23       5.00     756.62    745.00        2.23

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1257E+03 EXCESS= .0000E+00 OUTFLOW= .1258E+03 BASIN STORAGE= .1179E-04
PERCENT ERROR=   -.1

          FOR STORM = 6  STORM AREA (SQ MI) =      60.00
            RCAP11  MANE          2.23     718.72    748.72       2.10       5.00     711.67    745.00        2.10

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1188E+03 EXCESS= .0000E+00 OUTFLOW= .1189E+03 BASIN STORAGE= .1141E-04
PERCENT ERROR=   -.1

          FOR STORM = 7  STORM AREA (SQ MI) =      90.00
            RCAP11  MANE          2.21     702.48    747.45       2.06       5.00     697.23    750.00        2.06

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .1165E+03 EXCESS= .0000E+00 OUTFLOW= .1166E+03 BASIN STORAGE= .1061E-04
PERCENT ERROR=   -.1
```

```
*** NORMAL END OF HEC-1 ***


-----DSS---ZCLOSE Unit:  71,   File: SEMP10N.DSS
           Pointer Utilization:    .25
           Number of Records:      25
           File Size:      53.2  Kbytes
           Percent Inactive:     .0
```

APPENDIX J-2

NORTHWEST MESA AREA
10-YEAR, 24-HOUR STORM
EXISTING LAND USE CONDITIONS
HEC-1 MODEL

```
1****************************************
 *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUL   1997              *
 *           VERSION 4.1                *
 *                                      *
 *  RUN DATE   25JUN98  TIME  13:33:22  *
 *                                      *
 ****************************************
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****************************************
*                                      *
*    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   AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROADS TO THE EAST
  2           ID   ALL THE HYDROGRAPHS ENTERING INTO THE EMF ARE SENT TO TAPE 21
  3           ID
  4           ID   ALL STREET ROUTINGS HAVE N VALUES OF .015 FOR ASPHALT AND .03 FOR OVERLAND
  5           ID   FLOWS
  6           ID
  7           ID   EAST MARICOPA COUNTY AREA DRAINAGE MASTER STUDY - PHASE 2
  8           ID   THIS AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROAD TO THE
  9           ID   EAST, MCDOWELL ROAD TO THE NORTH AND THE SUPERSTITION FREEWAY TO THE SOUTH
 10           ID
 11           ID   FILENAME: PHASE2.DAT
 12           ID
 13           ID   DDMS FILE FAMILY NAME: PHASE2
 14           ID
 15           ID   THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
 16           ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 18.60 SQ. MI.
 17           ID   THIS MODEL USES THE REVISED LAND USE AND A Kn VALUE OF 0.09 FOR DESERT LAND
 18           ID   USES
 19           ID
 20           ID   THIS MODEL WAS REVISED TO ESTABLISH CONCENTRATION POINTS AND HYDROGRAPHS
 21           ID   ENTERING INTO THE EMF.
 22           ID   INITIAL REVISION IN MARCH 1997
 23           ID
 24           ID   10-YEAR 24-HOUR FREQUENCY
 25           ID
 26           ID   METHODOLOGY:
 27           ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
 28           ID   SCS TYPE II RAINFALL DISTRIBUTION
 29           ID   S-GRAPH HYDROGRAPH
 30           ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
 31           ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
 32           ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
 33           ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
 34           ID   DATED 1994
 35           ID   THE NOAA TECHNICAL MEMORANDUM NWS HYDRO-40 DEPTH AREA RATIOS
 36           ID
 37           ID   STUDY INITIALLY PERFORMED BY LISA C. YOUNG
 38           ID   REVISED BY VALERIE A. SWICK
 39           ID   HYDROLOGY BRANCH, ENGINEERING DISTRICT,
 40           ID   FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, SPRING 1996
 41           ID
 42           ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
```

```
 43          ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL,  5FT/SEC FOR CONCRETE CHANNEL
 44          ID
 45          ID   THIS MODEL DOES NOT REFLECT THE STORM DRAINS IN THE AREA AS THEY HAVE A LOW
 46          ID   CAPACITY AND OUTLET AT THE SAME LOCATION AS SURFACE FLOW
 47          ID
 48          ID
 49          ID    LAST UPDATED ON  3/13/98
 50          ID
 51          ID
 52          ID   DDM MCUHP2 Phase 2 model, north of Superstition Freeway
             * *DIAGRAM
 53          IT       5  1APR97    0000    1000
 54          IO       5
1                                          HEC-1 INPUT                                                    PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 55          IN      15
 56          JD    2.30    0.01
 57          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 58          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 59          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 60          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 61          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 62          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 63          PC    .856    .863    .869    .875    .881    .893    .898    .903    .903    .908
 64          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 65          PC    .953    .956    .969    .962    .965    .968    .971    .974    .977    .980
 66          PC    .983    .986    .989    .992    .995    .998   1.000
 67          JD    2.29       1
 68          JD    2.23       5
 69          JD    2.16    10.0
 70          JD    2.07    30.0
 71          JD    1.98    60.0
 72          JD    1.95    90.0
             *
             * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR 24-HR STORM.
             *
*** NOLIST ***
```

```
1****************************************                    ****************************************
 *                                      *                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *    U.S. ARMY CORPS OF ENGINEERS      *
 *              JUL   1997              *                    *    HYDROLOGIC ENGINEERING CENTER     *
 *           VERSION 4.1                *                    *          609 SECOND STREET           *
 *                                      *                    *       DAVIS, CALIFORNIA 95616        *
 *  RUN DATE   25JUN98  TIME  13:33:22  *                    *           (916) 756-1104             *
 *                                      *                    *                                      *
****************************************                    ****************************************
```

AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROADS TO THE EAST
ALL THE HYDROGRAPHS ENTERING INTO THE EMF ARE SENT TO TAPE 21

ALL STREET ROUTINGS HAVE N VALUES OF .015 FOR ASPHALT AND .03 FOR OVERLAND FLOWS

EAST MARICOPA COUNTY AREA DRAINAGE MASTER STUDY - PHASE 2
THIS AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROAD TO THE EAST, MCDOWELL ROAD TO THE NORTH AND THE SUPERSTITION FREEWAY TO THE SOUTH

FILENAME: PHASE2.DAT

DDMS FILE FAMILY NAME: PHASE2

THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 18.60 SQ. MI.
THIS MODEL USES THE REVISED LAND USE AND A Kn VALUE OF 0.09 FOR DESERT LAND USES

THIS MODEL WAS REVISED TO ESTABLISH CONCENTRATION POINTS AND HYDROGRAPHS ENTERING INTO THE EMF.
INITIAL REVISION IN MARCH 1997

10-YEAR 24-HOUR FREQUENCY

METHODOLOGY:
THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
SCS TYPE II RAINFALL DISTRIBUTION
S-GRAPH HYDROGRAPH
GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
NORMAL DEPTH STORAGE CHANNEL ROUTING
APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS DATED 1994
THE NOAA TECHNICAL MEMORANDUM NWS HYDRO-40 DEPTH AREA RATIOS

STUDY INITIALLY PERFORMED BY LISA C. YOUNG
REVISED BY VALERIE A. SWICK
HYDROLOGY BRANCH, ENGINEERING DISTRICT,
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, SPRING 1996

ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 5FT/SEC FOR CONCRETE CHANNEL

THIS MODEL DOES NOT REFLECT THE STORM DRAINS IN THE AREA AS THEY HAVE A LOW CAPACITY AND OUTLET AT THE SAME LOCATION AS SURFACE FLOW

LAST UPDATED ON 3/13/98

DDM MCUHP2 Phase 2 model, north of Superstition Freeway

```
 54 IO          OUTPUT CONTROL VARIABLES
                      IPRNT          5  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN          5  MINUTES IN COMPUTATION INTERVAL
                      IDATE     1APR97  STARTING DATE
                      ITIME       0000  STARTING TIME
                         NQ       1000  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE     4APR97  ENDING DATE
                     NDTIME       1115  ENDING TIME
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ICENT 19 CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 83.25 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

56 JD INDEX STORM NO. 1
STRM 2.30 PRECIPITATION DEPTH
TRDA .01 TRANSPOSITION DRAINAGE AREA

57 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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67 JD INDEX STORM NO. 2
STRM 2.29 PRECIPITATION DEPTH
TRDA 1.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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.00       .00       .00       .00       .00       .00       .00       .00

  68 JD          INDEX STORM NO. 3
                       STRM        2.23  PRECIPITATION DEPTH
                       TRDA        5.00  TRANSPOSITION DRAINAGE AREA

   0 PI            PRECIPITATION PATTERN
.00       .00       .00       .00       .00       .00       .00       .00       .00       .00
.00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.01       .01       .01       .01       .01       .01       .01       .01       .03       .03
.03       .09       .09       .09       .01       .01       .01       .01       .01       .01
.01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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.00       .00       .00       .00       .00       .00       .00       .00

  69 JD          INDEX STORM NO. 4
                       STRM        2.16  PRECIPITATION DEPTH
                       TRDA       10.00  TRANSPOSITION DRAINAGE AREA

   0 PI            PRECIPITATION PATTERN
.00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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  70 JD          INDEX STORM NO. 5
                       STRM        2.07  PRECIPITATION DEPTH
                       TRDA       30.00  TRANSPOSITION DRAINAGE AREA

   0 PI            PRECIPITATION PATTERN
.00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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71 JD INDEX STORM NO. 6

STRM 1.98 PRECIPITATION DEPTH

TRDA 60.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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72 JD INDEX STORM NO. 7

STRM 1.95 PRECIPITATION DEPTH

TRDA 90.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03

.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.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	9	48.	13.58	13.	3.	1.	.44		
+	HYDROGRAPH AT	4	409.	12.75	89.	29.	10.	1.00		
+	ROUTED TO	4T8	338.	13.17	89.	29.	10.	1.00		
+	HYDROGRAPH AT	8	140.	12.92	29.	8.	3.	.50		
+	2 COMBINED AT	C8	445.	13.00	117.	36.	12.	1.50		
+	2 COMBINED AT	EMFHOB	468.	13.08	129.	40.	13.	1.94		
+	ROUTED TO	C9T15	438.	13.42	129.	39.	13.	1.94		
+	HYDROGRAPH AT	3	338.	12.92	76.	23.	8.	1.00		
+	DIVERSION TO	RET3	338.	12.92	76.	23.	8.	1.00		
+	HYDROGRAPH AT	D3	0.	.00	0.	0.	0.	1.00		
+	ROUTED TO	3T7	0.	.00	0.	0.	0.	1.00		
+	HYDROGRAPH AT	7	102.	12.58	16.	5.	2.	.28		
+	2 COMBINED AT	C7	101.	12.58	16.	5.	2.	1.28		
+	ROUTED TO	7T10	93.	12.75	16.	5.	2.	1.28		
+	HYDROGRAPH AT	10	321.	12.58	55.	17.	6.	.72		
+	DIVERSION TO	RET10	321.	12.58	55.	17.	6.	.72		
+	HYDROGRAPH AT	D10	0.	.00	0.	0.	0.	.72		
+	2 COMBINED AT	C10	93.	12.75	16.	5.	2.	2.00		
+	ROUTED TO	10T8A	92.	12.83	16.	5.	2.	2.00		

+	HYDROGRAPH AT	8A	45.	12.50	5.	1.	0.	.12
+	2 COMBINED AT	C8A	115.	12.75	21.	6.	2.	2.12
+	ROUTED TO	8AT15A	114.	12.83	21.	6.	2.	2.12
+	HYDROGRAPH AT	15A	190.	12.42	28.	9.	3.	.35
+	2 COMBINED AT	C15A	230.	12.50	48.	14.	5.	2.47
+	2 COMBINED AT	EMFBRN	497.	13.33	173.	53.	18.	4.41
+	ROUTED TO	15AT15	492.	13.50	172.	53.	18.	4.41
+	HYDROGRAPH AT	15B	257.	12.50	43.	14.	5.	.51
+	2 COMBINED AT	EMFCLB	516.	13.50	212.	65.	22.	4.92
+	ROUTED TO	15T16	513.	13.58	212.	65.	22.	4.92
+	HYDROGRAPH AT	1	163.	12.42	19.	5.	2.	.39
+	DIVERSION TO	D1W	150.	12.33	19.	5.	2.	.39
+	HYDROGRAPH AT	D1S	13.	12.42	0.	0.	0.	.39
+	ROUTED TO	1T5	1.	13.33	0.	0.	0.	.39
+	HYDROGRAPH AT	5	361.	12.50	60.	19.	6.	.95
+	2 COMBINED AT	C5	360.	12.50	60.	18.	6.	1.15
+	DIVERSION TO	D5S	349.	12.50	60.	18.	6.	1.15
+	HYDROGRAPH AT	DC5	10.	12.50	0.	0.	0.	1.15
+	ROUTED TO	5T6	2.	13.25	0.	0.	0.	1.15
+	HYDROGRAPH AT	2	282.	12.83	59.	17.	6.	1.00
+	ROUTED TO	2T6	233.	13.42	59.	17.	6.	1.00
+	HYDROGRAPH AT	6	449.	12.50	79.	25.	8.	1.00
+	HYDROGRAPH AT	GD1	150.	12.33	19.	5.	2.	.39
+	ROUTED TO	RGD1A	99.	13.17	19.	5.	2.	.39
+	ROUTED TO	RGD1B	96.	13.25	19.	5.	2.	.39
+	4 COMBINED AT	C6	625.	12.58	152.	46.	16.	2.76
+	DIVERSION TO	D6W	400.	12.42	137.	43.	14.	2.76

+	HYDROGRAPH AT	DC6	225.	12.58	16.	4.	1.	2.76
+	ROUTED TO	6T13B	180.	12.83	16.	4.	1.	2.76
+	HYDROGRAPH AT	11	161.	13.33	42.	11.	4.	1.06
+	DIVERSION TO	D11S	161.	13.33	42.	11.	4.	1.06
+	HYDROGRAPH AT	D11	0.	.00	0.	0.	0.	1.06
+	ROUTED TO	11T12	0.	.00	0.	0.	0.	1.06
+	HYDROGRAPH AT	12	306.	12.83	70.	22.	7.	1.03
+	HYDROGRAPH AT	GD5S	349.	12.50	60.	18.	6.	1.15
+	ROUTED TO	RGD5A	284.	13.08	59.	18.	6.	1.15
+	3 COMBINED AT	C12	559.	12.83	127.	40.	13.	2.13
+	DIVERSION TO	D12S	300.	12.33	99.	33.	11.	2.13
+	HYDROGRAPH AT	DC12	259.	12.83	28.	7.	2.	2.13
+	ROUTED TO	12T13A	255.	12.92	28.	7.	2.	2.13
+	HYDROGRAPH AT	13A	282.	12.58	52.	16.	5.	.77
+	2 COMBINED AT	C13A	430.	12.92	79.	23.	8.	2.27
+	DIVERSION TO	BASIN	430.	12.92	59.	16.	5.	2.27
+	HYDROGRAPH AT	UNIVBA	301.	13.17	25.	7.	2.	2.27
+	DIVERSION TO	D13AS	294.	13.17	19.	5.	2.	2.27
+	HYDROGRAPH AT	D13A	7.	13.08	6.	2.	1.	2.27
+	HYDROGRAPH AT	13B	113.	12.42	18.	6.	2.	.23
+	3 COMBINED AT	C13B	243.	12.75	38.	12.	4.	2.15
+	DIVERSION TO	D13BS	124.	12.75	7.	2.	1.	2.15
+	HYDROGRAPH AT	D13B	119.	12.58	30.	10.	3.	2.15
+	ROUTED TO	RD13BW	120.	12.75	30.	10.	3.	2.15
+	HYDROGRAPH AT	GD6W	400.	12.42	137.	43.	14.	2.76
+	ROUTED TO	R6WT14	366.	14.17	137.	42.	14.	2.76
+	HYDROGRAPH AT	14	497.	12.50	80.	25.	8.	1.00

+	DIVERSION TO	D14S	139.	12.50	6.	1.	0.	1.00
+	HYDROGRAPH AT	D14	358.	12.33	74.	24.	8.	1.00
+	3 COMBINED AT	C14	561.	12.67	240.	76.	26.	2.16
+	ROUTED TO	RD14W	544.	12.67	239.	76.	25.	2.16
+	HYDROGRAPH AT	16	65.	12.17	6.	2.	1.	.09
+	2 COMBINED AT	C16	556.	12.67	248.	79.	26.	.64
+	2 COMBINED AT	EMFUNV	953.	12.67	449.	141.	47.	5.56
+	ROUTED TO	16T21	826.	14.08	443.	140.	47.	5.56
+	HYDROGRAPH AT	GD13AS	294.	13.17	19.	5.	2.	2.27
+	ROUTED TO	13AT21	183.	13.58	19.	5.	2.	2.27
+	HYDROGRAPH AT	GD13BS	124.	12.75	7.	2.	1.	2.15
+	ROUTED TO	13BT21	97.	13.08	7.	2.	1.	2.15
+	HYDROGRAPH AT	GD14S	139.	12.50	6.	1.	0.	1.00
+	ROUTED TO	14T21	123.	12.58	6.	1.	0.	1.00
+	HYDROGRAPH AT	21	220.	12.58	42.	13.	4.	.53
+	4 COMBINED AT	C21	299.	12.58	63.	19.	6.	6.23
+	2 COMBINED AT	EMFAPC	857.	13.75	472.	149.	51.	11.79
+	ROUTED TO	21T28	846.	14.00	470.	149.	51.	11.79
+	HYDROGRAPH AT	19	335.	12.50	60.	19.	6.	.76
+	HYDROGRAPH AT	GD11S	161.	13.33	42.	11.	4.	1.06
+	ROUTED TO	RD11	121.	14.50	42.	11.	4.	1.06
+	HYDROGRAPH AT	GD12S	300.	12.33	99.	33.	11.	2.13
+	ROUTED TO	RD12	300.	13.25	99.	33.	11.	2.13
+	3 COMBINED AT	C19	596.	12.58	197.	63.	21.	1.93
+	ROUTED TO	19T27	527.	12.92	197.	63.	21.	1.93
+	HYDROGRAPH AT	27	168.	12.17	20.	7.	2.	.24
+	2 COMBINED AT	C27	540.	12.92	216.	69.	23.	2.17

+	ROUTED TO 27T28	533.	13.17	216.	69.	23.	2.17
+	HYDROGRAPH AT 20	265.	12.67	56.	19.	6.	.58
+	ROUTED TO 20T28	223.	13.00	56.	19.	6.	.58
+	HYDROGRAPH AT 28	422.	12.58	81.	26.	9.	.90
+	3 COMBINED AT C28	958.	12.67	346.	112.	38.	3.65
+	2 COMBINED AT EMFBRD	1463.	13.17	773.	250.	85.	15.44
+	ROUTED TO 28T35	1445.	13.50	771.	249.	85.	15.44
+	HYDROGRAPH AT 26	174.	12.17	20.	6.	2.	.25
+	ROUTED TO 26T34	96.	13.00	20.	6.	2.	.25
+	HYDROGRAPH AT 34	296.	12.92	68.	21.	7.	.90
+	DIVERSION TO RET34	296.	12.92	68.	21.	7.	.90
+	HYDROGRAPH AT D34	0.	.00	0.	0.	0.	.90
+	2 COMBINED AT C34	96.	13.00	20.	6.	2.	1.15
+	ROUTED TO 34T35	90.	13.25	20.	6.	2.	1.15
+	HYDROGRAPH AT 35	341.	13.25	99.	31.	10.	1.46
+	DIVERSION TO RET35	341.	13.25	99.	31.	10.	1.46
+	HYDROGRAPH AT D35	0.	.00	0.	0.	0.	1.46
+	2 COMBINED AT C35	90.	13.25	20.	6.	2.	2.61
+	2 COMBINED AT EMFSTH	1495.	13.42	780.	253.	86.	18.05
+	ROUTED TO 35T41	1484.	13.58	778.	253.	86.	18.05
+	HYDROGRAPH AT 18B	204.	12.33	26.	8.	3.	.38
+	ROUTED TO 18BT25	180.	12.50	26.	8.	3.	.38
+	HYDROGRAPH AT 25	273.	12.42	43.	14.	5.	.50
+	2 COMBINED AT C25	449.	12.42	70.	22.	7.	.88
+	ROUTED TO 25T33	234.	13.50	70.	22.	7.	.88
+	HYDROGRAPH AT 33	237.	12.92	56.	18.	6.	.73
+	DIVERSION TO RET33	237.	12.92	56.	18.	6.	.73

```
          HYDROGRAPH AT
+                          D33        0.     .00          0.          0.          0.        .73

          2 COMBINED AT
+                          C33      234.   13.50         70.         22.          7.       1.61

          ROUTED TO
+                        33T40      211.   13.83         69.         22.          7.       1.61

          HYDROGRAPH AT
+                           40      441.   12.25         56.         18.          6.        .58

          2 COMBINED AT
+                          C40      547.   12.25        123.         40.         13.       2.19

          DIVERSION TO
+                          DB4        0.     .00          0.          0.          0.       2.19

          HYDROGRAPH AT
+                         ADD4      547.   12.25        123.         40.         13.       2.19

          DIVERSION TO
+                          DB3        0.     .00          0.          0.          0.       2.19

          HYDROGRAPH AT
+                         ADD3      547.   12.25        123.         40.         13.       2.19

          DIVERSION TO
+                          DB2        0.     .00          0.          0.          0.       2.19

          HYDROGRAPH AT
+                         ADD2      547.   12.25        123.         40.         13.       2.19

          DIVERSION TO
+                          DB1        0.     .00          0.          0.          0.       2.19

          HYDROGRAPH AT
+                         ADD1      547.   12.25        123.         40.         13.       2.19

          ROUTED TO
+                        40T41      281.   13.08        123.         40.         13.       2.19

          HYDROGRAPH AT
+                           41      278.   12.58         56.         19.          6.        .55

          DIVERSION TO
+                        RET41      278.   12.58         56.         19.          6.        .55

          HYDROGRAPH AT
+                          D41        0.     .00          0.          0.          0.        .55

          2 COMBINED AT
+                          C41      281.   13.08        123.         40.         13.       2.74

          2 COMBINED AT
+                        EMFSPR     1705.   13.50        868.        285.         97.      20.79
1
                                   SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                                       (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                                          INTERPOLATED TO
                                                                       COMPUTATION INTERVAL
          ISTAQ    ELEMENT      DT        PEAK    TIME TO     VOLUME      DT       PEAK    TIME TO     VOLUME
                                                     PEAK                                     PEAK

                               (MIN)      (CFS)     (MIN)      (IN)    (MIN)      (CFS)     (MIN)       (IN)

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RD13BW  MANE        5.00     119.33    765.00       .18     5.00     119.33    765.00        .18

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2050E+02 EXCESS= .0000E+00 OUTFLOW= .2050E+02 BASIN STORAGE= .7183E-03 PERCENT ERROR=
.0

          FOR STORM = 2  STORM AREA (SQ MI) =       1.00
            RD13BW  MANE        5.00     119.41    765.00       .18     5.00     119.41    765.00        .18

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .2034E+02 EXCESS= .0000E+00 OUTFLOW= .2033E+02 BASIN STORAGE= .7160E-03 PERCENT ERROR=
.0
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FOR STORM = 3  STORM AREA (SQ MI) =        5.00
  RD13BW  MANE          5.00     119.95     765.00        .17       5.00     119.95     765.00          .17

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1954E+02 EXCESS= .0000E+00 OUTFLOW= .1954E+02 BASIN STORAGE= .1046E-02 PERCENT ERROR=
.0

FOR STORM = 4  STORM AREA (SQ MI) =       10.00
  RD13BW  MANE          5.00     120.87     765.00        .16       5.00     120.87     765.00          .16

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1863E+02 EXCESS= .0000E+00 OUTFLOW= .1862E+02 BASIN STORAGE= .1021E-02 PERCENT ERROR=
.0

FOR STORM = 5  STORM AREA (SQ MI) =       30.00
  RD13BW  MANE          5.00     122.07     770.00        .15       5.00     122.07     770.00          .15

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1697E+02 EXCESS= .0000E+00 OUTFLOW= .1696E+02 BASIN STORAGE= .9891E-03 PERCENT ERROR=
.0

FOR STORM = 6  STORM AREA (SQ MI) =       60.00
  RD13BW  MANE          5.00     111.77     775.00        .10       5.00     111.77     775.00          .10

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1151E+02 EXCESS= .0000E+00 OUTFLOW= .1151E+02 BASIN STORAGE= .9568E-03 PERCENT ERROR=
.0

FOR STORM = 7  STORM AREA (SQ MI) =       90.00
  RD13BW  MANE          5.00      89.95     775.00        .09       5.00      89.95     775.00          .09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1062E+02 EXCESS= .0000E+00 OUTFLOW= .1061E+02 BASIN STORAGE= .7496E-03 PERCENT ERROR=
.0

FOR STORM = 1  STORM AREA (SQ MI) =         .01
   RD14W  MANE          3.58     552.93     759.63       1.34       5.00     550.87     760.00         1.34

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1548E+03 EXCESS= .0000E+00 OUTFLOW= .1542E+03 BASIN STORAGE= .5137E-03 PERCENT ERROR=
.4

FOR STORM = 2  STORM AREA (SQ MI) =        1.00
   RD14W  MANE          3.58     552.72     759.63       1.33       5.00     550.52     760.00         1.33

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1541E+03 EXCESS= .0000E+00 OUTFLOW= .1535E+03 BASIN STORAGE= .5126E-03 PERCENT ERROR=
.4

FOR STORM = 3  STORM AREA (SQ MI) =        5.00
   RD14W  MANE          3.59     542.90     757.99       1.29       5.00     538.90     755.00         1.29

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1497E+03 EXCESS= .0000E+00 OUTFLOW= .1492E+03 BASIN STORAGE= .4848E-03 PERCENT ERROR=
.4

FOR STORM = 4  STORM AREA (SQ MI) =       10.00
   RD14W  MANE          3.60     529.28     756.70       1.25       5.00     527.65     755.00         1.25

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1445E+03 EXCESS= .0000E+00 OUTFLOW= .1439E+03 BASIN STORAGE= .4920E-03 PERCENT ERROR=
.4

FOR STORM = 5  STORM AREA (SQ MI) =       30.00
   RD14W  MANE          3.62     514.09     752.56       1.19       5.00     513.93     755.00         1.19

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1372E+03 EXCESS= .0000E+00 OUTFLOW= .1366E+03 BASIN STORAGE= .5189E-03 PERCENT ERROR=
.4
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```
          FOR STORM = 6  STORM AREA (SQ MI) =       60.00
             RD14W  MANE          3.64     501.11     752.92       1.09       5.00     494.91     755.00         1.09

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1256E+03 EXCESS= .0000E+00 OUTFLOW= .1250E+03 BASIN STORAGE= .5144E-03 PERCENT ERROR=
.4

          FOR STORM = 7  STORM AREA (SQ MI) =       90.00
             RD14W  MANE          3.64     493.63     753.68       1.06       5.00     492.45     750.00         1.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .1226E+03 EXCESS= .0000E+00 OUTFLOW= .1220E+03 BASIN STORAGE= .4824E-03 PERCENT ERROR=
.4


*** NORMAL END OF HEC-1 ***
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APPENDIX J-3

SOUTHERN MESA AREA
10-YEAR, 24-HOUR STORM
EXISTING LAND USE CONDITIONS
HEC-1 MODEL

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1****************************************
□
 *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              JUL   1997              *
 *           VERSION 4.1                *
 *                                      *
 *  RUN DATE   25JUN98  TIME  13:31:30  *
 *                                      *
 ****************************************
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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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```
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

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID   SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
  2           ID   AREA SOUTH OF SUPERSTITION (U.S. HWY 60)
  3           ID   MARCH 1998
  4           ID   SOUTHEAST MESA HIGH RESOLUTION MODEL
  5           ID
  6           ID   FILENAME:  SEMP10S.DAT
  7           ID
  8           ID   THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
  9           ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 73 SQ. MI.
 10           ID   THIS MODEL USES A Kn VALUE OF 0.09 FOR DESERT LAND USE DUE TO SHEET FLOW
 11           ID   CONDITIONS.
 12           ID
 13           ID    10-YEAR 24-HOUR FREQUENCY
 14           ID
 15           ID   THIS MODEL INCLUDES INFLOW FROM NORTH OF THE SUPERSTITION FREEWAY
 16           ID   AND EAST OF THE CAP
 17           ID
 18           ID   METHODOLOGY
 19           ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
 20           ID   SCS TYPE II RAINFALL DISTRIBUTION
 21           ID   S-GRAPH HYDROGRAPH
 22           ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
 23           ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
 24           ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
 25           ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
 26           ID   DATED 1994
 27           ID   THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS
 28           ID
 29           ID   STUDY PERFORMED BY LISA C. YOUNG AND AFSHIN AHOURAIYAN, UPDATED BY
 30           ID   DAVID DEGERNESS (OCT-DEC, 1996). REVIEWED BY VALERIE A. SWICK
 31           ID   AND AMIR MOTAMEDI OF THE FLOOD CONTROL DISTRICT
 32           ID   HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
 33           ID   DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.
 34           ID
 35           ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2-3 FT/SEC FOR WASH/NATURAL
 36           ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL
 37           ID
 38           ID
 39           ID   NOTE: MUST USE SEMP10N.DSS AS THE DSS FILE TO IMPORT FLOWS ACROSS SUPERSTITN
 40           ID
 41           ID
 42           ID     LAST UPDATED ON  6/02/98
```

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          43          ID
          44          ID
          45          ID   DDM MCUHP2 SOUTH EAST MESA ADMP - SOUTH OF SUPERSTITION FREEWAY
                      * *DIAGRAM
          46          IT       5  1APR97    0000    1000
          47          IO       5
          48          IN      15
          49          JD    2.30    0.01
          50          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
          51          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
          52          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
          53          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
          54          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
1                                                HEC-1 INPUT                                          PAGE  2

        LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

          55          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
          56          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
          57          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
          58          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
          59          PC    .983    .986    .989    .992    .995    .998   1.000
          60          JD    2.29    1.00
          61          JD    2.23    5.00
          62          JD    2.16   10.00
          63          JD    2.07   30.00
          64          JD    1.98   60.00
          65          JD    1.95   90.00
                      *
                      * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR 24-HR STORM.
                      *
 *** NOLIST ***
1****************************************
****************************************
 *                                    *                                                    *
*
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                                    *    U.S. ARMY CORPS OF ENGINEERS
*
 *              JUL   1997             *                                                    *    HYDROLOGIC ENGINEERING CENTER
*
 *           VERSION 4.1               *                                                    *          609 SECOND STREET
*
 *                                    *                                                    *       DAVIS, CALIFORNIA 95616
*
 *  RUN DATE   25JUN98  TIME  13:31:30  *                                                    *           (916) 756-1104
*
 *                                    *                                                    *
*
 ****************************************
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SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
AREA SOUTH OF SUPERSTITION (U.S. HWY 60)
MARCH 1998
SOUTHEAST MESA HIGH RESOLUTION MODEL

FILENAME: SEMP10S.DAT

THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 73 SQ. MI.
THIS MODEL USES A Kn VALUE OF 0.09 FOR DESERT LAND USE DUE TO SHEET FLOW CONDITIONS.

10-YEAR 24-HOUR FREQUENCY

THIS MODEL INCLUDES INFLOW FROM NORTH OF THE SUPERSTITION FREEWAY AND EAST OF THE CAP

METHODOLOGY
THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
SCS TYPE II RAINFALL DISTRIBUTION
S-GRAPH HYDROGRAPH
GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
NORMAL DEPTH STORAGE CHANNEL ROUTING
APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS DATED 1994

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STUDY PERFORMED BY LISA C. YOUNG AND AFSHIN AHOURAIYAN, UPDATED BY
DAVID DEGERNESS (OCT-DEC, 1996). REVIEWED BY VALERIE A. SWICK
AND AMIR MOTAMEDI OF THE FLOOD CONTROL DISTRICT
HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.

ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2-3 FT/SEC FOR WASH/NATURAL
CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL

NOTE: MUST USE SEMP10N.DSS AS THE DSS FILE TO IMPORT FLOWS ACROSS SUPERSTITN

LAST UPDATED ON 6/02/98

DDM MCUHP2 SOUTH EAST MESA ADMP - SOUTH OF SUPERSTITION FREEWAY

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47 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1APR97  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      4APR97  ENDING DATE
                    NDTIME        1115  ENDING TIME
                     ICENT          19  CENTURY MARK

              COMPUTATION INTERVAL     .08 HOURS
                   TOTAL TIME BASE   83.25 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

49 JD          INDEX STORM NO. 1
                      STRM        2.30  PRECIPITATION DEPTH
                      TRDA         .01  TRANSPOSITION DRAINAGE AREA

50 PI            PRECIPITATION PATTERN
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                  .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                  .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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60 JD          INDEX STORM NO. 2
                    STRM        2.29  PRECIPITATION DEPTH
                    TRDA        1.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                  .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                  .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                  .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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61 JD          INDEX STORM NO. 3
                    STRM        2.23  PRECIPITATION DEPTH
                    TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                  .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                  .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                  .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                  .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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62 JD          INDEX STORM NO. 4
                    STRM        2.16  PRECIPITATION DEPTH
                    TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                  .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
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63 JD INDEX STORM NO. 5

STRM 2.07 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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64 JD INDEX STORM NO. 6

STRM 1.98 PRECIPITATION DEPTH

TRDA 60.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
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 65 JD          INDEX STORM NO. 7
                     STRM        1.95  PRECIPITATION DEPTH
                     TRDA       90.00  TRANSPOSITION DRAINAGE AREA

  0 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                    .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                    .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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   -----DSS---ZOPEN:  Existing File Opened,  File: SEMP10N.DSS
                      Unit:  71;  DSS Version: 6-EA
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:      5  Number of data values:       1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:      5  Number of data values:    744
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
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        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97        JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97        JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
```

```
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97        JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97        JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
-----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97        JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97        JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97        JULSD: 02APR97
```

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        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:      5  Number of data values:       1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:      5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97        JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97        JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
-----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97        JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
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        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97       JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97       JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    3:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97       JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  577
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  578   NVALS:  744    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35522
        JULS: 31MAR97       JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  167  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  0
        Offset:       0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 3, 1997  1355  (  35522  835)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
```

```
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    744
        Starting date and time:  Apr 3, 1997  1355  (  35522  835)
        Ending   date and time:  Apr 6, 1997  0350  (  35525  230)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35522
        JULS: 03APR97        JULSD: 03APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  167  NDATA:  288  NREAD:  122  ILIM:  122
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  123   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35523
        JULS: 03APR97        JULSD: 04APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  410
        After ZRDINF, Record found: F
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  411   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35524
        JULS: 03APR97        JULSD: 05APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  698
-----DSS*** ZRRTS:  CAUTION - Data block not found in file.  Unit:  71
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/05APR1997/5MIN/100YR/
        After ZRDINF, Record found: F
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/06APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  699   NVALS:  744    JULS:   35522  ISTIME:   835
        NLDATA:  288   JULSD:   35525
        JULS: 03APR97        JULSD: 06APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   46  ILIM:  744
      ----- Exiting ZRRTS, Number of data values:    744,  Status:  3
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
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	SOSS	997.	13.08	419.	141.	61.	12.50		
+	ROUTED TO	RSOSS	988.	13.17	419.	141.	61.	12.50		
+	HYDROGRAPH AT	59A	155.	12.33	22.	7.	2.	.26		
+	2 COMBINED AT	C59A	1025.	12.50	439.	147.	63.	12.76		
+	ROUTED TO	59A59B	992.	13.42	438.	147.	63.	12.76		

+	HYDROGRAPH AT	59B	287.	12.92	63.	19.	6.	.94
+	2 COMBINED AT	C59B	1217.	12.83	493.	164.	69.	13.70
+	ROUTED TO	59BT60	1213.	12.92	493.	164.	69.	13.70
+	HYDROGRAPH AT	60	421.	13.75	152.	46.	15.	2.30
+	DIVERSION TO	D60	421.	13.75	152.	46.	15.	2.30
+	HYDROGRAPH AT	R60	0.	.00	0.	0.	0.	2.30
+	2 COMBINED AT	EMFGUA	1213.	12.92	493.	164.	69.	16.00
+	ROUTED TO	GUATEL	1122.	13.67	488.	163.	69.	16.00
+	HYDROGRAPH AT	64	189.	13.00	36.	9.	3.	.81
+	2 COMBINED AT	EMFELL	1190.	13.58	515.	171.	71.	16.81
+	ROUTED TO	ELTWAR	1096.	14.08	507.	171.	71.	16.81
+	HYDROGRAPH AT	61A	158.	12.50	23.	7.	2.	.52
+	ROUTED TO	61ATB	122.	13.08	23.	7.	2.	.52
+	HYDROGRAPH AT	61B	179.	13.00	34.	8.	3.	1.09
+	2 COMBINED AT	CP61B	292.	13.00	56.	15.	5.	1.61
+	ROUTED TO	61T62E	278.	13.25	56.	15.	5.	1.61
+	HYDROGRAPH AT	62E	60.	12.50	7.	2.	1.	.15
+	2 COMBINED AT	C62E	281.	13.25	62.	17.	6.	1.76
+	ROUTED TO	62ETF	226.	13.83	62.	17.	6.	1.76
+	HYDROGRAPH AT	62A	89.	12.67	14.	4.	1.	.38
+	ROUTED TO	62ATD	47.	13.92	14.	4.	1.	.38
+	HYDROGRAPH AT	62B	94.	12.42	11.	3.	1.	.23
+	ROUTED TO	62BTD	65.	12.92	11.	3.	1.	.23
+	HYDROGRAPH AT	62D	126.	12.58	16.	4.	1.	.46
+	3 COMBINED AT	CP62D	178.	12.83	41.	11.	4.	1.07
+	ROUTED TO	62DTF	175.	13.00	41.	11.	4.	1.07
+	HYDROGRAPH AT	62C	249.	12.42	29.	8.	3.	.55

+	ROUTED TO 62CTF	205.	12.75	28.	8.	3.	.55
+	HYDROGRAPH AT 62F	102.	12.50	12.	3.	1.	.26
+	4 COMBINED AT CP62	428.	12.75	137.	37.	12.	3.64
+	ROUTED TO 62T63	402.	13.17	137.	37.	12.	3.64
+	HYDROGRAPH AT 63	135.	13.58	38.	10.	3.	.91
+	2 COMBINED AT CP63	477.	13.25	172.	46.	15.	4.55
+	ROUTED TO 63T71	315.	15.75	164.	46.	15.	4.55
+	HYDROGRAPH AT ADOT-E	99.	14.00	66.	23.	8.	.01
+	ROUTED TO AET67A	98.	14.33	66.	23.	8.	.01
+	HYDROGRAPH AT 67A	100.	12.67	16.	5.	2.	.30
+	2 COMBINED AT C67A	116.	12.75	77.	28.	9.	.31
+	ROUTED TO 67ATC	104.	13.25	76.	28.	9.	.31
+	HYDROGRAPH AT SUP2	451.	12.17	323.	163.	55.	.01
+	ROUTED TO RSUP2	344.	15.75	320.	163.	55.	.01
+	HYDROGRAPH AT 67B	147.	12.92	29.	8.	3.	.53
+	2 COMBINED AT C67B	419.	12.92	337.	171.	58.	.54
+	ROUTED TO 67BTC	392.	13.58	336.	171.	58.	.54
+	HYDROGRAPH AT 67C	255.	12.83	42.	10.	3.	.93
+	3 COMBINED AT C67C	617.	13.00	438.	208.	70.	1.78
+	ROUTED TO 67CTE	545.	14.25	428.	208.	70.	1.78
+	HYDROGRAPH AT 67D	51.	12.50	6.	1.	0.	.13
+	ROUTED TO 67DTE	41.	12.92	6.	1.	0.	.13
+	HYDROGRAPH AT 67E	156.	12.92	27.	7.	2.	.58
+	3 COMBINED AT CP67E	556.	14.17	431.	216.	73.	2.49
+	ROUTED TO 67T68	540.	14.50	430.	216.	73.	2.49
+	HYDROGRAPH AT 68A	151.	12.50	18.	5.	2.	.35
+	2 COMBINED AT C68A	540.	14.50	431.	220.	74.	2.84

+	ROUTED TO 68ATB	540.	14.58	431.	220.	74.	2.84
+	HYDROGRAPH AT 68B	105.	12.42	11.	3.	1.	.25
+	2 COMBINED AT CP68B	540.	14.58	431.	223.	75.	3.09
+	ROUTED TO 68BT69	516.	15.08	429.	223.	75.	3.09
+	HYDROGRAPH AT 69	27.	12.58	3.	1.	0.	.09
+	2 COMBINED AT C69	516.	15.08	429.	223.	75.	3.18
+	ROUTED TO 69T71	498.	15.92	427.	223.	75.	3.18
+	HYDROGRAPH AT 71	167.	13.42	42.	11.	4.	1.09
+	3 COMBINED AT CP71	773.	15.92	570.	273.	92.	8.82
+	ROUTED TO 71T72	765.	16.08	569.	273.	92.	8.82
+	2 COMBINED AT EMFWAR	1428.	14.08	1013.	434.	160.	25.63
+	ROUTED TO WARTKN	1396.	14.33	1006.	433.	160.	25.63
+	HYDROGRAPH AT CAP1A	217.	2.00	217.	217.	217.	.01
+	ROUTED TO RCA1A	217.	3.67	217.	217.	217.	.01
+	HYDROGRAPH AT CAP1B	217.	2.00	217.	217.	217.	.01
+	ROUTED TO RCAP1B	217.	3.50	217.	217.	217.	.01
+	HYDROGRAPH AT 65AW	219.	12.33	19.	5.	2.	.43
+	3 COMBINED AT C65AW	653.	12.33	453.	439.	436.	.45
+	ROUTED TO 65AWTB	461.	16.58	451.	439.	435.	.45
+	HYDROGRAPH AT 65A	550.	13.00	105.	27.	9.	2.54
+	ROUTED TO 65ATB	419.	13.75	105.	27.	9.	2.54
+	HYDROGRAPH AT 65B	279.	13.33	67.	17.	6.	1.37
+	3 COMBINED AT CP65B	1053.	13.42	612.	480.	449.	4.36
+	ROUTED TO 65T66	1031.	13.75	612.	480.	449.	4.36
+	HYDROGRAPH AT 66A	133.	12.42	14.	4.	1.	.26
+	ROUTED TO 66ATB	99.	12.92	14.	4.	1.	.26
+	HYDROGRAPH AT 66B	145.	13.08	30.	7.	2.	.67

+	2 COMBINED AT	CP66B	226.	13.00	44.	11.	4.	.93
+	ROUTED TO	66BTC	180.	13.75	44.	11.	4.	.93
+	HYDROGRAPH AT	66C	144.	12.83	23.	6.	2.	.50
+	2 COMBINED AT	CP66C	253.	13.08	66.	17.	6.	1.43
+	ROUTED TO	66CTD	243.	13.42	66.	17.	6.	1.43
+	HYDROGRAPH AT	66D	105.	12.83	18.	4.	1.	.31
+	2 COMBINED AT	C66D	285.	13.33	83.	21.	7.	1.74
+	2 COMBINED AT	CP66	1253.	13.67	684.	499.	455.	6.10
+	ROUTED TO	66DT70	1241.	13.92	684.	499.	455.	6.10
+	HYDROGRAPH AT	70A	210.	12.67	30.	8.	3.	.54
+	2 COMBINED AT	C70A	1242.	13.92	708.	505.	458.	6.64
+	ROUTED TO	70ATB	1230.	14.33	708.	505.	457.	6.64
+	HYDROGRAPH AT	70B	139.	12.92	26.	6.	2.	.38
+	2 COMBINED AT	CP70B	1231.	14.25	727.	510.	459.	7.02
+	ROUTED TO	70BT76	1181.	14.92	725.	510.	458.	7.02
+	HYDROGRAPH AT	76B	216.	13.17	50.	12.	4.	.64
+	2 COMBINED AT	CP76B	1186.	14.92	761.	520.	462.	7.66
+	HYDROGRAPH AT	72	185.	13.17	40.	10.	3.	.84
+	2 COMBINED AT	KNOX	1186.	14.92	793.	528.	465.	8.50
+	2 COMBINED AT	EMFKNX	2391.	14.67	1703.	942.	618.	34.13
+	ROUTED TO	KNXTRY	2374.	14.83	1699.	942.	618.	34.13
+	HYDROGRAPH AT	76A	407.	14.00	144.	36.	12.	1.91
+	2 COMBINED AT	EMFRAY	2559.	14.75	1790.	970.	627.	36.04
+	HYDROGRAPH AT	73A	156.	13.33	39.	10.	3.	.95
+	ROUTED TO	73ATB	116.	14.00	39.	10.	3.	.95
+	HYDROGRAPH AT	73B	168.	12.50	19.	5.	2.	.42
+	2 COMBINED AT	CP73B	199.	12.50	57.	14.	5.	1.37

+	ROUTED TO	73BTC	154.	13.08	57.	14.	5.	1.37
+	HYDROGRAPH AT	73C	272.	12.42	27.	7.	2.	.58
+	2 COMBINED AT	CP73C	360.	12.42	83.	21.	7.	1.95
+	ROUTED TO	73T74C	288.	12.83	82.	21.	7.	1.95
+	HYDROGRAPH AT	74A	128.	13.33	31.	8.	3.	.75
+	ROUTED TO	74ATB	89.	14.25	31.	8.	3.	.75
+	HYDROGRAPH AT	74B	130.	12.58	16.	4.	1.	.33
+	2 COMBINED AT	CP74B	161.	12.58	47.	12.	4.	1.08
+	ROUTED TO	74BTC	144.	12.83	47.	12.	4.	1.08
+	HYDROGRAPH AT	74C	148.	12.58	20.	5.	2.	.34
+	3 COMBINED AT	CP74C	528.	12.75	145.	36.	12.	3.37
+	ROUTED TO	74CT75	505.	13.00	144.	36.	12.	3.37
+	HYDROGRAPH AT	75	470.	14.75	208.	56.	19.	4.01
+	2 COMBINED AT	CP75	637.	13.00	336.	88.	30.	7.38
+	ROUTED TO	75TCP	629.	13.08	335.	88.	30.	7.38
+	HYDROGRAPH AT	77A	229.	13.75	70.	17.	6.	1.74
+	ROUTED TO	77ATB	219.	13.92	69.	17.	6.	1.74
+	HYDROGRAPH AT	77B	174.	12.42	18.	5.	2.	.36
+	2 COMBINED AT	CP77B	219.	13.92	86.	22.	7.	2.10
+	ROUTED TO	77BTC	201.	14.33	86.	22.	7.	2.10
+	HYDROGRAPH AT	77C	137.	12.42	14.	3.	1.	.28
+	2 COMBINED AT	C77C	201.	14.33	98.	25.	8.	2.38
+	ROUTED TO	77CT78	197.	14.50	98.	25.	8.	2.38
+	HYDROGRAPH AT	78A	243.	14.25	89.	23.	8.	2.29
+	ROUTED TO	78ATB	231.	14.50	89.	23.	8.	2.29
+	HYDROGRAPH AT	78B	362.	12.17	36.	10.	3.	.39
+	2 COMBINED AT	C78B	355.	12.17	121.	32.	11.	2.68

+	ROUTED TO 78BTC	315.	12.33	121.	32.	11.	2.68
+	HYDROGRAPH AT 78C	244.	12.33	30.	8.	3.	.28
+	2 COMBINED AT C78C	553.	12.33	149.	40.	13.	2.96
+	2 COMBINED AT C78C2	644.	12.42	240.	63.	21.	5.34
+	ROUTED TO 78CT79	576.	12.67	238.	63.	21.	5.34
+	HYDROGRAPH AT 79A	454.	13.50	128.	32.	11.	2.01
+	2 COMBINED AT C79A1	746.	12.67	349.	91.	30.	7.35
+	HYDROGRAPH AT 78F	453.	14.17	164.	42.	14.	4.29
+	ROUTED TO 78FTD	423.	14.58	163.	42.	14.	4.29
+	HYDROGRAPH AT 78D	357.	12.83	61.	15.	5.	.89
+	2 COMBINED AT C78D	427.	14.58	216.	56.	19.	5.18
+	HYDROGRAPH AT 82A4	201.	13.75	84.	21.	7.	2.13
+	ROUTED TO R82A4	200.	14.00	84.	21.	7.	2.13
+	HYDROGRAPH AT 82A3	167.	13.92	78.	20.	7.	2.02
+	2 COMBINED AT C82A3	357.	14.00	157.	41.	14.	4.15
+	ROUTED TO RC82A3	354.	14.25	157.	41.	14.	4.15
+	HYDROGRAPH AT CAP2	64.	20.00	64.	64.	62.	.01
+	ROUTED TO RCAP2	64.	23.33	64.	64.	61.	.01
+	HYDROGRAPH AT 82A2	260.	14.42	147.	40.	13.	4.13
+	2 COMBINED AT C82A2	292.	14.75	183.	95.	74.	4.14
+	HYDROGRAPH AT 82A1	356.	13.42	122.	31.	10.	3.12
+	3 COMBINED AT C82A	791.	13.83	416.	155.	94.	11.41
+	ROUTED TO 82ATD	784.	14.08	415.	155.	94.	11.41
+	2 COMBINED AT C78D2	1092.	14.50	586.	200.	109.	16.59
+	ROUTED TO 78DTE	1067.	14.92	585.	200.	108.	16.59
+	HYDROGRAPH AT 78E	437.	12.75	76.	19.	6.	1.01
+	2 COMBINED AT C78E	1067.	14.92	636.	215.	114.	17.60

+	ROUTED TO 78T79B	1058.	15.08	632.	214.	113.	17.60
+	HYDROGRAPH AT 79B	350.	13.08	77.	19.	6.	1.00
+	2 COMBINED AT C79B	1061.	15.08	688.	229.	119.	18.60
+	2 COMBINED AT C79	1501.	13.50	977.	304.	144.	25.95
+	ROUTED TO 79TCP	1479.	13.75	967.	303.	143.	25.95
+	2 COMBINED AT CPPWR	1917.	14.92	1229.	371.	166.	33.33
+	ROUTED TO CPT80A	1901.	15.08	1218.	370.	165.	33.33
+	HYDROGRAPH AT 80A	1218.	13.00	335.	106.	35.	2.64
+	2 COMBINED AT CPOWER	2519.	13.42	1441.	445.	191.	35.97
+	2 COMBINED AT EMFPOW	4189.	15.00	2996.	1361.	800.	72.01
+	ROUTED TO POWTWI	4181.	15.08	2992.	1361.	800.	72.01
+	HYDROGRAPH AT 80B	656.	12.58	123.	39.	13.	1.12
+	2 COMBINED AT MFWIL	4196.	15.08	3036.	1386.	809.	73.13
+	ROUTED TO WILTSP	4185.	15.25	3031.	1386.	808.	73.13
+	HYDROGRAPH AT 82B	597.	12.17	38.	9.	3.	.92
+	DIVERSION TO TRW	597.	12.17	38.	9.	3.	.92
+	HYDROGRAPH AT DTTRW	0.	.00	0.	0.	0.	.92
+	ROUTED TO 82BT83	0.	.00	0.	0.	0.	.92
+	HYDROGRAPH AT 83	145.	13.25	33.	8.	3.	1.01
+	2 COMBINED AT C83	140.	13.25	32.	8.	3.	1.93
+	ROUTED TO 83T84	91.	14.42	31.	8.	3.	1.93
+	HYDROGRAPH AT 84	119.	13.33	28.	7.	2.	.99
+	2 COMBINED AT C84	123.	14.17	56.	15.	5.	2.92
+	ROUTED TO 84T85	121.	14.42	56.	15.	5.	2.92
+	HYDROGRAPH AT 85	100.	13.25	22.	6.	2.	1.00
+	2 COMBINED AT C85	165.	13.58	74.	19.	6.	3.92
+	ROUTED TO 85T86	162.	13.83	73.	19.	6.	3.92

+	HYDROGRAPH AT	86	114.	13.25	26.	6.	2.	1.00
+	2 COMBINED AT	C86	219.	13.67	94.	25.	8.	4.92
+	ROUTED TO	86T91	216.	14.00	93.	25.	8.	4.92
+	HYDROGRAPH AT	87A	95.	12.83	15.	4.	1.	.49
+	ROUTED TO	87ATB	63.	13.42	15.	4.	1.	.49
+	HYDROGRAPH AT	87B	89.	12.92	15.	4.	1.	.49
+	2 COMBINED AT	C87	120.	13.00	31.	8.	3.	.98
+	ROUTED TO	87T88B	114.	13.50	30.	8.	3.	.98
+	HYDROGRAPH AT	88A	118.	12.67	16.	4.	1.	.50
+	ROUTED TO	88ATB	84.	13.17	16.	4.	1.	.50
+	HYDROGRAPH AT	88B	90.	12.92	16.	4.	1.	.50
+	2 COMBINED AT	C88B	160.	13.00	31.	8.	3.	1.00
+	2 COMBINED AT	C88	224.	13.25	59.	15.	5.	1.98
+	ROUTED TO	88T89	220.	13.50	59.	15.	5.	1.98
+	HYDROGRAPH AT	89A	73.	13.00	14.	3.	1.	.50
+	ROUTED TO	89ATB	45.	13.83	13.	3.	1.	.50
+	HYDROGRAPH AT	89B	91.	12.83	14.	4.	1.	.50
+	2 COMBINED AT	C89B	93.	12.83	28.	7.	2.	1.00
+	2 COMBINED AT	C89	269.	13.50	83.	21.	7.	2.98
+	ROUTED TO	89T90	261.	13.83	82.	21.	7.	2.98
+	HYDROGRAPH AT	90A	129.	12.42	14.	3.	1.	.48
+	ROUTED TO	90ATB	43.	14.00	13.	3.	1.	.48
+	HYDROGRAPH AT	90B	163.	13.17	36.	10.	3.	.82
+	2 COMBINED AT	C90B	167.	13.17	49.	13.	4.	1.30
+	2 COMBINED AT	C90	365.	13.83	125.	33.	11.	4.28
+	ROUTED TO	90T91	363.	14.00	125.	33.	11.	4.28
+	HYDROGRAPH AT	91	103.	12.92	20.	5.	2.	.46

```
        3 COMBINED AT
+                          CP91      504.   14.08        205.        55.        18.       9.66

        ROUTED TO
+                           R91      502.   14.17        205.        55.        18.       9.66

        HYDROGRAPH AT
+                           81A      863.   12.75        201.        67.        22.       1.81

        ROUTED TO
+                         81ATB      790.   13.17        201.        67.        22.       1.81

        HYDROGRAPH AT
+                           81B      328.   12.67         59.        18.         6.        .84

        3 COMBINED AT
+                        RITTEN     1019.   13.17        430.       132.        44.      12.31

        2 COMBINED AT
+                        EMFRIT     4436.   14.58       3293.      1472.       837.      85.44


*** NORMAL END OF HEC-1 ***


   -----DSS---ZCLOSE Unit:  71,   File: SEMP10N.DSS
            Pointer Utilization:    .25
            Number of Records:      25
            File Size:      53.2  Kbytes
            Percent Inactive:     .0
```

APPENDIX K

10-YEAR, 24-HOUR
FUTURE CONDITION MODEL
HEC-1 OUTPUT

APPENDIX K

HEC-1 OUTPUT K-1 Northeast Mesa Area, 10-year, 24-hour Storm Future Land Use Condition **K-1**

HEC-1 OUTPUT K-2 Northwest Mesa Area, 10-year, 24-hour Storm, Future Land Use Conditions **K-18**

HEC-1 OUTPUT K-3 Southern Mesa Area, 10-year, 24-hour Storm, Future Land Use Conditions **K-34**

APPENDIX K-1

NORTHEAST MESA AREA
10-YR, 24-HOUR STORM
FUTURE LAND USE CONDITIONS
HEC-1 MODEL

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1****************************************
□
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUL   1997              *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   25JUN98  TIME  14:11:21  *
*                                      *
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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   FUTURE LAND USE WITH RETENTION AND EXISTING ROUTING
  2           ID   ASSUMING 80% RETENTION EFFECTIVENESS
  3           ID
  4           ID   SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
  5           ID   AREA NORTH OF SUPERSTITION FREEWAY
  6           ID
  7           ID
  8           ID   REVISED BY VALERIE SWICK, OCTOBER-NOVEMBER 1996
  9           ID   TO INCORPORATE THE SUPERSITION STRUCTURES AND COMBINE MODELS
 10           ID
 11           ID   FILENAME:  FUTN10YR.DAT
 12           ID
 13           ID   THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
 14           ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 17 SQ. MI.
 15           ID
 16           ID   10-YEAR 24-HOUR FREQUENCY
 17           ID
 18           ID
 19           ID   METHODOLOGY
 20           ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
 21           ID   SCS TYPE II RAINFALL DISTRIBUTION
 22           ID   S-GRAPH HYDROGRAPH
 23           ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
 24           ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
 25           ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
 26           ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
 27           ID   DATED 1994
 28           ID   THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS
 29           ID
 30           ID   INITIAL STUDY PERFORMED BY LISA C. YOUNG
 31           ID   REVIEWED BY VALERIE A. SWICK
 32           ID   HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
 33           ID   DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.
 34           ID
 35           ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
 36           ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL
 37           ID
 38           ID
 39           ID    LAST UPDATED ON 3/13/98
 40           ID
 41           ID    UPDATE WAS BASED UPON NEW MAG LAND USE DEFINITIONS FOR SINGLE FAMILY HOUSING
 42           ID
```

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 43          ID   DDM MCUHP2 MESA AREA DRAINAGE MASTER PLAN
             * *DIAGRAM
 44          IT       5  1APR97    0000    1000
 45          IO       5
 46          IN      15
 47          JD    2.30     .01
 48          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 49          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 50          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 51          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 52          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 53          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 54          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
1                                            HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 55          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 56          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 57          PC    .983    .986    .989    .992    .995    .998   1.000
 58          JD    2.29     1.0
 59          JD    2.23     5.0
 60          JD    2.16    10.0
 61          JD    2.07    30.0
 62          JD    1.98    60.0
 63          JD    1.95    90.0
             *
             * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR, 24-HR STORM
             *
*** NOLIST ***
```

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1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUL   1997               *
*           VERSION 4.1                 *
*                                       *
*  RUN DATE   25JUN98  TIME  14:11:21   *
*                                       *
*****************************************
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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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                    FUTURE LAND USE WITH RETENTION AND EXISTING ROUTING
                    ASSUMING 80% RETENTION EFFECTIVENESS

                    SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
                    AREA NORTH OF SUPERSTITION FREEWAY


                    REVISED BY VALERIE SWICK, OCTOBER-NOVEMBER 1996
                    TO INCORPORATE THE SUPERSITION STRUCTURES AND COMBINE MODELS

                    FILENAME:  FUTN10YR.DAT

                    THIS MODEL REPRESENTS THE EXISTING CONDITION OF THE WATERSHED.
                    TOTAL DRAINAGE AREA IS APPROXIMATELY 17 SQ. MI.

                    10-YEAR 24-HOUR FREQUENCY


                    METHODOLOGY
                    THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
                    SCS TYPE II RAINFALL DISTRIBUTION
                    S-GRAPH HYDROGRAPH
                    GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
                    NORMAL DEPTH STORAGE CHANNEL ROUTING
                    APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
                    EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
                    DATED 1994
                    THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS

                    INITIAL STUDY PERFORMED BY LISA C. YOUNG
                    REVIEWED BY VALERIE A. SWICK
                    HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
                    DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.

                    ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
                    CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL


                     LAST UPDATED ON 3/13/98

                     UPDATE WAS BASED UPON NEW MAG LAND USE DEFINITIONS FOR SINGLE FAMILY HOUSING

                    DDM MCUHP2 MESA AREA DRAINAGE MASTER PLAN

 45 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN           5  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1APR97  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ        1000  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      4APR97  ENDING DATE
                     NDTIME        1115  ENDING TIME
                      ICENT          19  CENTURY MARK

                 COMPUTATION INTERVAL     .08 HOURS
                      TOTAL TIME BASE   83.25 HOURS

          ENGLISH UNITS
               DRAINAGE AREA          SQUARE MILES
               PRECIPITATION DEPTH    INCHES
               LENGTH, ELEVATION      FEET
               FLOW                   CUBIC FEET PER SECOND
               STORAGE VOLUME         ACRE-FEET
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          SURFACE AREA          ACRES
          TEMPERATURE           DEGREES FAHRENHEIT

47 JD       INDEX STORM NO. 1
                STRM        2.30  PRECIPITATION DEPTH
                TRDA         .01  TRANSPOSITION DRAINAGE AREA

48 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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58 JD       INDEX STORM NO. 2
                STRM        2.29  PRECIPITATION DEPTH
                TRDA        1.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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                .00       .00       .00       .00       .00       .00       .00       .00

59 JD       INDEX STORM NO. 3
                STRM        2.23  PRECIPITATION DEPTH
                TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 0 PI         PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00		

60 JD INDEX STORM NO. 4

STRM 2.16 PRECIPITATION DEPTH

TRDA 10.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.00		

61 JD INDEX STORM NO. 5

STRM 2.07 PRECIPITATION DEPTH

TRDA 30.00 TRANSPOSITION DRAINAGE AREA

0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03

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                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00
62 JD         INDEX STORM NO. 6
                STRM        1.98  PRECIPITATION DEPTH
                TRDA       60.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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                .00       .00       .00       .00       .00       .00       .00       .00
63 JD         INDEX STORM NO. 7
                STRM        1.95  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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                    .00       .00       .00       .00       .00       .00       .00       .00
  -----DSS---ZOPEN:  Existing File Opened,  File: FUTN10YR.DSS
                    Unit:  71;  DSS Version: 6-EA
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    1:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    1:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    1:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    1:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/31MAR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/01APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/02APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    1:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/03APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    1:  /CONCENTRATION POINT C58/FLOW TO OVERCHUTES/FLOW/04APR1997/5MIN/OBSERVED/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    1:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    1:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    7:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    1:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    1:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    8:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    9:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    3:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   10:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   11:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    5:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.   12:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    6:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN//
 -----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/03APR1997/5MIN/100YR/
 -----DSS---ZWRITE Unit  71; Vers.    2:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/04APR1997/5MIN/100YR/
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
+                          42     703.   12.75        147.        46.         16.      1.75
        DIVERSION TO
+                          D42    703.   12.75         98.        27.          9.      1.75
        HYDROGRAPH AT
+                        RET42    493.   13.00         67.        19.          6.      1.75
        ROUTED TO
+                        42T51    382.   13.58         65.        19.          6.      1.75
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+	HYDROGRAPH AT	51	838.	12.33	128.	42.	14.	1.24
+	DIVERSION TO	D51	838.	12.33	89.	25.	8.	1.24
+	HYDROGRAPH AT	RET51	513.	12.58	58.	17.	6.	1.24
+	2 COMBINED AT	C51	503.	12.58	116.	35.	12.	2.99
+	ROUTED TO	51T53	398.	13.92	113.	35.	12.	2.99
+	HYDROGRAPH AT	44A	614.	12.75	127.	40.	13.	1.59
+	DIVERSION TO	D44A	614.	12.75	87.	24.	8.	1.59
+	HYDROGRAPH AT	RET44A	420.	13.00	55.	16.	5.	1.59
+	DIVERSION TO	D44A	336.	13.00	44.	13.	4.	1.59
+	HYDROGRAPH AT	DIV44A	84.	13.00	11.	3.	1.	1.59
+	HYDROGRAPH AT	43	895.	12.42	151.	50.	17.	1.42
+	DIVERSION TO	D43	895.	12.42	111.	31.	10.	1.42
+	HYDROGRAPH AT	RET43	530.	12.67	62.	19.	6.	1.42
+	2 COMBINED AT	C43	449.	12.75	70.	21.	7.	3.01
+	ROUTED TO	43T53	226.	14.08	67.	21.	7.	3.01
+	HYDROGRAPH AT	53	436.	12.50	72.	23.	8.	.78
+	DIVERSION TO	D53	436.	12.50	49.	14.	5.	.78
+	HYDROGRAPH AT	RET53	322.	12.67	32.	9.	3.	.78
+	3 COMBINED AT	C53	571.	14.00	190.	61.	20.	6.78
+	HYDROGRAPH AT	54	262.	12.50	43.	13.	4.	.49
+	DIVERSION TO	D54	211.	12.33	19.	6.	2.	.49
+	HYDROGRAPH AT	RET54	262.	12.50	28.	8.	3.	.49
+	2 COMBINED AT	C54	576.	14.00	211.	68.	23.	7.27
+	DIVERSION TO	SOUTH	63.	14.00	4.	1.	0.	7.27
+	HYDROGRAPH AT	DCAP12	513.	14.00	207.	67.	22.	7.27
+	ROUTED TO	CAP12	449.	14.25	206.	67.	22.	7.27
+	HYDROGRAPH AT	DR44A	614.	12.75	87.	24.	8.	1.59

+	ROUTED TO 44ATB	390.	13.67	88.	24.	8.	1.59
+	HYDROGRAPH AT 44B	751.	12.42	113.	36.	12.	1.06
+	DIVERSION TO D44B	456.	12.17	41.	12.	4.	1.06
+	HYDROGRAPH AT RET44B	751.	12.42	85.	23.	8.	1.06
+	2 COMBINED AT C44B	897.	12.42	164.	48.	16.	1.06
+	ROUTED TO CAP10+	842.	12.50	164.	48.	16.	1.06
+	ROUTED TO RCAP11	833.	12.58	164.	48.	16.	1.06
+	2 COMBINED AT C12	913.	12.67	353.	111.	37.	8.33
+	ROUTED TO ADOT-W	292.	15.00	271.	111.	37.	8.33
+	ROUTED TO RADOTW	292.	15.08	271.	111.	37.	8.33
+	HYDROGRAPH AT 36B	177.	12.58	29.	8.	3.	.32
+	DIVERSION TO D36B	177.	12.58	29.	8.	3.	.32
+	HYDROGRAPH AT RET36B	0.	.00	0.	0.	0.	.32
+	2 COMBINED AT C36B	292.	15.08	271.	111.	37.	8.65
+	HYDROGRAPH AT RSOUTH	63.	14.00	4.	1.	0.	7.27
+	HYDROGRAPH AT 57	254.	12.00	22.	7.	2.	.18
+	DIVERSION TO D57	254.	12.00	22.	7.	2.	.18
+	HYDROGRAPH AT RET57	0.	.00	0.	0.	0.	.18
+	2 COMBINED AT C57	124.	13.92	13.	3.	1.	.18
+	ROUTED TO CAP13+	115.	14.00	13.	3.	1.	.18
+	HYDROGRAPH AT 36A	72.	12.25	8.	3.	1.	.10
+	DIVERSION TO D36A	72.	12.25	8.	3.	1.	.10
+	HYDROGRAPH AT RET36A	0.	24.17	0.	0.	0.	.10
+	2 COMBINED AT C36A	115.	14.00	13.	3.	1.	.28
+	ROUTED TO ADOT-E	15.	14.42	9.	3.	1.	.28
+	2 COMBINED AT CFAKE	294.	15.08	272.	111.	37.	8.93
+	HYDROGRAPH AT 52	292.	12.42	49.	16.	5.	.43

+	DIVERSION TO	D52	292.	12.42	47.	13.	4.	.43
+	HYDROGRAPH AT	RET52	17.	13.83	8.	3.	1.	.43
+	HYDROGRAPH AT	56	426.	12.42	70.	23.	8.	.55
+	DIVERSION TO	D56	426.	12.42	45.	13.	4.	.55
+	HYDROGRAPH AT	RET56	311.	12.50	35.	10.	3.	.55
+	2 COMBINED AT	C56	310.	12.58	41.	13.	4.	.98
+	ROUTED TO	56T58	210.	12.92	40.	13.	4.	.98
+	HYDROGRAPH AT	58	737.	12.33	113.	38.	13.	.95
+	DIVERSION TO	D58	737.	12.33	113.	37.	12.	.95
+	HYDROGRAPH AT	RET58	9.	22.08	4.	1.	0.	.95
+	2 COMBINED AT	C58	210.	12.92	40.	14.	5.	1.93
+	HYDROGRAPH AT	46B	223.	12.42	38.	13.	4.	.36
+	DIVERSION TO	D46B	18.	11.33	7.	3.	1.	.36
+	HYDROGRAPH AT	RET46B	223.	12.42	36.	10.	3.	.36
+	ROUTED TO	CAP6	190.	12.50	36.	10.	3.	.36
+	ROUTED TO	RCAP6	187.	12.58	36.	10.	3.	.36
+	ROUTED TO	RCAP6B	187.	12.67	36.	10.	3.	.36
+	HYDROGRAPH AT	29A	109.	12.25	14.	4.	1.	.18
+	DIVERSION TO	D29A	109.	12.25	14.	4.	1.	.18
+	HYDROGRAPH AT	RET29A	0.	.00	0.	0.	0.	.18
+	2 COMBINED AT	C29A	187.	12.67	36.	10.	3.	.54
+	DIVERSION TO	29A-W	0.	.00	0.	0.	0.	.54
+	HYDROGRAPH AT	29A-S	187.	12.67	36.	10.	3.	.54
+	ROUTED TO	29ATB	187.	12.67	36.	10.	3.	.54
+	HYDROGRAPH AT	45A	192.	12.67	37.	11.	4.	.62
+	DIVERSION TO	D45A	192.	12.67	37.	11.	4.	.62
+	HYDROGRAPH AT	RET45A	0.	.00	0.	0.	0.	.62

+	DIVERSION TO	45ATB	0.	.00	0.	0.	0.	.62
+	HYDROGRAPH AT	D45A	0.	.00	0.	0.	0.	.62
+	HYDROGRAPH AT	55B	525.	13.00	141.	45.	15.	1.86
+	DIVERSION TO	D55B	525.	13.00	141.	45.	15.	1.86
+	HYDROGRAPH AT	RET55B	0.	.00	0.	0.	0.	1.86
+	2 COMBINED AT	C55B	0.	.00	0.	0.	0.	2.48
+	ROUTED TO	CAP7	0.	.00	0.	0.	0.	2.48
+	ROUTED TO	RCAP7	0.	.00	0.	0.	0.	2.48
+	HYDROGRAPH AT	29B	41.	12.25	4.	1.	0.	.08
+	DIVERSION TO	D29B	41.	12.25	4.	1.	0.	.08
+	HYDROGRAPH AT	RET29B	0.	.00	0.	0.	0.	.08
+	2 COMBINED AT	C29B1	0.	.00	0.	0.	0.	2.56
+	2 COMBINED AT	C29B2	187.	12.67	36.	10.	3.	3.10
+	ROUTED TO	29BTC	184.	12.67	35.	10.	3.	3.10
+	HYDROGRAPH AT	RD45A	0.	.00	0.	0.	0.	.62
+	ROUTED TO	45ATB	0.	.00	0.	0.	0.	.62
+	HYDROGRAPH AT	45B	403.	12.50	74.	24.	8.	.66
+	DIVERSION TO	D45B	381.	12.42	42.	12.	4.	.66
+	HYDROGRAPH AT	RET45B	390.	12.58	43.	12.	4.	.66
+	2 COMBINED AT	C45B	390.	12.58	43.	12.	4.	.66
+	ROUTED TO	CAP8	220.	12.83	43.	12.	4.	.66
+	ROUTED TO	RCAP8	189.	13.50	42.	12.	4.	.66
+	HYDROGRAPH AT	29C	148.	12.33	20.	6.	2.	.23
+	DIVERSION TO	D29C	148.	12.33	20.	6.	2.	.23
+	HYDROGRAPH AT	RET29C	0.	.00	0.	0.	0.	.23
+	2 COMBINED AT	C29C1	189.	13.50	42.	12.	4.	.89
+	2 COMBINED AT	C29C2	215.	13.42	73.	22.	7.	3.99

+	ROUTED TO 29CT36	214.	13.50	73.	22.	7.	3.99
+	HYDROGRAPH AT 55	135.	12.08	11.	4.	1.	.14
+	DIVERSION TO D55	135.	12.08	11.	4.	1.	.14
+	HYDROGRAPH AT RET55	0.	.00	0.	0.	0.	.14
+	ROUTED TO CAP9	0.	.00	0.	0.	0.	.14
+	ROUTED TO RCAP9	0.	.00	0.	0.	0.	.14
+	HYDROGRAPH AT 29D	353.	12.50	65.	21.	7.	.65
+	DIVERSION TO D29D	353.	12.50	49.	14.	5.	.65
+	HYDROGRAPH AT RET29D	216.	12.83	25.	8.	3.	.65
+	ROUTED TO 29T36	82.	13.92	23.	8.	3.	.65
+	HYDROGRAPH AT 36C	514.	12.08	66.	23.	8.	.44
+	DIVERSION TO D36C	514.	12.08	65.	19.	6.	.44
+	HYDROGRAPH AT RET36C	17.	14.67	11.	4.	1.	.44
+	4 COMBINED AT C36	222.	13.67	96.	31.	10.	5.22
+	ROUTED TO 36T37	221.	13.83	95.	31.	10.	5.22
+	HYDROGRAPH AT 29AWST	0.	.00	0.	0.	0.	.54
+	HYDROGRAPH AT 30	515.	12.58	108.	36.	12.	1.12
+	DIVERSION TO D30	267.	12.17	33.	11.	4.	1.12
+	HYDROGRAPH AT RET30	515.	12.58	91.	26.	9.	1.12
+	2 COMBINED AT C30	515.	12.58	91.	26.	9.	1.12
+	ROUTED TO 30T37	498.	12.75	91.	26.	9.	1.12
+	HYDROGRAPH AT 37	545.	12.08	68.	24.	8.	.47
+	DIVERSION TO D37	545.	12.08	66.	19.	6.	.47
+	HYDROGRAPH AT RET37	24.	13.92	13.	4.	1.	.47
+	3 COMBINED AT C37	640.	12.75	182.	57.	19.	6.81
+	ROUTED TO ADOTEL	16.	24.67	16.	16.	15.	6.81
+	ROUTED TO 37T38	16.	24.83	16.	16.	15.	6.81

+	HYDROGRAPH AT	17A	138.	12.17	17.	6.	2.	.18
+	DIVERSION TO	D17A	84.	12.00	7.	2.	1.	.18
+	HYDROGRAPH AT	RET17A	138.	12.17	13.	4.	1.	.18
+	ROUTED TO	17AT23	139.	12.25	13.	4.	1.	.18
+	HYDROGRAPH AT	23	202.	12.25	26.	9.	3.	.28
+	DIVERSION TO	D23	202.	12.25	18.	5.	2.	.28
+	HYDROGRAPH AT	RET23	127.	12.33	12.	3.	1.	.28
+	HYDROGRAPH AT	48	329.	12.50	50.	16.	5.	.77
+	DIVERSION TO	D48	329.	12.50	50.	14.	5.	.77
+	HYDROGRAPH AT	RET48	6.	15.92	4.	1.	0.	.77
+	ROUTED TO	CAP3	7.	16.00	4.	1.	0.	.77
+	ROUTED TO	RCAP3A	6.	16.25	4.	1.	0.	.77
+	ROUTED TO	RCAP3B	6.	17.08	4.	1.	0.	.77
+	HYDROGRAPH AT	17B	181.	12.25	25.	8.	3.	.22
+	DIVERSION TO	D17B	69.	11.92	8.	3.	1.	.22
+	HYDROGRAPH AT	RET17B	181.	12.25	21.	6.	2.	.22
+	2 COMBINED AT	C17B	181.	12.25	22.	7.	2.	.99
+	ROUTED TO	17BT22	177.	12.17	22.	7.	2.	.99
+	HYDROGRAPH AT	47	434.	12.92	95.	29.	10.	1.67
+	DIVERSION TO	D47	434.	12.92	95.	29.	10.	1.67
+	HYDROGRAPH AT	RET47	0.	.00	0.	0.	0.	1.67
+	ROUTED TO	CAP4+5	0.	.00	0.	0.	0.	1.67
+	ROUTED TO	RCAP4	0.	.00	0.	0.	0.	1.67
+	HYDROGRAPH AT	22	320.	12.25	43.	15.	5.	.41
+	DIVERSION TO	D22	194.	12.00	18.	6.	2.	.41
+	HYDROGRAPH AT	RET22	320.	12.25	32.	9.	3.	.41
+	2 COMBINED AT	C22A	314.	12.25	31.	9.	3.	2.08

+	2 COMBINED AT	C22	482.	12.25	51.	15.	5.	3.07
+	ROUTED TO	22T23	238.	12.58	49.	15.	5.	3.07
+	3 COMBINED AT	C23	354.	12.50	72.	22.	7.	3.53
+	ROUTED TO	23T24	359.	12.50	71.	22.	7.	3.53
+	HYDROGRAPH AT	49	342.	12.50	53.	16.	5.	.79
+	DIVERSION TO	D49	342.	12.50	50.	14.	5.	.79
+	HYDROGRAPH AT	RET49	29.	13.50	8.	3.	1.	.79
+	ROUTED TO	CAP2	28.	13.50	8.	3.	1.	.79
+	ROUTED TO	RCAP2	17.	14.25	8.	3.	1.	.79
+	HYDROGRAPH AT	50	200.	12.25	26.	9.	3.	.28
+	DIVERSION TO	D50	200.	12.25	24.	7.	2.	.28
+	HYDROGRAPH AT	RET50	26.	12.83	6.	2.	1.	.28
+	ROUTED TO	CAP1	24.	12.92	7.	5.	5.	.28
+	ROUTED TO	RCAP1	19.	13.33	7.	5.	5.	.28
+	HYDROGRAPH AT	18A	637.	12.33	93.	31.	10.	1.01
+	DIVERSION TO	D18A	620.	12.25	58.	17.	6.	1.01
+	HYDROGRAPH AT	RET18A	568.	12.42	49.	14.	5.	1.01
+	3 COMBINED AT	C18A	520.	12.42	59.	22.	11.	2.08
+	ROUTED TO	18T24	440.	12.58	58.	22.	11.	2.08
+	HYDROGRAPH AT	24	200.	12.25	27.	9.	3.	.29
+	DIVERSION TO	D24	5.	8.75	3.	1.	0.	.29
+	HYDROGRAPH AT	RET24	200.	12.25	27.	8.	3.	.29
+	3 COMBINED AT	C24	811.	12.58	143.	49.	20.	5.90
+	ROUTED TO	24T31A	605.	12.92	142.	49.	20.	5.90
+	ROUTED TO	24T31B	589.	13.00	142.	49.	20.	5.90
+	HYDROGRAPH AT	31B	265.	12.42	42.	14.	5.	.47
+	DIVERSION TO	D31B	265.	12.42	41.	12.	4.	.47

+	HYDROGRAPH AT	RET31B	10.	14.50	6.	2.	1.	.47
+	2 COMBINED AT	C31	580.	13.08	143.	50.	20.	6.37
+	DIVERSION TO	D31W	280.	13.08	21.	5.	2.	6.37
+	HYDROGRAPH AT	D31	300.	12.92	121.	44.	18.	6.37
+	ROUTED TO	31T38	300.	13.33	121.	44.	18.	6.37
+	HYDROGRAPH AT	31A	349.	12.33	53.	18.	6.	.53
+	DIVERSION TO	D31A	290.	12.25	27.	8.	3.	.53
+	HYDROGRAPH AT	RET31A	349.	12.33	34.	10.	3.	.53
+	ROUTED TO	31AT38	254.	12.75	34.	10.	3.	.53
+	HYDROGRAPH AT	38	350.	12.25	53.	18.	6.	.47
+	DIVERSION TO	D38	258.	12.17	25.	8.	3.	.47
+	HYDROGRAPH AT	RET38	350.	12.25	36.	10.	3.	.47
+	4 COMBINED AT	C38	473.	12.92	185.	73.	37.	14.18
+	ROUTED TO	38T39	466.	13.00	185.	73.	37.	14.18
+	DIVERSION TO	DB10	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD10	466.	13.00	185.	73.	37.	14.18
+	DIVERSION TO	DB9	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD9	466.	13.00	185.	73.	37.	14.18
+	DIVERSION TO	DB8	6.	13.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD8	461.	13.00	185.	73.	37.	14.18
+	DIVERSION TO	DB7	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD7	461.	13.00	185.	73.	37.	14.18
+	DIVERSION TO	DB6	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD6	461.	13.00	185.	73.	37.	14.18
+	DIVERSION TO	DB5	0.	.00	0.	0.	0.	14.18
+	HYDROGRAPH AT	ADD5	461.	13.00	185.	73.	37.	14.18
+	HYDROGRAPH AT	D31W	280.	13.08	21.	5.	2.	6.37

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          ROUTED TO
+                        31WT32      140.   13.50          21.          5.          2.        6.37

          HYDROGRAPH AT
+                            32      212.   12.33          28.          9.          3.         .38

          2 COMBINED AT
+                           C32      229.   13.33          58.         16.          5.         .38

          ROUTED TO
+                        32T39      224.   13.42          58.         16.          5.         .38

          HYDROGRAPH AT
+                            39      222.   12.42          35.         12.          4.         .36

          DIVERSION TO
+                           D39       13.   11.08           6.          2.          1.         .36

          HYDROGRAPH AT
+                        RET39      222.   12.42          35.         10.          3.         .36

          3 COMBINED AT
+                           C39      711.   12.42         248.         91.         43.       14.92

          DIVERSION TO
+                         BASIN        0.     .00           0.          0.          0.       14.92

          HYDROGRAPH AT
+                          SOSS      711.   12.42         248.         91.         43.       14.92
1
                                   SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
                                       (FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)
                                                                          INTERPOLATED TO
                                                                       COMPUTATION INTERVAL
           ISTAQ    ELEMENT      DT        PEAK    TIME TO     VOLUME      DT        PEAK    TIME TO     VOLUME
                                                     PEAK                                       PEAK

                                (MIN)      (CFS)     (MIN)      (IN)     (MIN)      (CFS)     (MIN)       (IN)

          FOR STORM = 1  STORM AREA (SQ MI) =        .01
            RCAP11  MANE         2.05    845.40    754.15      1.69      5.00    838.73    755.00       1.69

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .9537E+02 EXCESS= .0000E+00 OUTFLOW= .9553E+02 BASIN STORAGE= .1179E-04 PERCENT ERROR=   -
.2

          FOR STORM = 2  STORM AREA (SQ MI) =       1.00
            RCAP11  MANE         2.10    834.70    752.93      1.68      5.00    834.43    755.00       1.69

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .9494E+02 EXCESS= .0000E+00 OUTFLOW= .9516E+02 BASIN STORAGE= .1097E-04 PERCENT ERROR=   -
.2

          FOR STORM = 3  STORM AREA (SQ MI) =       5.00
            RCAP11  MANE         2.12    809.90    753.11      1.64      5.00    808.08    755.00       1.64

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .9248E+02 EXCESS= .0000E+00 OUTFLOW= .9262E+02 BASIN STORAGE= .1270E-04 PERCENT ERROR=   -
.1

          FOR STORM = 4  STORM AREA (SQ MI) =      10.00
            RCAP11  MANE         2.12    777.92    753.54      1.59      5.00    774.25    755.00       1.59

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .8989E+02 EXCESS= .0000E+00 OUTFLOW= .9008E+02 BASIN STORAGE= .1187E-04 PERCENT ERROR=   -
.2

          FOR STORM = 5  STORM AREA (SQ MI) =      30.00
            RCAP11  MANE         2.16    741.38    754.60      1.53      5.00    738.42    755.00       1.53

 CONTINUITY SUMMARY (AC-FT) - INFLOW= .8635E+02 EXCESS= .0000E+00 OUTFLOW= .8645E+02 BASIN STORAGE= .1240E-04 PERCENT ERROR=   -
.1

          FOR STORM = 6  STORM AREA (SQ MI) =      60.00
```

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          RCAP11  MANE          2.14     698.06     754.64      1.47      5.00     695.68     755.00        1.47

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8274E+02 EXCESS= .0000E+00 OUTFLOW= .8294E+02 BASIN STORAGE= .1104E-04 PERCENT ERROR=  -
.2

        FOR STORM = 7  STORM AREA (SQ MI) =       90.00
          RCAP11  MANE          2.21     674.19     754.22      1.45      5.00     671.82     755.00        1.45

CONTINUITY SUMMARY (AC-FT) - INFLOW= .8158E+02 EXCESS= .0000E+00 OUTFLOW= .8176E+02 BASIN STORAGE= .9544E-05 PERCENT ERROR=  -
.2



*** NORMAL END OF HEC-1 ***


  -----DSS---ZCLOSE Unit:  71,   File: FUTN10YR.DSS
            Pointer Utilization:    .25
            Number of Records:      25
            File Size:      53.2  Kbytes
            Percent Inactive:     .0
```

APPENDIX K-2

NORTHWEST MESA AREA
10-YR, 24-HOUR STORM
FUTURE LAND USE CONDITIONS
HEC-1 MODEL

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1****************************************
□
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUL   1997              *
*           VERSION 4.1                *
*                                      *
*  RUN DATE   25JUN98  TIME  15:41:18  *
*                                      *
****************************************
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****************************************
*                                      *
*    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

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID   FILENAME: FUTP2-10.DAT
  2           ID
  3           ID   ASSUME 80% RETENTION EFFECTIVENESS
  4           ID
  5           ID   AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROADS TO THE EAST
  6           ID
  7           ID   ALL STREET ROUTINGS HAVE N VALUES OF .015 FOR ASPHALT AND .03 FOR OVERLAND
  8           ID   FLOWS
  9           ID
 10           ID   EAST MARICOPA COUNTY AREA DRAINAGE MASTER STUDY - PHASE 2
 11           ID   THIS AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROAD TO THE
 12           ID   EAST, MCDOWELL ROAD TO THE NORTH AND THE SUPERSTITION FREEWAY TO THE SOUTH  .
 13           ID
 14           ID   THIS MODEL REPRESENTS THE FUTURE CONDITION OF THE WATERSHED.
 15           ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 18.60 SQ. MI.
 16           ID   THIS MODEL USES THE REVISED LAND USE AND A Kn VALUE OF 0.09 FOR DESERT LAND
 17           ID   USES
 18           ID
 19           ID   THIS MODEL WAS REVISED TO ESTABLISH CONCENTRATION POINTS AND HYDROGRAPHS
 20           ID   ENTERING INTO THE EMF.
 21           ID   INITIAL REVISION IN MARCH 1997
 22           ID
 23           ID   10-YEAR 24-HOUR FREQUENCY
 24           ID
 25           ID   METHODOLOGY:
 26           ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
 27           ID   SCS TYPE II RAINFALL DISTRIBUTION
 28           ID   S-GRAPH HYDROGRAPH
 29           ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
 30           ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
 31           ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
 32           ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
 33           ID   DATED 1994
 34           ID   THE NOAA TECHNICAL MEMORANDUM NWS HYDRO-40 DEPTH AREA RATIOS
 35           ID
 36           ID   STUDY INITIALLY PERFORMED BY LISA C. YOUNG
 37           ID   REVISED BY VALERIE A. SWICK
 38           ID   HYDROLOGY BRANCH, ENGINEERING DISTRICT,
 39           ID   FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, SPRING 1996
 40           ID
 41           ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL
 42           ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL,  5FT/SEC FOR CONCRETE CHANNEL
```

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 43          ID
 44          ID   THIS MODEL DOES NOT REFLECT THE STORM DRAINS IN THE AREA AS THEY HAVE A LOW
 45          ID   CAPACITY AND OUTLET AT THE SAME LOCATION AS SURFACE FLOW
 46          ID
 47          ID
 48          ID     ******************************************************************
 49          ID     * THIS FUTURE CONDITIONS MODEL MUST USE USE THE DSS FILE FROM THE   *
 50          ID     * FUTNORTH MODEL (FUTNORTH.DSS) BECAUSE THERE IS A SPLIT FLOW AT    *
 51          ID     * BROADWAY AND HAWES ROADS.  THIS IS MODELED AS A 50/50 SPLIT, IF   *
 52          ID     * IT WILL ACTUALLY OCCUR IN THE FUTURE IS NOT KNOWN. THIS FLOW IS   *
 53          ID     * BROUGHT INTO THE MODEL AT SUBBASIN 25 WHICH IS WEST OF HAWES ROAD *
 54          ID     ******************************************************************
 55          ID
1                                        HEC-1 INPUT                                    PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 56          ID     ******************************************************************
 57          ID     * RETENTION VOLUME WERE OBTAINED BY USE OF THE 100-YR 2-HR MODEL.   *
 58          ID     * BASINS WITH OLDER DEVELOPMENT WILL NOT HAVE 100% OF THIS VOLUME   *
 59          ID     * AS RETENTION, BUT INSTEAD WILL HAVE A PERCENTAGE BASED UPON THE   *
 60          ID     * AMOUNT THAT CAN BE DEVELOPED IN THE FUTURE. THIS WAS BASED UPON   *
 61          ID     * EXAMINATION OF AERIAL PHOTOS AND FIELD OBSERVATION.               *
 62          ID     * 100% OF THE VOLUME FROM THE 100-YR 2-HR MODEL IS TERMED ULTIMATE  *
 63          ID     ******************************************************************
 64          ID
 65          ID
 66          ID     LAST UPDATED ON  3/13/98
 67          ID
 68          ID
 69          ID   DDM MCUHP2 Phase 2 model, north of Superstition Freeway
             * *DIAGRAM
 70          IT       5  1APR97    0000     300
 71          IO       5
 72          IN      15
             *
 73          JD    2.30    0.01
 74          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 75          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 76          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 77          PC    .110    .115    .120    .126    .133    .140    .147    .150    .163    .172
 78          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 79          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 80          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 81          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 82          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 83          PC    .983    .986    .999    .992    .995    .998   1.000
 84          JD    2.29     1.0
 85          JD    2.23     5.0
 86          JD    2.16    10.0
 87          JD    2.07    30.0
 88          JD    1.98    60.0
 89          JD    1.95    90.0
             *
             * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR, 24-HR STORM.
             *
*** NOLIST ***
```

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1****************************************                    ****************************************
□
 *                                      *                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *    U.S. ARMY CORPS OF ENGINEERS      *
 *              JUL   1997              *                    *    HYDROLOGIC ENGINEERING CENTER     *
 *           VERSION 4.1                *                    *          609 SECOND STREET           *
 *                                      *                    *       DAVIS, CALIFORNIA 95616        *
 *  RUN DATE   25JUN98  TIME  15:41:18  *                    *           (916) 756-1104             *
 *                                      *                    *                                      *
 ****************************************                    ****************************************
```

FILENAME: FUTP2-10.DAT

ASSUME 80% RETENTION EFFECTIVENESS

AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROADS TO THE EAST

ALL STREET ROUTINGS HAVE N VALUES OF .015 FOR ASPHALT AND .03 FOR OVERLAND FLOWS

EAST MARICOPA COUNTY AREA DRAINAGE MASTER STUDY - PHASE 2
THIS AREA IS BOUNDED BY THE EMF TO THE WEST, THE CAP AND VARIOUS ROAD TO THE EAST, MCDOWELL ROAD TO THE NORTH AND THE SUPERSTITION FREEWAY TO THE SOUTH

THIS MODEL REPRESENTS THE FUTURE CONDITION OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 18.60 SQ. MI.
THIS MODEL USES THE REVISED LAND USE AND A Kn VALUE OF 0.09 FOR DESERT LAND USES

THIS MODEL WAS REVISED TO ESTABLISH CONCENTRATION POINTS AND HYDROGRAPHS ENTERING INTO THE EMF.
INITIAL REVISION IN MARCH 1997

10-YEAR 24-HOUR FREQUENCY

METHODOLOGY:
THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
SCS TYPE II RAINFALL DISTRIBUTION
S-GRAPH HYDROGRAPH
GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
NORMAL DEPTH STORAGE CHANNEL ROUTING
APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS DATED 1994
THE NOAA TECHNICAL MEMORANDUM NWS HYDRO-40 DEPTH AREA RATIOS

STUDY INITIALLY PERFORMED BY LISA C. YOUNG
REVISED BY VALERIE A. SWICK
HYDROLOGY BRANCH, ENGINEERING DISTRICT,
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, SPRING 1996

ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2 FT/SEC FOR WASH/NATURAL CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 5FT/SEC FOR CONCRETE CHANNEL

THIS MODEL DOES NOT REFLECT THE STORM DRAINS IN THE AREA AS THEY HAVE A LOW CAPACITY AND OUTLET AT THE SAME LOCATION AS SURFACE FLOW

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*******************************************************************
* THIS FUTURE CONDITIONS MODEL MUST USE USE THE DSS FILE FROM THE   *
* FUTNORTH MODEL (FUTNORTH.DSS) BECAUSE THERE IS A SPLIT FLOW AT    *
* BROADWAY AND HAWES ROADS.  THIS IS MODELED AS A 50/50 SPLIT, IF   *
* IT WILL ACTUALLY OCCUR IN THE FUTURE IS NOT KNOWN. THIS FLOW IS   *
* BROUGHT INTO THE MODEL AT SUBBASIN 25 WHICH IS WEST OF HAWES ROAD *
*******************************************************************

*******************************************************************
* RETENTION VOLUME WERE OBTAINED BY USE OF THE 100-YR 2-HR MODEL.   *
* BASINS WITH OLDER DEVELOPMENT WILL NOT HAVE 100% OF THIS VOLUME   *
* AS RETENTION, BUT INSTEAD WILL HAVE A PERCENTAGE BASED UPON THE   *
* AMOUNT THAT CAN BE DEVELOPED IN THE FUTURE. THIS WAS BASED UPON   *
* EXAMINATION OF AERIAL PHOTOS AND FIELD OBSERVATION.               *
* 100% OF THE VOLUME FROM THE 100-YR 2-HR MODEL IS TERMED ULTIMATE  *
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LAST UPDATED ON 3/13/98

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                    DDM MCUHP2 Phase 2 model, north of Superstition Freeway

71 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1APR97  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2APR97  ENDING DATE
                    NDTIME        0055  ENDING TIME
                     ICENT          19  CENTURY MARK

                COMPUTATION INTERVAL     .08 HOURS
                     TOTAL TIME BASE   24.92 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

73 JD          INDEX STORM NO. 1
                      STRM        2.30  PRECIPITATION DEPTH
                      TRDA         .01  TRANSPOSITION DRAINAGE AREA

74 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                    .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                    .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                    .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                    .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                    .00       .00       .00       .00       .00       .00       .00       .00

84 JD          INDEX STORM NO. 2
                      STRM        2.29  PRECIPITATION DEPTH
                      TRDA        1.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00
85 JD         INDEX STORM NO. 3
                 STRM        2.23  PRECIPITATION DEPTH
                 TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00
86 JD         INDEX STORM NO. 4
                 STRM        2.16  PRECIPITATION DEPTH
                 TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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87 JD         INDEX STORM NO. 5
                STRM        2.07  PRECIPITATION DEPTH
                TRDA       30.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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                .00       .00       .00       .00       .00       .00       .00       .00

88 JD         INDEX STORM NO. 6
                STRM        1.98  PRECIPITATION DEPTH
                TRDA       60.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00

89 JD         INDEX STORM NO. 7
                STRM        1.95  PRECIPITATION DEPTH
                TRDA       90.00  TRANSPOSITION DRAINAGE AREA
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0 PI PRECIPITATION PATTERN

.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
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.00	.00	.00	.00	.00	.00	.00	.01	.00	.01
.01	.01	.01	.01	.01	.01	.01	.01	.03	.03
.03	.09	.09	.09	.01	.01	.01	.01	.01	.01
.01	.01	.01	.01	.01	.01	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.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	9	173.	13.42	64.	22.	21.	.44		
+	DIVERSION TO	RET9	173.	13.42	64.	21.	20.	.44		
+	HYDROGRAPH AT	D9	9.	19.50	7.	2.	2.	.44		
+	HYDROGRAPH AT	4	524.	12.58	98.	32.	31.	1.00		
+	DIVERSION TO	RET4	524.	12.58	62.	18.	17.	1.00		
+	HYDROGRAPH AT	D4	391.	12.75	49.	14.	14.	1.00		
+	ROUTED TO	4T8	262.	13.17	48.	14.	14.	1.00		
+	HYDROGRAPH AT	8	526.	12.17	71.	25.	24.	.50		
+	DIVERSION TO	RET8	526.	12.17	69.	20.	19.	.50		
+	HYDROGRAPH AT	D8	30.	13.67	14.	5.	5.	.50		
+	2 COMBINED AT	C8	262.	13.17	61.	19.	18.	1.50		
+	2 COMBINED AT	EMFHOB	255.	13.17	58.	20.	19.	1.94		
+	ROUTED TO	C9T15	134.	13.50	53.	19.	18.	1.94		
+	HYDROGRAPH AT	3	388.	12.83	85.	26.	25.	1.00		

+	DIVERSION TO	RET3	388.	12.83	85.	26.	25.	1.00
+	HYDROGRAPH AT	D3	0.	.00	0.	0.	0.	1.00
+	ROUTED TO	3T7	0.	.00	0.	0.	0.	1.00
+	HYDROGRAPH AT	7	159.	12.50	27.	9.	9.	.28
+	DIVERSION TO	RET7	159.	12.50	27.	8.	7.	.28
+	HYDROGRAPH AT	D7	7.	14.58	4.	1.	1.	.28
+	2 COMBINED AT	C7	6.	14.58	4.	1.	1.	1.28
+	ROUTED TO	7T10	4.	16.50	3.	1.	1.	1.28
+	HYDROGRAPH AT	10	304.	12.58	47.	14.	13.	.72
+	DIVERSION TO	RET10	304.	12.58	47.	14.	13.	.72
+	HYDROGRAPH AT	D10	0.	.00	0.	0.	0.	.72
+	2 COMBINED AT	C10	4.	16.50	3.	1.	1.	2.00
+	ROUTED TO	10T8A	4.	17.33	3.	1.	1.	2.00
+	HYDROGRAPH AT	8A	103.	12.17	11.	3.	3.	.12
+	DIVERSION TO	RET8A	103.	12.17	11.	3.	3.	.12
+	HYDROGRAPH AT	D8A	0.	.00	0.	0.	0.	.12
+	2 COMBINED AT	C8A	4.	17.33	3.	1.	1.	2.12
+	ROUTED TO	8AT15A	4.	17.83	3.	1.	1.	2.12
+	HYDROGRAPH AT	15A	174.	12.42	22.	6.	6.	.35
+	DIVERSION TO	RET15A	2.	9.83	2.	1.	0.	.35
+	HYDROGRAPH AT	D15A	174.	12.42	22.	6.	6.	.35
+	2 COMBINED AT	C15A	169.	12.42	22.	7.	7.	2.47
+	2 COMBINED AT	EMFBRN	166.	12.42	67.	24.	23.	4.41
+	ROUTED TO	15AT15	119.	12.75	66.	24.	23.	4.41
+	HYDROGRAPH AT	15B	250.	12.42	34.	10.	10.	.51
+	DIVERSION TO	RET15B	5.	10.17	3.	1.	1.	.51
+	HYDROGRAPH AT	D15B	250.	12.42	34.	9.	9.	.51

+	2 COMBINED AT	EMFCLB	292.	12.50	94.	32.	31.	4.92
+	ROUTED TO	15T16	263.	12.58	93.	32.	31.	4.92
+	HYDROGRAPH AT	1	390.	12.08	43.	14.	14.	.39
+	DIVERSION TO	RET1	390.	12.08	40.	11.	11.	.39
+	HYDROGRAPH AT	D1	27.	12.92	10.	3.	3.	.39
+	DIVERSION TO	D1W	27.	12.92	10.	3.	3.	.39
+	HYDROGRAPH AT	D1S	0.	.00	0.	0.	0.	.39
+	ROUTED TO	1T5	0.	.00	0.	0.	0.	.39
+	HYDROGRAPH AT	5	510.	12.25	60.	18.	18.	.95
+	DIVERSION TO	RET5	453.	12.17	28.	8.	8.	.95
+	HYDROGRAPH AT	D5	500.	12.33	38.	10.	10.	.95
+	2 COMBINED AT	C5	497.	12.33	37.	10.	10.	1.15
+	DIVERSION TO	D5S	350.	12.33	34.	10.	9.	1.15
+	HYDROGRAPH AT	DC5	147.	12.33	3.	1.	1.	1.15
+	ROUTED TO	5T6	47.	12.67	3.	1.	1.	1.15
+	HYDROGRAPH AT	2	430.	12.50	63.	19.	18.	1.00
+	DIVERSION TO	RET2	410.	12.42	31.	9.	8.	1.00
+	HYDROGRAPH AT	D2	395.	12.58	37.	10.	10.	1.00
+	ROUTED TO	2T6	243.	13.17	36.	10.	10.	1.00
+	HYDROGRAPH AT	6	422.	12.50	66.	20.	19.	1.00
+	DIVERSION TO	RET6	422.	12.50	54.	15.	14.	1.00
+	HYDROGRAPH AT	D6	175.	12.92	18.	6.	5.	1.00
+	HYDROGRAPH AT	GD1	27.	12.92	10.	3.	3.	.39
+	ROUTED TO	RGD1A	21.	13.50	9.	3.	3.	.39
+	ROUTED TO	RGD1B	17.	14.08	9.	3.	3.	.39
+	4 COMBINED AT	C6	350.	13.00	60.	18.	17.	2.76
+	DIVERSION TO	D6W	350.	13.00	60.	18.	17.	2.76

+	HYDROGRAPH AT	DIV6	0.	.00	0.	0.	0.	2.76
+	ROUTED TO	6T13B	0.	.00	0.	0.	0.	2.76
+	HYDROGRAPH AT	11	523.	12.25	55.	16.	15.	1.06
+	DIVERSION TO	RET11	523.	12.25	55.	16.	15.	1.06
+	HYDROGRAPH AT	D11	0.	.00	0.	0.	0.	1.06
+	DIVERSION TO	D11S	0.	.00	0.	0.	0.	1.06
+	HYDROGRAPH AT	DIV11	0.	.00	0.	0.	0.	1.06
+	ROUTED TO	11T12	0.	.00	0.	0.	0.	1.06
+	HYDROGRAPH AT	12	545.	12.33	67.	21.	20.	1.03
+	DIVERSION TO	RET12	380.	12.17	26.	8.	7.	1.03
+	HYDROGRAPH AT	D12	545.	12.33	47.	13.	12.	1.03
+	HYDROGRAPH AT	GD5S	350.	12.33	34.	10.	9.	1.15
+	ROUTED TO	RGD5A	258.	12.83	34.	10.	9.	1.15
+	3 COMBINED AT	C12	545.	12.50	79.	22.	21.	2.13
+	DIVERSION TO	D12S	300.	12.25	60.	17.	17.	2.13
+	HYDROGRAPH AT	DC12	243.	12.50	18.	5.	4.	2.13
+	ROUTED TO	12T13A	255.	12.50	18.	5.	4.	2.13
+	HYDROGRAPH AT	13A	294.	12.50	45.	14.	13.	.77
+	DIVERSION TO	RET13A	204.	12.33	18.	5.	5.	.77
+	HYDROGRAPH AT	DET13A	294.	12.50	32.	9.	8.	.77
+	DIVERSION TO	D13AS	287.	12.50	26.	7.	6.	.77
+	HYDROGRAPH AT	D13A	7.	12.33	6.	2.	2.	.77
+	2 COMBINED AT	C13A	261.	12.50	24.	7.	6.	2.27
+	DIVERSION TO	BASIN	261.	12.50	24.	7.	6.	2.27
+	HYDROGRAPH AT	UNIVBA	0.	.00	0.	0.	0.	2.27
+	HYDROGRAPH AT	13B	109.	12.42	14.	4.	4.	.23
+	DIVERSION TO	RET13B	3.	10.92	1.	1.	0.	.23

+	HYDROGRAPH AT	DET13B	109.	12.42	14.	4.	4.	.23
+	DIVERSION TO	D13BS	0.	.00	0.	0.	0.	.23
+	HYDROGRAPH AT	D13B	109.	12.42	14.	4.	4.	.23
+	3 COMBINED AT	C13B	106.	12.42	14.	4.	4.	2.15
+	ROUTED TO	RD13BW	70.	13.00	12.	3.	3.	2.15
+	HYDROGRAPH AT	GD6W	350.	13.00	60.	18.	17.	2.76
+	ROUTED TO	R6WT14	179.	14.42	59.	18.	17.	2.76
+	HYDROGRAPH AT	14	432.	12.50	60.	18.	17.	1.00
+	DIVERSION TO	RET14	4.	5.00	2.	1.	0.	1.00
+	HYDROGRAPH AT	DET14	432.	12.50	60.	17.	16.	1.00
+	DIVERSION TO	D14S	74.	12.50	2.	1.	1.	1.00
+	HYDROGRAPH AT	D14	358.	12.33	57.	16.	16.	1.00
+	3 COMBINED AT	C14	373.	12.58	123.	38.	36.	2.16
+	ROUTED TO	RD14W	369.	12.58	123.	38.	36.	2.16
+	HYDROGRAPH AT	16	93.	12.00	6.	2.	2.	.09
+	DIVERSION TO	RET16	91.	12.00	4.	1.	1.	.09
+	HYDROGRAPH AT	D16	74.	12.08	2.	1.	1.	.09
+	2 COMBINED AT	C16	377.	12.58	131.	40.	38.	.64
+	2 COMBINED AT	EMFUNV	625.	12.58	209.	67.	65.	5.56
+	ROUTED TO	16T21	329.	13.50	193.	63.	61.	5.56
+	HYDROGRAPH AT	GD13AS	287.	12.50	26.	7.	6.	.77
+	ROUTED TO	13AT21	207.	13.08	26.	7.	6.	.77
+	HYDROGRAPH AT	GD13BS	0.	.00	0.	0.	0.	.23
+	ROUTED TO	13BT21	0.	.00	0.	0.	0.	.23
+	HYDROGRAPH AT	GD14S	74.	12.50	2.	1.	1.	1.00
+	ROUTED TO	14T21	50.	12.58	2.	1.	1.	1.00
+	HYDROGRAPH AT	21	221.	12.58	37.	11.	11.	.53

+	DIVERSION TO RET21	9.	11.08	4.	2.	1.	.53
+	HYDROGRAPH AT D21	221.	12.58	37.	10.	10.	.53
+	4 COMBINED AT C21	303.	12.92	59.	16.	15.	6.23
+	2 COMBINED AT EMFAPC	506.	13.08	219.	71.	68.	11.79
+	ROUTED TO 21T28	459.	13.25	216.	70.	67.	11.79
+	HYDROGRAPH AT 19	566.	12.17	73.	24.	24.	.76
+	DIVERSION TO RET19	566.	12.17	63.	18.	17.	.76
+	HYDROGRAPH AT D19	101.	12.67	21.	7.	7.	.76
+	HYDROGRAPH AT GD11S	0.	.00	0.	0.	0.	1.06
+	ROUTED TO RD11	0.	.00	0.	0.	0.	1.06
+	HYDROGRAPH AT GD12S	300.	12.25	60.	17.	17.	2.13
+	ROUTED TO RD12	296.	12.92	60.	17.	17.	2.13
+	3 COMBINED AT C19	366.	12.75	79.	24.	23.	1.93
+	ROUTED TO 19T27	339.	13.08	78.	24.	23.	1.93
+	HYDROGRAPH AT 27	229.	12.08	25.	8.	8.	.24
+	DIVERSION TO RET27	72.	11.83	8.	3.	2.	.24
+	HYDROGRAPH AT D27	229.	12.08	21.	6.	6.	.24
+	2 COMBINED AT C27	350.	13.08	96.	29.	28.	2.17
+	ROUTED TO 27T28	345.	13.33	94.	29.	28.	2.17
+	HYDROGRAPH AT 20	263.	12.50	47.	15.	15.	.58
+	DIVERSION TO RET20	16.	11.17	7.	3.	2.	.58
+	HYDROGRAPH AT D20	263.	12.50	46.	13.	12.	.58
+	ROUTED TO 20T28	213.	12.83	46.	13.	12.	.58
+	HYDROGRAPH AT 28	548.	12.42	87.	29.	28.	.90
+	DIVERSION TO RET28	312.	12.08	29.	9.	9.	.90
+	HYDROGRAPH AT D28	548.	12.42	70.	20.	19.	.90
+	3 COMBINED AT C28	767.	12.42	203.	59.	57.	3.65

+	2 COMBINED AT	EMFBRD	919.	13.25	387.	121.	117.	15.44
+	ROUTED TO	28T35	883.	13.50	376.	117.	113.	15.44
+	HYDROGRAPH AT	26	169.	12.17	17.	5.	5.	.25
+	DIVERSION TO	RET26	2.	9.00	2.	1.	0.	.25
+	HYDROGRAPH AT	D26	169.	12.17	17.	5.	4.	.25
+	ROUTED TO	26T34	91.	12.83	16.	5.	4.	.25
+	HYDROGRAPH AT	34	307.	12.75	57.	17.	16.	.90
+	DIVERSION TO	RET34	307.	12.75	57.	17.	16.	.90
+	HYDROGRAPH AT	D34	0.	.00	0.	0.	0.	.90
+	2 COMBINED AT	C34	91.	12.83	16.	5.	4.	1.15
+	ROUTED TO	34T35	85.	13.17	16.	4.	4.	1.15
+	HYDROGRAPH AT	35	398.	12.92	82.	24.	23.	1.46
+	DIVERSION TO	RET35	398.	12.92	82.	24.	23.	1.46
+	HYDROGRAPH AT	D35	0.	.00	0.	0.	0.	1.46
+	2 COMBINED AT	C35	85.	13.17	16.	4.	4.	2.61
+	2 COMBINED AT	EMFSTH	913.	13.50	383.	119.	115.	18.05
+	ROUTED TO	35T41	897.	13.67	378.	117.	113.	18.05
+	HYDROGRAPH AT	18B	251.	12.25	30.	10.	9.	.38
+	DIVERSION TO	RET18B	99.	12.00	10.	3.	3.	.38
+	HYDROGRAPH AT	D	251.	12.25	24.	7.	6.	.38
+	ROUTED TO	18BT25	193.	12.50	24.	7.	6.	.38
+	HYDROGRAPH AT	25	257.	12.33	37.	12.	11.	.50
+	DIVERSION TO	RET25	257.	12.33	35.	10.	9.	.50
+	HYDROGRAPH AT	D25	18.	13.42	6.	2.	2.	.50
+	2 COMBINED AT	C25	193.	12.50	29.	9.	8.	.88
+	ROUTED TO	25T33	139.	12.92	29.	9.	8.	.88
+	HYDROGRAPH AT	33	238.	12.75	46.	14.	13.	.73

+	DIVERSION TO RET33	238.	12.75	46.	14.	13.	.73
+	HYDROGRAPH AT D33	0.	.00	0.	0.	0.	.73
+	2 COMBINED AT C33	139.	12.92	29.	9.	8.	1.61
+	ROUTED TO 33T40	135.	13.00	28.	8.	8.	1.61
+	HYDROGRAPH AT 40	669.	12.08	66.	22.	21.	.58
+	DIVERSION TO RET40	413.	11.92	34.	10.	10.	.58
+	HYDROGRAPH AT D40	669.	12.08	42.	12.	12.	.58
+	2 COMBINED AT C40	657.	12.08	68.	20.	19.	2.19
+	DIVERSION TO DB4	0.	.00	0.	0.	0.	2.19
+	HYDROGRAPH AT ADD4	657.	12.08	68.	20.	19.	2.19
+	DIVERSION TO DB3	0.	.00	0.	0.	0.	2.19
+	HYDROGRAPH AT ADD3	657.	12.08	68.	20.	19.	2.19
+	DIVERSION TO DB2	0.	.00	0.	0.	0.	2.19
+	HYDROGRAPH AT ADD2	657.	12.08	68.	20.	19.	2.19
+	DIVERSION TO DB1	0.	.00	0.	0.	0.	2.19
+	HYDROGRAPH AT ADD1	657.	12.08	68.	20.	19.	2.19
+	ROUTED TO 40T41	205.	12.92	67.	20.	19.	2.19
+	HYDROGRAPH AT 41	492.	12.25	73.	25.	24.	.55
+	DIVERSION TO RET41	492.	12.25	73.	25.	24.	.55
+	HYDROGRAPH AT D41	0.	.00	0.	0.	0.	.55
+	2 COMBINED AT C41	205.	12.92	67.	20.	19.	2.74
+	2 COMBINED AT EMFSPR	987.	13.50	411.	132.	127.	20.79

1

SUMMARY OF KINEMATIC WAVE - MUSKINGUM-CUNGE ROUTING
(FLOW IS DIRECT RUNOFF WITHOUT BASE FLOW)

ISTAQ	ELEMENT	DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)	INTERPOLATED TO COMPUTATION INTERVAL DT (MIN)	PEAK (CFS)	TIME TO PEAK (MIN)	VOLUME (IN)
FOR STORM = 1	STORM AREA (SQ MI) =			.01					
RD13BW	MANE	5.00	71.62	780.00	.06	5.00	71.62	780.00	.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7518E+01 EXCESS= .0000E+00 OUTFLOW= .6858E+01 BASIN STORAGE= .5240E-01 PERCENT ERROR= 8.1

FOR STORM = 2 STORM AREA (SQ MI) = 1.00

RD13BW	MANE	5.00	70.97	780.00	.06	5.00	70.97	780.00	.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7461E+01 EXCESS= .0000E+00 OUTFLOW= .6787E+01 BASIN STORAGE= .5470E-01 PERCENT ERROR= 8.3

FOR STORM = 3 STORM AREA (SQ MI) = 5.00

RD13BW	MANE	5.00	67.99	780.00	.06	5.00	67.99	780.00	.06

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7116E+01 EXCESS= .0000E+00 OUTFLOW= .6487E+01 BASIN STORAGE= .5356E-01 PERCENT ERROR= 8.1

FOR STORM = 4 STORM AREA (SQ MI) = 10.00

RD13BW	MANE	5.00	64.41	780.00	.05	5.00	64.41	780.00	.05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6710E+01 EXCESS= .0000E+00 OUTFLOW= .6133E+01 BASIN STORAGE= .5223E-01 PERCENT ERROR= 7.8

FOR STORM = 5 STORM AREA (SQ MI) = 30.00

RD13BW	MANE	4.50	59.08	778.50	.05	5.00	58.99	780.00	.05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .6172E+01 EXCESS= .0000E+00 OUTFLOW= .5662E+01 BASIN STORAGE= .5153E-01 PERCENT ERROR= 7.4

FOR STORM = 6 STORM AREA (SQ MI) = 60.00

RD13BW	MANE	3.50	54.35	780.50	.05	5.00	54.21	780.00	.05

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5648E+01 EXCESS= .0000E+00 OUTFLOW= .5189E+01 BASIN STORAGE= .4854E-01 PERCENT ERROR= 7.3

FOR STORM = 7 STORM AREA (SQ MI) = 90.00

RD13BW	MANE	3.50	52.66	780.50	.04	5.00	52.50	780.00	.04

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5467E+01 EXCESS= .0000E+00 OUTFLOW= .5029E+01 BASIN STORAGE= .4795E-01 PERCENT ERROR= 7.1

FOR STORM = 1 STORM AREA (SQ MI) = .01

RD14W	MANE	2.15	376.27	756.10	.68	5.00	375.22	755.00	.68

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7852E+02 EXCESS= .0000E+00 OUTFLOW= .7846E+02 BASIN STORAGE= .7284E-01 PERCENT ERROR= .0

FOR STORM = 2 STORM AREA (SQ MI) = 1.00

RD14W	MANE	2.15	374.34	754.83	.67	5.00	374.27	755.00	.67

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7752E+02 EXCESS= .0000E+00 OUTFLOW= .7746E+02 BASIN STORAGE= .7211E-01 PERCENT ERROR= .0

FOR STORM = 3 STORM AREA (SQ MI) = 5.00

RD14W	MANE	2.17	365.48	753.91	.62	5.00	364.70	750.00	.62

CONTINUITY SUMMARY (AC-FT) - INFLOW= .7172E+02 EXCESS= .0000E+00 OUTFLOW= .7166E+02 BASIN STORAGE= .7060E-01 PERCENT ERROR= .0

FOR STORM = 4 STORM AREA (SQ MI) = 10.00

RD14W	MANE	2.17	363.93	749.98	.56	5.00	363.91	750.00	.56

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CONTINUITY SUMMARY (AC-FT) - INFLOW= .6511E+02 EXCESS= .0000E+00 OUTFLOW= .6505E+02 BASIN STORAGE= .6904E-01 PERCENT ERROR=
.0

          FOR STORM = 5  STORM AREA (SQ MI) =       30.00
             RD14W  MANE          2.17     358.21     749.44        .49       5.00     357.65     750.00          .49

CONTINUITY SUMMARY (AC-FT) - INFLOW= .5644E+02 EXCESS= .0000E+00 OUTFLOW= .5639E+02 BASIN STORAGE= .6651E-01 PERCENT ERROR=
.0

          FOR STORM = 6  STORM AREA (SQ MI) =       60.00
             RD14W  MANE          2.22     323.68     748.84        .41       5.00     323.44     750.00          .41

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4753E+02 EXCESS= .0000E+00 OUTFLOW= .4745E+02 BASIN STORAGE= .6458E-01 PERCENT ERROR=
.0

          FOR STORM = 7  STORM AREA (SQ MI) =       90.00
             RD14W  MANE          2.23     313.72     749.72        .39       5.00     313.28     750.00          .39

CONTINUITY SUMMARY (AC-FT) - INFLOW= .4463E+02 EXCESS= .0000E+00 OUTFLOW= .4455E+02 BASIN STORAGE= .6355E-01 PERCENT ERROR=
.0


*** NORMAL END OF HEC-1 ***
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APPENDIX K-3

SOUTHERN MESA AREA
10-YR, 24-HOUR STORM
FUTURE LAND USE CONDITIONS
HEC-1 MODEL

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1****************************************                    ****************************************
□
 *                                      *                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *    U.S. ARMY CORPS OF ENGINEERS      *
 *              JUL   1997              *                    *    HYDROLOGIC ENGINEERING CENTER     *
 *           VERSION 4.1                *                    *          609 SECOND STREET           *
 *                                      *                    *       DAVIS, CALIFORNIA 95616        *
 *  RUN DATE   25JUN98  TIME  14:15:31  *                    *           (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
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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   SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
         2          ID   AREA SOUTH OF SUPERSTITION (U.S. HWY 60)
         3          ID   MARCH 1998
         4          ID   SOUTHEAST MESA HIGH RESOLUTION MODEL
         5          ID
         6          ID   FILENAME:  FUTS10YR.DAT
         7          ID
         8          ID   THIS MODEL REPRESENTS THE FUTURE LAND USE CONDITIONS OF THE WATERSHED.
         9          ID   TOTAL DRAINAGE AREA IS APPROXIMATELY 85.5 SQ. MI.
        10          ID   THIS MODEL USES A Kn VALUE OF 0.09 FOR DESERT LAND USE DUE TO SHEET FLOW
        11          ID   CONDITIONS.
        12          ID
        13          ID   10-YEAR 24-HOUR FREQUENCY
        14          ID
        15          ID   THIS MODEL INCLUDES INFLOW FROM NORTH OF THE SUPERSTITION FREEWAY
        16          ID   AND EAST OF THE CAP
        17          ID
        18          ID   METHODOLOGY
        19          ID   THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
        20          ID   SCS TYPE II RAINFALL DISTRIBUTION
        21          ID   S-GRAPH HYDROGRAPH
        22          ID   GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
        23          ID   NORMAL DEPTH STORAGE CHANNEL ROUTING
        24          ID   APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
        25          ID   EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
        26          ID   DATED 1994
        27          ID   THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS
        28          ID
        29          ID   STUDY PERFORMED BY LISA C. YOUNG AND AFSHIN AHOURAIYAN, UPDATED BY
        30          ID   DAVID DEGERNESS (OCT-DEC, 1996). REVIEWED BY VALERIE A. SWICK
        31          ID   AND AMIR MOTAMEDI OF THE FLOOD CONTROL DISTRICT
        32          ID   HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
        33          ID   DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.
        34          ID
        35          ID   ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2-3 FT/SEC FOR WASH/NATURAL
        36          ID   CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL
        37          ID
        38          ID   LAND USES ARE UPDATED FROM MAG 97 LAND USES
        39          ID
        40          ID   RETENTION VOLUMES ARE BASED FROM A 100 YR 2 HR.  VOLUMES WERE ONLY ASSUMED
        41          ID   FOR AREAS THAT WILL HAVE FUTURE DEVELOPMENT.  MANY OF THE CURRENT
        42          ID   DEVELOPMENTS DO NOT HAVE RETENTION, OR IT IS NOT EFFECTIVE.  IF THERE IS
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 43          ID   SIGNIFICANT CURRENT RETENTION IT IS ACCOUNTED FOR.  FUTURE VOLUMES ARE
 44          ID   ASSUMED TO ONLY BE 80% EFFECTIVE.  THIS TAKES INTO ACCOUNT SMALL AREAS SUCH
 45          ID   AS STREETS THAT DO NOT FLOW INTO THE RETENTION BASINS.
 46          ID
 47          ID   RETENTION IN PINAL COUNTY FOR FUTURE DEVELOPMENT IS NOT CONSIDERED BECAUSE
 48          ID   THERE IS NO GUARANTEE OF RETENTION REQUIREMENT ENFORCEMENT.
 49          ID
 50          ID   NOTE: MUST USE FUTN.DSS AS THE DSS FILE TO IMPORT FLOWS ACROSS
 51          ID         THE SUPERSTITION.
 52          ID
 53          ID     LAST UPDATED ON  6/03/98
 54          ID
 55          ID
1                                          HEC-1 INPUT                                          PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 56          ID   DDM MCUHP2 SOUTH EAST MESA ADMP - SOUTH OF SUPERSTITION FREEWAY, FUTURE CONDI
             * *DIAGRAM
 57          IT       5  1APR97    0000     300
 58          IO       5
 59          IN      15
 60          JD    2.30    0.01
 61          PC    .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
 62          PC    .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
 63          PC    .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
 64          PC    .110    .115    .120    .126    .133    .140    .147    .155    .163    .172
 65          PC    .181    .191    .203    .218    .236    .257    .283    .387    .663    .707
 66          PC    .735    .758    .776    .791    .804    .815    .825    .834    .842    .849
 67          PC    .856    .863    .869    .875    .881    .887    .893    .898    .903    .908
 68          PC    .913    .918    .922    .926    .930    .934    .938    .942    .946    .950
 69          PC    .953    .956    .959    .962    .965    .968    .971    .974    .977    .980
 70          PC    .983    .986    .989    .992    .995    .998   1.000
 71          JD    2.29     1.0
 72          JD    2.23    5.00
 73          JD    2.16   10.00
 74          JD    2.07   30.00
 75          JD    1.98   60.00
 76          JD    1.95   90.00
             *
             * INPUT FROM THIS POINT IS THE SAME AS THE 100-YR, 24-HR STORM.
             *
 *** NOLIST ***
1****************************************
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 *                                      *                                                  *
*
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                                  *    U.S. ARMY CORPS OF ENGINEERS
*
 *              JUL   1997              *                                                  *    HYDROLOGIC ENGINEERING CENTER
*
 *           VERSION 4.1                *                                                  *          609 SECOND STREET
*
 *                                      *                                                  *       DAVIS, CALIFORNIA 95616
*
 *  RUN DATE   25JUN98  TIME  14:15:31  *                                                  *           (916) 756-1104
*
 *                                      *                                                  *
*
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SOUTHEAST MESA AREA DRAINAGE MASTER PLAN
AREA SOUTH OF SUPERSTITION (U.S. HWY 60)
MARCH 1998
SOUTHEAST MESA HIGH RESOLUTION MODEL

FILENAME: FUTS10YR.DAT

THIS MODEL REPRESENTS THE FUTURE LAND USE CONDITIONS OF THE WATERSHED.
TOTAL DRAINAGE AREA IS APPROXIMATELY 85.5 SQ. MI.
THIS MODEL USES A Kn VALUE OF 0.09 FOR DESERT LAND USE DUE TO SHEET FLOW CONDITIONS.

10-YEAR 24-HOUR FREQUENCY

THIS MODEL INCLUDES INFLOW FROM NORTH OF THE SUPERSTITION FREEWAY

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                    AND EAST OF THE CAP

                    METHODOLOGY
                    THE US CORPS OF ENGINEERS FLOOD HYDROLOGY MODEL HEC-1 DATED SEP1990 VER 4.0
                    SCS TYPE II RAINFALL DISTRIBUTION
                    S-GRAPH HYDROGRAPH
                    GREEN AND AMPT INFILTRATION EQUATION USED FOR CALCULATING LOSSES
                    NORMAL DEPTH STORAGE CHANNEL ROUTING
                    APPROXIMATE DIRECTION, LOCATION, AND LENGTH OF THE WASHES HAVE BEEN
                    EVALUATED BASED ON FIELD INVESTIGATION, USGS MAPS, LANDIS AERIAL SURVEYS
                    DATED 1994
                    THE NOAA TECHNICAL MEMORANDUM NOAA ATLAS 2 DEPTH AREA RATIOS

                    STUDY PERFORMED BY LISA C. YOUNG AND AFSHIN AHOURAIYAN, UPDATED BY
                    DAVID DEGERNESS (OCT-DEC, 1996). REVIEWED BY VALERIE A. SWICK
                    AND AMIR MOTAMEDI OF THE FLOOD CONTROL DISTRICT
                    HYDROLOGY BRANCH ENGINEERING DIVISION, FLOOD CONTROL
                    DISTRICT OF MARICOPA COUNTY, DECEMBER - JULY 1995.

                    ASSUMED VELOCITY OF 1 FT/SEC FOR SHEET FLOW, 2-3 FT/SEC FOR WASH/NATURAL
                    CHANNEL, 3 FT/SEC FOR ROAD AND GRASS CHANNEL, 10FT/SEC FOR CONCRETE CHANNEL

                    LAND USES ARE UPDATED FROM MAG 97 LAND USES

                    RETENTION VOLUMES ARE BASED FROM A 100 YR 2 HR.  VOLUMES WERE ONLY ASSUMED
                    FOR AREAS THAT WILL HAVE FUTURE DEVELOPMENT.  MANY OF THE CURRENT
                    DEVELOPMENTS DO NOT HAVE RETENTION, OR IT IS NOT EFFECTIVE.  IF THERE IS
                    SIGNIFICANT CURRENT RETENTION IT IS ACCOUNTED FOR.  FUTURE VOLUMES ARE
                    ASSUMED TO ONLY BE 80% EFFECTIVE.  THIS TAKES INTO ACCOUNT SMALL AREAS SUCH
                    AS STREETS THAT DO NOT FLOW INTO THE RETENTION BASINS.

                    RETENTION IN PINAL COUNTY FOR FUTURE DEVELOPMENT IS NOT CONSIDERED BECAUSE
                    THERE IS NO GUARANTEE OF RETENTION REQUIREMENT ENFORCEMENT.

                    NOTE: MUST USE FUTN.DSS AS THE DSS FILE TO IMPORT FLOWS ACROSS
                          THE SUPERSTITION.

                      LAST UPDATED ON  6/03/98


                    DDM MCUHP2 SOUTH EAST MESA ADMP - SOUTH OF SUPERSTITION FREEWAY, FUTURE CONDI

58 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN           5  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1APR97  STARTING DATE
                     ITIME        0000  STARTING TIME
                        NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      2APR97  ENDING DATE
                    NDTIME        0055  ENDING TIME
                     ICENT          19  CENTURY MARK

               COMPUTATION INTERVAL     .08 HOURS
                    TOTAL TIME BASE   24.92 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

60 JD          INDEX STORM NO. 1
                      STRM        2.30  PRECIPITATION DEPTH
                      TRDA         .01  TRANSPOSITION DRAINAGE AREA

61 PI            PRECIPITATION PATTERN
                    .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .00       .00       .00       .00       .00       .00       .00       .00
71 JD         INDEX STORM NO. 2
                STRM        2.29  PRECIPITATION DEPTH
                TRDA        1.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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72 JD         INDEX STORM NO. 3
                STRM        2.23  PRECIPITATION DEPTH
                TRDA        5.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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73 JD         INDEX STORM NO. 4
                STRM        2.16  PRECIPITATION DEPTH
                TRDA       10.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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74 JD         INDEX STORM NO. 5
                STRM        2.07  PRECIPITATION DEPTH
                TRDA       30.00  TRANSPOSITION DRAINAGE AREA

 0 PI           PRECIPITATION PATTERN
                .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
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                .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
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75 JD          INDEX STORM NO. 6
                     STRM        1.98  PRECIPITATION DEPTH
                     TRDA       60.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                   .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                   .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                   .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00

76 JD          INDEX STORM NO. 7
                     STRM        1.95  PRECIPITATION DEPTH
                     TRDA       90.00  TRANSPOSITION DRAINAGE AREA

 0 PI            PRECIPITATION PATTERN
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .01       .00       .01
                   .01       .01       .01       .01       .01       .01       .01       .01       .03       .03
                   .03       .09       .09       .09       .01       .01       .01       .01       .01       .01
                   .01       .01       .01       .01       .01       .01       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00       .00       .00
                   .00       .00       .00       .00       .00       .00       .00       .00
  -----DSS---ZOPEN:  Existing File Opened,  File: FUTN10YR.DSS
                     Unit:  71;  DSS Version: 6-EA
       ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
       Time Window set.  Interval:      5  Number of data values:       1
       Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
       Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
       Input time offset:       0
       After ZRDINF, Record found: T
       Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
       Number of actual data:  288  Header length:   0
       Compression:   0  Quality:   0
```

```
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    301
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 2, 1997  0100  (  35521   60)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  301    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  301    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97        JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    4:  /SOSSAMAN DRAIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  301    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97        JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   12  ILIM:  301
      ----- Exiting ZRRTS, Number of data values:    301,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    301
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 2, 1997  0100  (  35521   60)
        Input time offset:       0
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
```

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        NSTART:    1   NVALS:  301    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  301    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97        JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT EAST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:  290   NVALS:  301    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35521
        JULS: 31MAR97        JULSD: 02APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   12  ILIM:  301
      ----- Exiting ZRRTS, Number of data values:    301,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:      1
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Mar 31, 1997  2400  (  35519 1440)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:    1    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
      ----- Exiting ZRRTS, Number of data values:      1,  Status:  0
        Offset:        0,  Units: CFS      ,  Type:INST-VAL
        ----- Entering ZRRTSX for unit 71 -----
Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW//5MIN/100YR/
        Time Window set.  Interval:     5  Number of data values:    301
        Starting date and time:  Mar 31, 1997  2400  (  35519 1440)
        Ending   date and time:  Apr 2, 1997  0100  (  35521   60)
        Input time offset:      0
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/31MAR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    1   NVALS:  301    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35519
        JULS: 31MAR97        JULSD: 31MAR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:  288  NDATA:  288  NREAD:    1  ILIM:    1
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/01APR1997/5MIN/100YR/
      ----DSS---Debug:  Enter ZRRTSB;  Unit:  71
        NSTART:    2   NVALS:  301    JULS:   35519  ISTIME:  1440
        NLDATA:  288   JULSD:   35520
        JULS: 31MAR97        JULSD: 01APR97
        Quality Read: F,  Quality Requested: F
        ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:  288  ILIM:  289
        After ZRDINF, Record found: T
        Pathname: /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
        Number of actual data:  288  Header length:   0
        Compression:   0  Quality:   0
-----DSS--- ZREAD Unit  71; Vers.    2:  /ADOT WEST BASIN/AT SUPERSTITION/FLOW/02APR1997/5MIN/100YR/
```

```
----DSS---Debug:  Enter ZRRTSB;  Unit:  71
  NSTART:  290   NVALS:  301    JULS:   35519  ISTIME:  1440
  NLDATA:  288   JULSD:   35521
  JULS: 31MAR97        JULSD: 02APR97
  Quality Read: F,  Quality Requested: F
  ---ZRRTSB Calculations:  NPOS:    1  NDATA:  288  NREAD:   12  ILIM:  301
----- Exiting ZRRTS, Number of data values:    301,  Status:  0
  Offset:        0,  Units: CFS      ,  Type:INST-VAL
   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	SOSS	711.	12.42	248.	85.	82.	12.50		
+	ROUTED TO	RSOSS	642.	12.58	247.	84.	81.	12.50		
+	HYDROGRAPH AT	59A	158.	12.33	22.	7.	7.	.26		
+	DIVERSION TO	D59A	5.	10.58	3.	1.	1.	.26		
+	HYDROGRAPH AT	RET59A	158.	12.33	22.	6.	6.	.26		
+	2 COMBINED AT	C59A	732.	12.50	265.	89.	86.	12.76		
+	ROUTED TO	59A59B	684.	12.83	263.	88.	85.	12.76		
+	HYDROGRAPH AT	59B	323.	12.83	69.	21.	20.	.94		
+	DIVERSION TO	D59B	323.	12.83	69.	21.	20.	.94		
+	HYDROGRAPH AT	RET59B	0.	.00	0.	0.	0.	.94		
+	2 COMBINED AT	C59B	684.	12.83	263.	88.	85.	13.70		
+	ROUTED TO	59BT60	681.	12.92	262.	87.	84.	13.70		
+	HYDROGRAPH AT	60	571.	13.50	197.	63.	61.	2.30		
+	DIVERSION TO	D60	571.	13.50	197.	63.	61.	2.30		
+	HYDROGRAPH AT	RET60	0.	.00	0.	0.	0.	2.30		
+	2 COMBINED AT	EMFGUA	681.	12.92	262.	87.	84.	16.00		
+	ROUTED TO	GUATEL	506.	13.92	246.	83.	80.	16.00		
+	HYDROGRAPH AT	64	526.	12.42	92.	31.	30.	.81		
+	DIVERSION TO	D64	526.	12.42	92.	31.	30.	.81		
+	HYDROGRAPH AT	RET64	0.	.00	0.	0.	0.	.81		
+	2 COMBINED AT	EMFELL	506.	13.92	246.	83.	80.	16.81		

+	ROUTED TO	ELTWAR	439.	14.83	231.	78.	76.	16.81
+	HYDROGRAPH AT	61A	442.	12.17	56.	19.	18.	.52
+	DIVERSION TO	D61A	442.	12.17	56.	19.	18.	.52
+	HYDROGRAPH AT	RET61A	0.	.00	0.	0.	0.	.52
+	ROUTED TO	61ATB	0.	.00	0.	0.	0.	.52
+	HYDROGRAPH AT	61B	626.	12.42	97.	31.	30.	1.09
+	DIVERSION TO	D61B	626.	12.42	97.	31.	30.	1.09
+	HYDROGRAPH AT	RET61B	0.	.00	0.	0.	0.	1.09
+	2 COMBINED AT	CP61B	0.	.00	0.	0.	0.	1.61
+	ROUTED TO	61T62E	0.	.00	0.	0.	0.	1.61
+	HYDROGRAPH AT	62E	126.	12.17	16.	5.	5.	.15
+	DIVERSION TO	D62E	126.	12.17	16.	5.	5.	.15
+	HYDROGRAPH AT	RET62E	0.	.00	0.	0.	0.	.15
+	2 COMBINED AT	C62E	0.	.00	0.	0.	0.	1.76
+	ROUTED TO	62ETF	0.	.00	0.	0.	0.	1.76
+	HYDROGRAPH AT	62A	491.	12.00	55.	19.	18.	.38
+	DIVERSION TO	D62A	491.	12.00	55.	17.	16.	.38
+	HYDROGRAPH AT	RET62A	11.	15.58	8.	3.	2.	.38
+	ROUTED TO	62ATD	11.	16.83	7.	2.	2.	.38
+	HYDROGRAPH AT	62B	332.	12.00	34.	12.	11.	.23
+	DIVERSION TO	D62B	332.	12.00	33.	10.	9.	.23
+	HYDROGRAPH AT	RET62B	10.	14.08	6.	2.	2.	.23
+	ROUTED TO	62BTD	7.	16.33	5.	2.	2.	.23
+	HYDROGRAPH AT	62D	342.	12.17	50.	17.	16.	.46
+	DIVERSION TO	D62D	342.	12.17	50.	17.	16.	.46
+	HYDROGRAPH AT	ET62D	0.	.00	0.	0.	0.	.46
+	3 COMBINED AT	CP62D	17.	16.75	13.	4.	4.	1.07

+	ROUTED TO	62DTF	16.	17.33	12.	4.	4.	1.07
+	HYDROGRAPH AT	62C	464.	12.17	56.	19.	18.	.55
+	DIVERSION TO	D62C	464.	12.17	55.	16.	15.	.55
+	HYDROGRAPH AT	RET62C	17.	14.00	9.	3.	3.	.55
+	ROUTED TO	62CTF	13.	15.00	8.	3.	3.	.55
+	HYDROGRAPH AT	62F	241.	12.17	29.	10.	9.	.26
+	DIVERSION TO	D62F	241.	12.17	29.	9.	9.	.26
+	HYDROGRAPH AT	RET62F	3.	18.67	3.	1.	1.	.26
+	4 COMBINED AT	CP62	21.	18.67	18.	6.	6.	3.64
+	ROUTED TO	62T63	21.	19.17	18.	6.	6.	3.64
+	HYDROGRAPH AT	63	681.	12.33	104.	35.	34.	.91
+	DIVERSION TO	D63	681.	12.33	104.	35.	34.	.91
+	HYDROGRAPH AT	RET63	0.	.00	0.	0.	0.	.91
+	2 COMBINED AT	CP63	21.	19.17	18.	6.	6.	4.55
+	ROUTED TO	63T71	17.	23.92	15.	4.	4.	4.55
+	HYDROGRAPH AT	ADOT-E	15.	14.42	9.	3.	3.	.01
+	ROUTED TO	AET67A	14.	15.08	9.	3.	3.	.01
+	HYDROGRAPH AT	67A	212.	12.25	29.	10.	9.	.30
+	DIVERSION TO	D67A	212.	12.25	29.	10.	9.	.30
+	HYDROGRAPH AT	RET67A	0.	.00	0.	0.	0.	.30
+	2 COMBINED AT	C67A	14.	15.08	9.	3.	3.	.31
+	ROUTED TO	67ATC	13.	16.00	9.	3.	3.	.31
+	HYDROGRAPH AT	SUP2	292.	15.08	271.	107.	103.	.01
+	ROUTED TO	RSUP2	291.	15.92	269.	106.	102.	.01
+	HYDROGRAPH AT	67B	409.	12.33	62.	21.	20.	.53
+	DIVERSION TO	D67B	409.	12.33	62.	21.	20.	.53
+	HYDROGRAPH AT	RET67B	5.	24.00	0.	0.	0.	.53

+	2 COMBINED AT	C67B	291.	15.92	269.	106.	102.	.54
+	ROUTED TO	67BTC	291.	16.25	269.	104.	101.	.54
+	HYDROGRAPH AT	67C	541.	12.42	78.	25.	24.	.93
+	DIVERSION TO	D67C	541.	12.42	78.	25.	24.	.93
+	HYDROGRAPH AT	RET67C	0.	.00	0.	0.	0.	.93
+	3 COMBINED AT	C67C	304.	16.17	277.	107.	103.	1.78
+	ROUTED TO	67CTE	301.	17.33	275.	105.	101.	1.78
+	HYDROGRAPH AT	67D	97.	12.17	11.	3.	3.	.13
+	DIVERSION TO	D67D	97.	12.17	11.	3.	3.	.13
+	HYDROGRAPH AT	RET67D	0.	.00	0.	0.	0.	.13
+	ROUTED TO	67DTE	0.	.00	0.	0.	0.	.13
+	HYDROGRAPH AT	67E	441.	12.33	64.	21.	21.	.58
+	DIVERSION TO	D67E	441.	12.33	64.	21.	21.	.58
+	HYDROGRAPH AT	RET67E	0.	.00	0.	0.	0.	.58
+	3 COMBINED AT	CP67E	301.	17.33	275.	105.	101.	2.49
+	ROUTED TO	67T68	301.	17.58	275.	103.	100.	2.49
+	HYDROGRAPH AT	68A	419.	12.08	46.	16.	15.	.35
+	DIVERSION TO	D68A	419.	12.08	46.	16.	15.	.35
+	HYDROGRAPH AT	RET68A	1.	23.83	0.	0.	0.	.35
+	2 COMBINED AT	C68A	301.	17.58	275.	103.	100.	2.84
+	ROUTED TO	68ATB	301.	17.58	275.	103.	100.	2.84
+	HYDROGRAPH AT	68B	359.	12.00	36.	13.	12.	.25
+	DIVERSION TO	D68B	359.	12.00	36.	12.	12.	.25
+	HYDROGRAPH AT	RET68B	3.	21.42	2.	0.	0.	.25
+	2 COMBINED AT	CP68B	301.	17.58	275.	103.	100.	3.09
+	ROUTED TO	68BT69	300.	18.08	275.	102.	98.	3.09
+	HYDROGRAPH AT	69	128.	12.00	13.	5.	4.	.09

+	DIVERSION TO	D69	128.	12.00	13.	5.	4.	.09
+	HYDROGRAPH AT	RET69	1.	22.08	0.	0.	0.	.09
+	2 COMBINED AT	C69	300.	18.08	275.	102.	98.	3.18
+	ROUTED TO	69T71	299.	19.00	274.	94.	91.	3.18
+	HYDROGRAPH AT	71	1201.	12.17	160.	56.	54.	1.09
+	DIVERSION TO	D71	1201.	12.17	160.	53.	51.	1.09
+	HYDROGRAPH AT	RET71	15.	23.17	9.	2.	2.	1.09
+	3 COMBINED AT	CP71	301.	19.08	280.	97.	94.	8.82
+	ROUTED TO	71T72	301.	19.25	280.	95.	92.	8.82
+	2 COMBINED AT	EMFWAR	451.	14.83	399.	171.	165.	25.63
+	ROUTED TO	WARTKN	427.	15.17	396.	166.	160.	25.63
+	HYDROGRAPH AT	CAP1A	217.	2.00	217.	213.	207.	.01
+	ROUTED TO	RCAP1A	217.	2.50	217.	210.	202.	.01
+	HYDROGRAPH AT	CAP1B	217.	2.00	217.	213.	207.	.01
+	ROUTED TO	RCAP1B	217.	2.58	217.	210.	202.	.01
+	HYDROGRAPH AT	65AW	297.	12.33	38.	12.	11.	.43
+	DIVERSION TO	D65AW	297.	12.33	38.	12.	11.	.43
+	HYDROGRAPH AT	RE65AW	0.	.00	0.	0.	0.	.43
+	3 COMBINED AT	C65AW	434.	2.58	434.	420.	405.	.45
+	ROUTED TO	65AWTB	434.	5.75	434.	409.	394.	.45
+	HYDROGRAPH AT	65A	1498.	12.50	301.	101.	98.	2.54
+	ROUTED TO	65ATB	339.	17.50	264.	96.	92.	2.54
+	HYDROGRAPH AT	65B	890.	12.50	159.	53.	51.	1.37
+	DIVERSION TO	D65B	890.	12.50	159.	53.	51.	1.37
+	HYDROGRAPH AT	RET65B	0.	.00	0.	0.	0.	1.37
+	3 COMBINED AT	CP65B	769.	17.58	696.	504.	485.	4.36
+	ROUTED TO	65T66	767.	18.00	695.	498.	480.	4.36

+	HYDROGRAPH AT 66A	251.	12.17	25.	8.	8.	.26
+	DIVERSION TO D66A	251.	12.17	25.	8.	8.	.26
+	HYDROGRAPH AT RET66A	0.	.00	0.	0.	0.	.26
+	ROUTED TO 66ATB	0.	.00	0.	0.	0.	.26
+	HYDROGRAPH AT 66B	318.	12.58	56.	17.	17.	.67
+	DIVERSION TO D66B	318.	12.58	56.	17.	17.	.67
+	HYDROGRAPH AT RET66B	0.	.00	0.	0.	0.	.67
+	2 COMBINED AT CP66B	0.	.00	0.	0.	0.	.93
+	ROUTED TO 66BTC	0.	.00	0.	0.	0.	.93
+	HYDROGRAPH AT 66C	401.	12.25	54.	18.	17.	.50
+	DIVERSION TO D66C	401.	12.25	54.	18.	17.	.50
+	HYDROGRAPH AT RET66C	0.	.00	0.	0.	0.	.50
+	2 COMBINED AT CP66C	0.	.00	0.	0.	0.	1.43
+	ROUTED TO 66CTD	0.	.00	0.	0.	0.	1.43
+	HYDROGRAPH AT 66D	407.	12.08	47.	16.	16.	.31
+	DIVERSION TO D66D	407.	12.08	47.	16.	15.	.31
+	HYDROGRAPH AT RET66D	4.	21.67	2.	0.	0.	.31
+	2 COMBINED AT C66D	3.	24.08	1.	0.	0.	1.74
+	2 COMBINED AT CP66	767.	18.00	695.	498.	480.	6.10
+	ROUTED TO 66DT70	762.	18.25	691.	490.	472.	6.10
+	HYDROGRAPH AT 70A	711.	12.08	76.	25.	24.	.54
+	DIVERSION TO D70A	711.	12.08	76.	25.	24.	.54
+	HYDROGRAPH AT RET70A	0.	.00	0.	0.	0.	.54
+	2 COMBINED AT C70A	762.	18.25	691.	490.	472.	6.64
+	ROUTED TO 70ATB	760.	18.67	690.	479.	461.	6.64
+	HYDROGRAPH AT 70B	404.	12.17	57.	19.	19.	.38
+	DIVERSION TO D70B	404.	12.17	57.	19.	18.	.38

+	HYDROGRAPH AT	RET70B	5.	23.50	1.	0.	0.	.38
+	2 COMBINED AT	CP70B	760.	18.67	690.	479.	461.	7.02
+	ROUTED TO	70BT76	757.	19.33	688.	456.	439.	7.02
+	HYDROGRAPH AT	76B	728.	12.17	98.	33.	32.	.64
+	DIVERSION TO	D76B	728.	12.17	98.	33.	32.	.64
+	HYDROGRAPH AT	RET76B	9.	23.75	1.	0.	0.	.64
+	2 COMBINED AT	CP76B	757.	19.33	688.	456.	439.	7.66
+	HYDROGRAPH AT	72	873.	12.17	125.	43.	42.	.84
+	DIVERSION TO	D72	873.	12.17	125.	43.	42.	.84
+	HYDROGRAPH AT	RET72	0.	.00	0.	0.	0.	.84
+	2 COMBINED AT	KNOX	757.	19.33	688.	456.	439.	8.50
+	2 COMBINED AT	EMFKNX	1136.	19.25	1057.	615.	592.	34.13
+	ROUTED TO	KNXTRY	1135.	19.50	1056.	602.	580.	34.13
+	HYDROGRAPH AT	76A	1302.	12.58	254.	82.	80.	1.91
+	DIVERSION TO	D76A	1302.	12.58	254.	82.	80.	1.91
+	HYDROGRAPH AT	RET76A	0.	.00	0.	0.	0.	1.91
+	2 COMBINED AT	EMFRAY	1135.	19.50	1056.	602.	580.	36.04
+	HYDROGRAPH AT	73A	156.	13.33	39.	10.	9.	.95
+	ROUTED TO	73ATB	116.	14.00	39.	10.	9.	.95
+	HYDROGRAPH AT	73B	309.	12.25	31.	9.	9.	.42
+	DIVERSION TO	D73B	309.	12.25	31.	9.	9.	.42
+	HYDROGRAPH AT	RET73B	0.	.00	0.	0.	0.	.42
+	2 COMBINED AT	CP73B	116.	14.00	39.	10.	9.	1.37
+	ROUTED TO	73BTC	114.	14.17	38.	10.	9.	1.37
+	HYDROGRAPH AT	73C	866.	12.00	86.	30.	29.	.58
+	DIVERSION TO	D73C	866.	12.00	86.	29.	28.	.58
+	HYDROGRAPH AT	RET73C	8.	22.50	2.	1.	1.	.58

+	2 COMBINED AT	CP73C	114.	14.17	38.	10.	10.	1.95
+	ROUTED TO	73T74C	107.	14.67	38.	10.	9.	1.95
+	HYDROGRAPH AT	74A	128.	13.33	31.	8.	7.	.75
+	ROUTED TO	74ATB	89.	14.25	31.	8.	7.	.75
+	HYDROGRAPH AT	74B	232.	12.25	20.	5.	5.	.33
+	DIVERSION TO	D74B	232.	12.25	20.	5.	5.	.33
+	HYDROGRAPH AT	RET74B	0.	.00	0.	0.	0.	.33
+	2 COMBINED AT	CP74B	89.	14.25	31.	8.	7.	1.08
+	ROUTED TO	74BTC	88.	14.50	31.	8.	7.	1.08
+	HYDROGRAPH AT	74C	481.	12.00	53.	18.	18.	.34
+	DIVERSION TO	D74C	481.	12.00	53.	18.	17.	.34
+	HYDROGRAPH AT	RET74C	5.	21.58	2.	1.	1.	.34
+	3 COMBINED AT	CP74C	188.	14.58	66.	17.	16.	3.37
+	ROUTED TO	74CT75	186.	14.83	66.	17.	16.	3.37
+	HYDROGRAPH AT	75	470.	14.75	208.	56.	54.	4.01
+	2 COMBINED AT	CP75	624.	14.75	260.	70.	67.	7.38
+	ROUTED TO	75TCP	617.	14.83	260.	69.	67.	7.38
+	HYDROGRAPH AT	77A	229.	13.75	70.	17.	17.	1.74
+	ROUTED TO	77ATB	219.	13.92	69.	17.	17.	1.74
+	HYDROGRAPH AT	77B	263.	12.17	20.	5.	5.	.36
+	DIVERSION TO	D77B	263.	12.17	20.	5.	5.	.36
+	HYDROGRAPH AT	RET77B	0.	.00	0.	0.	0.	.36
+	2 COMBINED AT	CP77B	219.	13.92	69.	17.	17.	2.10
+	ROUTED TO	77BTC	200.	14.33	68.	17.	17.	2.10
+	HYDROGRAPH AT	77C	421.	12.00	42.	14.	14.	.28
+	DIVERSION TO	D77C	421.	12.00	42.	14.	14.	.28
+	HYDROGRAPH AT	RET77C	4.	22.75	1.	0.	0.	.28

+	2 COMBINED AT	C77C	200.	14.33	68.	17.	17.	2.38
+	ROUTED TO	77CT78	195.	14.50	68.	17.	17.	2.38
+	HYDROGRAPH AT	78A	248.	13.75	75.	19.	18.	1.88
+	ROUTED TO	78ATB	235.	14.00	75.	19.	18.	1.88
+	HYDROGRAPH AT	78B	369.	12.17	34.	9.	9.	.39
+	2 COMBINED AT	C78B	363.	12.17	107.	27.	26.	2.27
+	ROUTED TO	78BTC	322.	12.42	107.	27.	26.	2.27
+	HYDROGRAPH AT	78C	421.	12.00	43.	14.	13.	.28
+	DIVERSION TO	D78C	421.	12.00	43.	12.	12.	.28
+	HYDROGRAPH AT	RET78C	8.	14.67	5.	2.	2.	.28
+	2 COMBINED AT	C78C	322.	12.42	109.	29.	28.	2.55
+	2 COMBINED AT	C78C2	380.	14.25	170.	45.	43.	4.93
+	ROUTED TO	78CT79	375.	14.58	168.	45.	43.	4.93
+	HYDROGRAPH AT	79A	454.	13.50	128.	32.	31.	2.01
+	2 COMBINED AT	C79A1	548.	14.33	280.	73.	70.	6.94
+	HYDROGRAPH AT	78F	439.	14.25	160.	41.	39.	4.19
+	ROUTED TO	78FTD	407.	14.58	159.	41.	39.	4.19
+	HYDROGRAPH AT	78D	947.	12.17	116.	38.	36.	.89
+	DIVERSION TO	D78D	947.	12.17	116.	38.	36.	.89
+	HYDROGRAPH AT	RET78D	0.	.00	0.	0.	0.	.89
+	2 COMBINED AT	C78D	408.	14.58	159.	41.	39.	5.08
+	HYDROGRAPH AT	82A4	259.	13.92	84.	21.	20.	2.13
+	ROUTED TO	82A4T3	196.	14.75	84.	21.	20.	2.13
+	HYDROGRAPH AT	82A3	220.	14.17	79.	20.	19.	2.02
+	2 COMBINED AT	C82A3	360.	14.25	158.	40.	39.	4.15
+	ROUTED TO	82A3T2	331.	15.17	158.	40.	39.	4.15
+	HYDROGRAPH AT	CAP2	64.	20.00	64.	35.	33.	.01

+	ROUTED TO	RCAP2	64.	22.83	61.	29.	27.	.01
+	HYDROGRAPH AT	82A2	360.	14.75	158.	42.	40.	4.13
+	2 COMBINED AT	C82A2	392.	14.75	194.	71.	68.	4.14
+	HYDROGRAPH AT	82A1	462.	13.50	122.	31.	29.	3.12
+	3 COMBINED AT	C82A1	730.	14.75	427.	131.	126.	11.41
+	ROUTED TO	82ATD	718.	15.00	427.	129.	124.	11.41
+	2 COMBINED AT	C78D2	1006.	14.83	552.	161.	155.	16.49
+	ROUTED TO	78DTE	982.	15.33	550.	159.	153.	16.49
+	HYDROGRAPH AT	78E	437.	12.75	76.	19.	18.	1.01
+	2 COMBINED AT	C78E	982.	15.33	591.	175.	169.	17.50
+	ROUTED TO	78T79B	974.	15.42	587.	173.	167.	17.50
+	HYDROGRAPH AT	79B	350.	13.08	77.	19.	19.	1.00
+	2 COMBINED AT	C79B	976.	15.42	643.	189.	182.	18.50
+	2 COMBINED AT	C79	1288.	14.50	870.	248.	239.	25.44
+	ROUTED TO	79TCP	1280.	14.83	862.	244.	235.	25.44
+	2 COMBINED AT	CPPWR	1778.	14.83	1063.	298.	287.	32.82
+	ROUTED TO	CPT80A	1756.	15.08	1054.	295.	284.	32.82
+	HYDROGRAPH AT	80A	1472.	12.83	353.	114.	109.	2.64
+	DIVERSION TO	D80A	88.	11.00	48.	17.	16.	2.64
+	HYDROGRAPH AT	RET80A	1472.	12.83	348.	97.	93.	2.64
+	2 COMBINED AT	CPOWER	1808.	15.08	1271.	377.	363.	35.46
+	2 COMBINED AT	EMFPOW	2519.	15.17	1936.	943.	909.	71.50
+	ROUTED TO	POWTWI	2499.	15.42	1934.	929.	895.	71.50
+	HYDROGRAPH AT	80B	701.	12.50	132.	42.	41.	1.12
+	DIVERSION TO	D80B	13.	5.50	8.	2.	2.	1.12
+	HYDROGRAPH AT	RET80B	701.	12.50	132.	41.	39.	1.12
+	2 COMBINED AT	MFWIL	2516.	15.33	1993.	962.	927.	72.62

+	ROUTED TO	WILTSP	2494.	15.67	1986.	939.	905.	72.62
+	HYDROGRAPH AT	82B	905.	12.17	106.	36.	34.	.92
+	DIVERSION TO	TRW	905.	12.17	106.	36.	34.	.92
+	HYDROGRAPH AT	D82B	0.	.00	0.	0.	0.	.92
+	ROUTED TO	82BT83	0.	.00	0.	0.	0.	.92
+	HYDROGRAPH AT	83	788.	12.25	116.	39.	38.	1.01
+	DIVERSION TO	D83	788.	12.25	116.	39.	38.	1.01
+	HYDROGRAPH AT	RET83	0.	.00	0.	0.	0.	1.01
+	2 COMBINED AT	C83	0.	.00	0.	0.	0.	1.93
+	ROUTED TO	83T84	0.	.00	0.	0.	0.	1.93
+	HYDROGRAPH AT	84	753.	12.33	114.	38.	37.	.99
+	DIVERSION TO	D84	753.	12.33	114.	38.	37.	.99
+	HYDROGRAPH AT	RET84	0.	.00	0.	0.	0.	.99
+	2 COMBINED AT	C84	0.	.00	0.	0.	0.	2.92
+	ROUTED TO	84T85	0.	.00	0.	0.	0.	2.92
+	HYDROGRAPH AT	85	751.	12.25	113.	38.	37.	1.00
+	DIVERSION TO	D85	751.	12.25	113.	38.	37.	1.00
+	HYDROGRAPH AT	RET85	0.	.00	0.	0.	0.	1.00
+	2 COMBINED AT	C85	0.	.00	0.	0.	0.	3.92
+	ROUTED TO	85T86	0.	.00	0.	0.	0.	3.92
+	HYDROGRAPH AT	86	762.	12.25	114.	38.	37.	1.00
+	DIVERSION TO	D86	762.	12.25	114.	38.	37.	1.00
+	HYDROGRAPH AT	RET86	0.	.00	0.	0.	0.	1.00
+	2 COMBINED AT	C86	0.	.00	0.	0.	0.	4.92
+	ROUTED TO	86T91	0.	.00	0.	0.	0.	4.92
+	HYDROGRAPH AT	87A	641.	12.08	72.	25.	24.	.49
+	DIVERSION TO	D87A	641.	12.08	72.	25.	24.	.49

+	HYDROGRAPH AT RET87A	7.	23.17	1.	0.	0.	.49
+	ROUTED TO 87ATB	4.	24.58	1.	0.	0.	.49
+	HYDROGRAPH AT 87B	628.	12.08	72.	25.	24.	.49
+	DIVERSION TO D87B	628.	12.08	72.	25.	24.	.49
+	HYDROGRAPH AT RET87B	7.	22.83	2.	0.	0.	.49
+	2 COMBINED AT C87	8.	23.83	2.	1.	1.	.98
+	ROUTED TO 87T88B	7.	24.58	1.	0.	0.	.98
+	HYDROGRAPH AT 88A	700.	12.00	74.	26.	25.	.50
+	DIVERSION TO D88A	700.	12.00	74.	25.	24.	.50
+	HYDROGRAPH AT RET88A	7.	22.83	2.	0.	0.	.50
+	ROUTED TO 88ATB	6.	24.33	1.	0.	0.	.50
+	HYDROGRAPH AT 88B	636.	12.08	73.	25.	24.	.50
+	DIVERSION TO D88B	636.	12.08	73.	25.	24.	.50
+	HYDROGRAPH AT RET88B	7.	23.50	1.	0.	0.	.50
+	2 COMBINED AT C88B	10.	23.92	2.	0.	0.	1.00
+	2 COMBINED AT C88	8.	24.08	2.	0.	0.	1.98
+	ROUTED TO 88T89	7.	24.83	1.	0.	0.	1.98
+	HYDROGRAPH AT 89A	617.	12.08	73.	25.	25.	.50
+	DIVERSION TO 89A	617.	12.08	73.	25.	24.	.50
+	HYDROGRAPH AT RET89A	7.	23.25	1.	0.	0.	.50
+	ROUTED TO 89ATB	3.	24.92	0.	0.	0.	.50
+	HYDROGRAPH AT 89B	644.	12.08	73.	25.	24.	.50
+	DIVERSION TO D89B	644.	12.08	73.	25.	24.	.50
+	HYDROGRAPH AT RET89B	7.	22.58	2.	0.	0.	.50
+	2 COMBINED AT C89B	7.	23.75	2.	1.	1.	1.00
+	2 COMBINED AT C89	7.	24.92	2.	0.	0.	2.98
+	ROUTED TO 89T90	2.	24.92	0.	0.	0.	2.98

+	HYDROGRAPH AT 90A	548.	12.08	59.	20.	19.	.48
+	DIVERSION TO D90A	548.	12.08	59.	20.	19.	.48
+	HYDROGRAPH AT RET90A	0.	.00	0.	0.	0.	.48
+	ROUTED TO 90ATB	0.	.00	0.	0.	0.	.48
+	HYDROGRAPH AT 90B	350.	12.67	69.	22.	21.	.82
+	DIVERSION TO D90B	350.	12.67	41.	12.	11.	.82
+	HYDROGRAPH AT RET90B	289.	12.83	36.	10.	10.	.82
+	2 COMBINED AT C90B	287.	12.83	35.	10.	10.	1.30
+	2 COMBINED AT C90	279.	12.83	33.	10.	9.	4.28
+	ROUTED TO 90T91	193.	13.33	32.	9.	9.	4.28
+	HYDROGRAPH AT 91	383.	12.25	53.	18.	17.	.46
+	DIVERSION TO D91	383.	12.25	53.	18.	17.	.46
+	HYDROGRAPH AT RET91	0.	.00	0.	0.	0.	.46
+	3 COMBINED AT CP91	195.	13.33	32.	9.	9.	9.66
+	ROUTED TO 91TEMF	143.	13.58	29.	8.	8.	9.66
+	HYDROGRAPH AT 81A	957.	12.67	213.	72.	69.	1.81
+	DIVERSION TO D81A	19.	4.08	10.	3.	2.	1.81
+	HYDROGRAPH AT RET81A	957.	12.67	213.	69.	67.	1.81
+	ROUTED TO 81ATB	873.	13.08	213.	69.	66.	1.81
+	HYDROGRAPH AT 81B	719.	12.25	109.	37.	36.	.84
+	DIVERSION TO D81B	666.	12.17	60.	18.	17.	.84
+	HYDROGRAPH AT RET81B	692.	12.33	68.	20.	19.	.84
+	3 COMBINED AT RITTEN	901.	13.00	281.	89.	86.	12.31
+	2 COMBINED AT EMFRIT	2666.	13.08	2179.	1011.	974.	84.93

*** NORMAL END OF HEC-1 ***

```
-----DSS---ZCLOSE Unit:  71,   File: FUTN10YR.DSS
          Pointer Utilization:    .25
          Number of Records:      25
          File Size:      53.2  Kbytes
          Percent Inactive:     .0
```