VOLUME III
SUBBASIN PREPARATION

Loop 303 Corridor/White Tanks
Area Drainage Master Plan Update
Contract FCD 99-40

Prepared for

Flood Control District of Maricopa County

URS

URS Job No. E1-00001526

November 4, 2002

LOSS PARAMETERS FOR SUBBASIN: 1

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	1.921	99.0	0.40	20
49	0.019	1.0	0.06	0

TOTAL = 1.940 Sq.Miles XKSAT = 0.39 %Rock = 20

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.940	MTN	100.	DRY	40	0	0.20	0.05	Min	0.02
1.940 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.52

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 20

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 2

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.546	30.0	0.40	20
RS	0.419	23.0	0.40	65
EPD	0.419	23.0	0.12	0
TB	0.218	12.0	0.40	0
CO	0.218	12.0	0.29	20

TOTAL = 1.820 Sq.Miles XKSAT = 0.29 %Rock = 23

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.910	MNT	50.0	DRY	40	0	0.20	0.05	Min	0.02
0.910	HIL	50.0	DRY	30	0	0.15	0.05	Min	0.02

1.820 = Total Area Avg. = 35 0% 0.180

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.37

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 23

% EFFECTIVE IMP. = 12

LOSS PARAMETERS FOR SUBBASIN: 3

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AKB	0.591	73.0	0.27	0
VR	0.073	9.0	0.63	0
TB	0.065	8.0	0.40	0
AGB	0.057	7.0	0.40	0
AL	0.024	3.0	0.40	0

TOTAL = 0.810 Sq.Miles XKSAT = 0.31 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.810	HIL	100.	DRY	30	0	0.15	0.05	Min	0.02

0.810 = Total Area Avg. = 30 0% 0.150

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0
% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 3A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AKB	0.203	70.2	0.27	0
VR	0.072	24.9	0.63	0
ADB	0.014	4.8	0.40	0

TOTAL = 0.289 Sq.Miles XKSAT = 0.34 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.289	HIL	100.	DRY	30	0	0.15	0.05	Min	0.03
0.289 = Total Area			Avg. =	30	0%	0.150			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 4

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.270	90.0	0.40	20
49	0.030	10.0	0.06	0

TOTAL = 0.300 Sq.Miles XKSAT = 0.33 %Rock = 18

DTHETA

Dry = 0.35 PSIF = 4.35
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.300	MNT	100.	DRY	40	0	0.20	0.05	Min	0.03
0.300 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 18

% EFFECTIVE IMP. = 9

LOSS PARAMETERS FOR SUBBASIN: 5

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.662	91.9	0.40	20
49	0.058	8.1	0.06	0

TOTAL = 0.720 Sq.Miles XKSAT = 0.34 %Rock = 18

DTHETA

Dry = 0.35 PSIF = 4.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.720	MNT	100.	DRY	40	0	0.20	0.05	Min	0.02
0.720 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 18

% EFFECTIVE IMP. = 9

LOSS PARAMETERS FOR SUBBASIN: 6

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.450	100.	0.40	20

TOTAL = 0.450 Sq.Miles XKSAT = 0.40 %Rock = 20

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.450	MNT	100.	DRY	40	0	0.20	0.05	Min	0.02
0.450 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 20

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 7

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.310	100.	0.40	20

TOTAL = 0.310 Sq.Miles XKSAT = 0.40 %Rock = 20

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.310	MNT	100.	DRY	40	0	0.20	0.05	Min	0.03
0.310 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 20

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 8

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.810	100.	0.40	20

TOTAL = 0.810 Sq.Miles XKSAT = 0.40 %Rock = 20

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.810	MNT	100.	DRY	40	0	0.20	0.05	Min	0.02
0.810 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 20

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 9

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	1.351	96.5	0.40	20
29	0.035	2.5	0.34	0
48	0.014	1.0	0.06	0

TOTAL = 1.400 Sq.Miles XKSAT = 0.39 %Rock = 19

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.344	MNT	96.0	DRY	40	0	0.20	0.05	Min	0.02
0.056	HIL	4.0	DRY	30	0	0.15	0.05	Min	0.03
1.400 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.52

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 19

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 10

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
TB	0.364	18.0	0.40	0
AKB	0.343	17.0	0.27	0
100	0.263	13.0	0.40	20
PYD	0.222	11.0	0.20	0
EPD	0.222	11.0	0.12	0
RS	0.121	6.0	0.40	65
CV	0.121	6.0	0.39	0
AL	0.121	6.0	0.40	0
GYD	0.081	4.0	0.26	0
AGB	0.061	3.0	0.40	0
29	0.061	3.0	0.34	0
VR	0.020	1.0	0.63	0
48	0.020	1.0	0.06	0

TOTAL = 2.020 Sq.Miles XKSAT = 0.29 %Rock = 7

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.818	HIL	90.0	DRY	30	0	0.15	0.05	Min	0.02
0.202	MNT	10.0	DRY	40	0	0.20	0.05	Min	0.03

2.020 = Total Area Avg. = 31 0% 0.160

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.36

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 7

% EFFECTIVE IMP. = 4

LOSS PARAMETERS FOR SUBBASIN: 11

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.608	39.0	0.40	20
EPD	0.530	34.0	0.12	0
48	0.172	11.0	0.06	0
RS	0.125	8.0	0.40	65
CO	0.047	3.0	0.29	20
AM	0.047	3.0	0.39	0
TB	0.031	2.0	0.40	0

TOTAL = 1.560 Sq.Miles XKSAT = 0.21 %Rock = 14

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.780	MNT	50.0	DRY	40	0	0.20	0.05	Min	0.02
0.780	HIL	50.0	DRY	30	0	0.15	0.05	Min	0.02

1.560 = Total Area Avg. = 35 0% 0.180

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.37

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 14

% EFFECTIVE IMP. = 7

LOSS PARAMETERS FOR SUBBASIN: 12

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PYD	0.290	21.0	0.20	0
EPD	0.290	21.0	0.12	0
CV	0.179	13.0	0.39	0
AKB	0.152	11.0	0.27	0
100	0.124	9.0	0.40	20
TB	0.110	8.0	0.40	0
AGB	0.110	8.0	0.40	0
RS	0.083	6.0	0.40	65
48	0.028	2.0	0.06	0
CO	0.014	1.0	0.29	20

TOTAL = 1.380 Sq.Miles XKSAT = 0.25 %Rock = 6

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.242	HIL	90.0	DRY	30	0	0.15	0.05	Min	0.02
0.138	MNT	10.0	DRY	40	0	0.20	0.05	Min	0.03
1.380 = Total Area			Avg. =	31	0%	0.160			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 6

% EFFECTIVE IMP. = 3

LOSS PARAMETERS FOR SUBBASIN: 13

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PYD	0.221	17.0	0.20	0
EPD	0.208	16.0	0.12	0
AM	0.195	15.0	0.39	0
AGB	0.182	14.0	0.40	0
TB	0.169	13.0	0.40	0
CV	0.169	13.0	0.39	0
AHC	0.156	12.0	0.38	0

TOTAL = 1.300 Sq.Miles XKSAT = 0.29 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.300	HIL	100.	DRY	30	0	0.15	0.05	Min	0.02

1.300 = Total Area Avg. = 30 0% 0.150

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0
% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 14

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	1.323	90.0	0.40	20
48	0.132	9.0	0.06	0
10	0.015	1.0	0.94	0

TOTAL = 1.470 Sq.Miles XKSAT = 0.34 %Rock = 18

DTHETA

Dry = 0.35 PSIF = 4.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.323	MNT	90.0	DRY	40	0	0.20	0.05	Min	0.02
0.147	HIL	10.0	DRY	30	0	0.15	0.05	Min	0.03
1.470 = Total Area			Avg. =	39	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 18

% EFFECTIVE IMP. = 9

LOSS PARAMETERS FOR SUBBASIN: 15

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.403	32.0	0.40	20
TB	0.189	15.0	0.40	0
EPD	0.151	12.0	0.12	0
CO	0.151	12.0	0.29	20
18	0.113	9.0	0.33	15
AGB	0.101	8.0	0.40	0
AM	0.063	5.0	0.39	0
RS	0.050	4.0	0.40	65
PYD	0.038	3.0	0.20	0

TOTAL = 1.259 Sq.Miles XKSAT = 0.32 %Rock = 13

DTHETA

Dry = 0.35 PSIF = 4.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.630	MNT	50.0	DRY	40	0	0.20	0.05	Min	0.02
0.630	HIL	50.0	DRY	30	0	0.15	0.05	Min	0.02
1.260 = Total Area			Avg. =	35	0%	0.180			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 13

% EFFECTIVE IMP. = 7

LOSS PARAMETERS FOR SUBBASIN: 16

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
RS	0.328	29.0	0.40	65
EPD	0.271	24.0	0.12	0
PYD	0.113	10.0	0.20	0
CO	0.113	10.0	0.29	20
AHC	0.113	10.0	0.38	0
AGB	0.113	10.0	0.40	0
100	0.079	7.0	0.40	20

TOTAL = 1.130 Sq.Miles XKSAT = 0.27 %Rock = 22

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.678	HIL	60.0	DRY	30	0	0.15	0.05	Min	0.02
0.452	MNT	40.0	DRY	40	0	0.20	0.05	Min	0.02
1.130 = Total Area			Avg. =	34	0%	0.170			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.34

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 22

% EFFECTIVE IMP. = 11

LOSS PARAMETERS FOR SUBBASIN: 17

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AHC	0.417	39.0	0.38	0
AM	0.182	17.0	0.39	0
AGB	0.171	16.0	0.40	0
TB	0.161	15.1	0.40	0
AL	0.064	6.0	0.40	0
AKB	0.064	6.0	0.27	0
AE	0.011	1.0	0.39	0

TOTAL = 1.070 Sq.Miles XKSAT = 0.38 %Rock = 0

DTHETA

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

LAND USE

AREA Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.856	HIL	80.0	DRY	30	0	0.15	0.05	Min	0.02
0.214	DRL	20.0	DRY	20	0	0.35	0.05	Min	0.03
1.070 = Total Area			Avg. =	28	0%	0.190			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % 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.
1	1.070	1.30	0.70	0.05	67.7	0.19	0.35	4.10	0.46	0	31

LOSS PARAMETERS FOR SUBBASIN: WT3

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AKB	0.381	86.6	0.27	0
GGA	0.040	9.1	0.25	0
ADB	0.013	3.0	0.40	0
ABA	0.006	1.4	0.38	0

TOTAL = 0.440 Sq.Miles XKSAT = 0.27 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.440	DRL	100.	DRY	20	0	0.35	0.05	Min	0.02
0.440 = Total Area			Avg. =	20	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. = 0.30

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 18

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.765	94.4	0.40	20
49	0.045	5.6	0.06	0

TOTAL = 0.810 Sq.Miles XKSAT = 0.36 %Rock = 19

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.810	MNT	100.	DRY	40	0	0.20	0.05	Min	0.02

0.810 = Total Area Avg. = 40 0% 0.200

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 19
% 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.
18	0.810	1.25	0.63	0.05	920.0	0.20	0.35	4.20	0.48	10	5

LOSS PARAMETERS FOR SUBBASIN: 19

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.687	87.0	0.40	20
48	0.103	13.0	0.06	0

TOTAL = 0.790 Sq.Miles XKSAT = 0.31 %Rock = 17

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.632	MNT	80.0	DRY	40	0	0.20	0.05	Min	0.02
0.158	HIL	20.0	DRY	30	0	0.15	0.05	Min	0.03
0.790 = Total Area			Avg. =	38	0%	0.190			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 17

% EFFECTIVE IMP. = 9

LOSS PARAMETERS FOR SUBBASIN: 20

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.792	74.0	0.40	20
48	0.278	26.0	0.06	0

TOTAL = 1.070 Sq.Miles XKSAT = 0.24 %Rock = 15

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.749	MNT	70.0	DRY	40	0	0.20	0.05	Min	0.02
0.321	HIL	30.0	DRY	30	0	0.15	0.05	Min	0.03
1.070 = Total Area			Avg. =	37	0%	0.190			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 15

% EFFECTIVE IMP. = 8

LOSS PARAMETERS FOR SUBBASIN: 21

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
48	0.316	40.0	0.06	0
100	0.237	30.0	0.40	20
EPD	0.158	20.0	0.12	0
RS	0.079	10.0	0.40	65

TOTAL = 0.790 Sq.Miles XKSAT = 0.15 %Rock = 13

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.553	MNT	70.0	DRY	40	0	0.20	0.05	Min	0.02
0.237	HIL	30.0	DRY	30	0	0.15	0.05	Min	0.03

0.790 = Total Area Avg. = 37 0% 0.190

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.40

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.20

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 13

% EFFECTIVE IMP. = 7

LOSS PARAMETERS FOR SUBBASIN: 22

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.393	69.1	0.40	20
48	0.142	25.0	0.06	0
18	0.034	6.0	0.33	15

TOTAL = 0.569 Sq.Miles XKSAT = 0.25 %Rock = 15

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.484	MNT	84.9	DRY	40	0	0.20	0.05	Min	0.02
0.086	HIL	15.1	DRY	30	0	0.15	0.05	Min	0.03

0.570 = Total Area Avg. = 38 0% 0.190

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.33

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 15

% EFFECTIVE IMP. = 8

LOSS PARAMETERS FOR SUBBASIN: 22A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
EPD	0.360	72.0	0.12	0
TB	0.017	3.4	0.40	0
RS	0.085	17.0	0.40	65
PYD	0.038	7.6	0.20	0

TOTAL = 0.500 Sq.Miles XKSAT = 0.16 %Rock = 11

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.500	HIL	100.	DRY	30	0	0.15	0.05	Min	0.02

0.500 = Total Area Avg. = 30 0% 0.150

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.39

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.20

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 11

% EFFECTIVE IMP. = 6

LOSS PARAMETERS FOR SUBBASIN: 23

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.050	31.2	0.40	20
RS	0.110	68.8	0.40	65

TOTAL = 0.160 Sq.Miles XKSAT = 0.40 %Rock = 51

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.080	MNT	50.0	DRY	40	0	0.20	0.05	Min	0.03
0.080	HIL	50.0	DRY	30	0	0.15	0.05	Min	0.03

0.160 = Total Area Avg. = 35 0% 0.180

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.51

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 51

% EFFECTIVE IMP. = 26

LOSS PARAMETERS FOR SUBBASIN: 25

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
EPD	0.336	73.0	0.12	0
TB	0.083	18.0	0.40	0
AGB	0.023	5.0	0.40	0
AHC	0.018	3.9	0.38	0

TOTAL = 0.460 Sq.Miles XKSAT = 0.17 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.460	HIL	100.	DRY	30	0	0.15	0.05	Min	0.02

0.460 = Total Area Avg. = 30 0% 0.150

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.39

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.21

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 24

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AHC	0.088	62.9	0.38	0
EPD	0.049	35.0	0.12	0
TB	0.003	2.1	0.40	0

TOTAL = 0.140 Sq.Miles XKSAT = 0.25 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.140	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.140 = Total Area Avg. = 20 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. = 0.28

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 26

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
48	0.464	40.0	0.06	0
100	0.348	30.0	0.40	20
44	0.325	28.0	0.03	0
EPD	0.023	2.0	0.12	0

TOTAL = 1.160 Sq.Miles XKSAT = 0.09 %Rock = 6

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.696	HIL	60.0	DRY	30	0	0.15	0.05	Min	0.02
0.464	MNT	40.0	DRY	40	0	0.20	0.05	Min	0.02
1.160 = Total Area			Avg. =	34	0%	0.170			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.33

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.11

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 6

% EFFECTIVE IMP. = 3

LOSS PARAMETERS FOR SUBBASIN: 27

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
48	0.510	51.0	0.06	0
AHC	0.100	10.0	0.38	0
29	0.050	5.0	0.34	0
AGB	0.050	5.0	0.40	0
100	0.040	4.0	0.40	20
EPD	0.250	25.0	0.12	0

TOTAL = 1.000 Sq.Miles XKSAT = 0.11 %Rock = 1

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.000	HIL	100.	DRY	30	20	0.15	0.05	Min	0.02
1.000 = Total Area			Avg. =	30	20%	0.150			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.36

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.13

IMPERVIOUS AREA: URBAN @ 100 % effective = 20
ROCK OUTCROP @ 50 % effective = 1

% EFFECTIVE IMP. = 21

LOSS PARAMETERS FOR SUBBASIN: 28

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.499	58.0	0.40	0
AL	0.095	11.0	0.40	0
AHC	0.095	11.0	0.38	0
ADB	0.090	10.5	0.40	0
AKB	0.026	3.0	0.27	0
PYD	0.017	2.0	0.20	0
ABA	0.017	2.0	0.38	0
GGA	0.013	1.5	0.25	0
MA	0.009	1.0	0.40	0

TOTAL = 0.861 Sq.Miles XKSAT = 0.38 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.860	HIL	100.	DRY	30	0	0.15	0.05	Min	0.02

0.860 = Total Area Avg. = 30 0% 0.150

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 29

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
TC	0.178	80.9	0.40	0
TB	0.042	19.1	0.40	0

TOTAL = 0.220 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.220	HIL	100.	DRY	30	0	0.15	0.05	Min	0.03

0.220 = Total Area Avg. = 30 0% 0.150

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.49

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 30

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
TC	0.147	52.5	0.40	0
MA	0.062	22.1	0.40	0
BS	0.020	7.1	0.39	0
TB	0.001	0.4	0.40	0
AL	0.050	17.9	0.40	0

TOTAL = 0.280 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.280	HIL	100.	DRY	30	32	0.15	0.05	Min	0.03

0.280 = Total Area Avg. = 30 32% 0.150

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.49

IMPERVIOUS AREA: URBAN @ 100 % effective = 32
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 32

LOSS PARAMETERS FOR SUBBASIN: 31

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.149	21.0	0.40	0
TB	0.085	12.0	0.40	0
AL	0.121	17.1	0.40	0
BS	0.177	25.0	0.39	0
AHC	0.078	11.0	0.38	0
MA	0.036	5.1	0.40	0
AKB	0.028	3.9	0.27	0
CB	0.021	3.0	0.40	0
ADA	0.014	2.0	0.40	0

TOTAL = 0.709 Sq.Miles XKSAT = 0.39 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.568	HIL	80.0	DRY	30	0	0.15	0.05	Min	0.02
0.142	DRL	20.0	DRY	20	0	0.35	0.05	Min	0.03

0.710 = Total Area Avg. = 28 0% 0.190

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 32

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
48	0.129	10.0	0.06	0
100	1.161	90.0	0.40	20

TOTAL = 1.290 Sq.Miles XKSAT = 0.33 %Rock = 18

DTHETA

Dry = 0.35 PSIF = 4.35
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
1.290	MNT	100.	DRY	40	1	0.20	0.05	Min	0.02
1.290 = Total Area			Avg. =	40	1%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 1
ROCK OUTCROP @ 50 % effective = 18

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 33

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.650	100.	0.40	20

TOTAL = 0.650 Sq.Miles XKSAT = 0.40 %Rock = 20

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.650	MNT	100.	DRY	40	0	0.20	0.05	Min	0.02
0.650 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 20

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 34

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.360	100.	0.40	20

TOTAL = 0.360 Sq.Miles XKSAT = 0.40 %Rock = 20

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.360	MNT	100.	DRY	40	0	0.20	0.05	Min	0.03
0.360 = Total Area			Avg. =	40	0%	0.200			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 20

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 35

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.390	100.	0.40	20

TOTAL = 0.390 Sq.Miles XKSAT = 0.40 %Rock = 20

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.390	MNT	100.	DRY	40	0	0.20	0.05	Min	0.03

0.390 = Total Area Avg. = 40 0% 0.200

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.53

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 20

% EFFECTIVE IMP. = 10

LOSS PARAMETERS FOR SUBBASIN: 36

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
3	0.154	64.2	0.58	0
48	0.048	20.0	0.06	0
100	0.026	10.8	0.40	20
29	0.012	5.0	0.34	0

TOTAL = 0.240 Sq.Miles XKSAT = 0.34 %Rock = 2

DTHETA

Dry = 0.35 PSIF = 4.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.216	HIL	90.0	DRY	30	0	0.15	0.05	Min	0.03
0.024	MNT	10.0	DRY	40	0	0.20	0.05	Min	0.03

0.240 = Total Area Avg. = 31 0% 0.160

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 2

% EFFECTIVE IMP. = 1

LOSS PARAMETERS FOR SUBBASIN: 37

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.798	84.0	0.40	20
48	0.123	12.9	0.06	0
3	0.029	3.1	0.58	0

TOTAL = 0.950 Sq.Miles XKSAT = 0.32 %Rock = 17

DTHETA

Dry = 0.35 PSIF = 4.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.665	MNT	70.0	DRY	40	0	0.20	0.05	Min	0.02
0.285	HIL	30.0	DRY	30	0	0.15	0.05	Min	0.03
0.950 = Total Area			Avg. =	37	0%	0.190			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.42

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 17

% EFFECTIVE IMP. = 9

LOSS PARAMETERS FOR SUBBASIN: 38

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.266	35.0	0.40	20
29	0.266	35.0	0.34	0
3	0.152	20.0	0.58	0
48	0.068	8.9	0.06	0
TB	0.008	1.1	0.40	0

TOTAL = 0.760 Sq.Miles XKSAT = 0.34 %Rock = 7

DTHETA

Dry = 0.35 PSIF = 4.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.456	HIL	60.0	DRY	30	0	0.15	0.05	Min	0.02
0.304	MNT	40.0	DRY	40	0	0.20	0.05	Min	0.03

0.760 = Total Area Avg. = 34 0% 0.170

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.43

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 7

% EFFECTIVE IMP. = 4

LOSS PARAMETERS FOR SUBBASIN: 39

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.477	62.0	0.40	0
PYD	0.104	13.5	0.20	0
AL	0.096	12.5	0.40	0
TB	0.073	9.5	0.40	0
29	0.019	2.5	0.34	0

TOTAL = 0.769 Sq.Miles XKSAT = 0.36 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.770	HIL	100.	DRY	30	0	0.15	0.05	Min	0.02

0.770 = Total Area Avg. = 30 0% 0.150

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 40

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
100	0.364	70.0	0.40	20
29	0.104	20.0	0.34	0
AGB	0.052	10.0	0.40	0

TOTAL = 0.520 Sq.Miles XKSAT = 0.39 %Rock = 14

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.312	MNT	60.0	DRY	40	0	0.20	0.05	Min	0.03
0.208	HIL	40.0	DRY	30	11	0.15	0.05	Min	0.03
0.520 = Total Area			Avg. =	36	4%	0.180			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.50

IMPERVIOUS AREA: URBAN @ 100 % effective = 4
ROCK OUTCROP @ 50 % effective = 14

% EFFECTIVE IMP. = 11

LOSS PARAMETERS FOR SUBBASIN: 41A1

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
HLC	0.018	90.0	0.14	0
AGB	0.002	10.0	0.40	0

TOTAL = 0.020 Sq.Miles XKSAT = 0.16 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.020	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.020 = Total Area Avg. = 20 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. = 0.18

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 41A2

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.026	86.7	0.40	0
HLC	0.004	13.3	0.14	0

TOTAL = 0.030 Sq.Miles XKSAT = 0.35 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.030	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.030 = Total Area Avg. = 20 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. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 41A3

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.030	100.	0.40	0

TOTAL = 0.030 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.030	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.030 = Total Area Avg. = 20 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. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 41A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.050	100.	0.40	0

TOTAL = 0.050 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.050	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.050 = Total Area Avg. = 20 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. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 41-1

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.150	100.	0.40	0

TOTAL = 0.150 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.150	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.150 = Total Area Avg. = 20 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. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 41-2

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.050	50.0	0.40	0
AL	0.050	50.0	0.40	0

TOTAL = 0.100 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.100	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.100 = Total Area Avg. = 20 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. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 41

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
29	0.331	57.0	0.34	0
AL	0.133	22.9	0.40	0
98	0.070	12.0	0.37	0
CV	0.023	4.0	0.39	0
AGB	0.012	2.1	0.40	0
10	0.012	2.1	0.94	0

TOTAL = 0.581 Sq.Miles XKSAT = 0.37 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.406	HIL	70.0	DRY	30	0	0.15	0.05	Min	0.02
0.174	DRL	30.0	DRY	20	0	0.35	0.05	Min	0.03
0.580 = Total Area			Avg. =	27	0%	0.210			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 42

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AGB	0.448	38.0	0.40	0
PYD	0.295	25.0	0.20	0
TSC	0.271	23.0	0.14	0
AL	0.071	6.0	0.40	0
TB	0.047	4.0	0.40	0
PRB	0.047	4.0	0.28	0

TOTAL = 1.179 Sq.Miles XKSAT = 0.26 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.826	HIL	70.0	DRY	30	0	0.15	0.05	Min	0.02
0.354	DRL	30.0	DRY	20	0	0.35	0.05	Min	0.03

1.180 = Total Area Avg. = 27 0% 0.210

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43-1

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AL	0.029	72.5	0.40	0
CV	0.011	27.5	0.39	0

TOTAL = 0.040 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.040	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.040 = Total Area Avg. = 20 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. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0
% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43-2

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AL	0.010	100.	0.40	0

TOTAL = 0.010 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.010	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03
0.010 = Total Area			Avg. =	20	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. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43-3

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AL	0.038	74.5	0.40	0
CV	0.013	25.5	0.39	0

TOTAL = 0.051 Sq.Miles XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35
Normal = 0.25
Wet = 0.00

PSIF = ~~3.95~~ 4.30

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.050	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.050 = Total Area Avg. = 20 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. = 0.44

IMPERVIOUS AREA:
URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43-4

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AL	0.018	60.0	0.40	0
PRB	0.012	40.0	0.28	0
TOTAL =	0.030 Sq.Miles	XKSAT = 0.35	%Rock =	0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.030	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03
0.030 = Total Area			Avg. =	20	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. = 0.39

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0
% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43-5

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PRB	0.020	100.	0.28	0

TOTAL = 0.020 Sq.Miles XKSAT = 0.28 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.020	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.020 = Total Area Avg. = 20 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. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43-6

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PRB	0.014	70.0	0.28	0
CV	0.006	30.0	0.39	0

TOTAL = 0.020 Sq.Miles XKSAT = 0.31 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.020	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.020 = Total Area Avg. = 20 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. = 0.34

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43-7

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PRB	0.020	100.	0.28	0

TOTAL = 0.020 Sq.Miles XKSAT = 0.28 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.020	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.020 = Total Area Avg. = 20 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. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43-8

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PRB	0.010	100.	0.28	0

TOTAL = 0.010 Sq.Miles XKSAT = 0.28 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.010	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03
0.010 = Total Area			Avg. =	20	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. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 43

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PRB	0.005	50.0	0.28	0
AL	0.005	50.0	0.40	0

TOTAL = 0.010 Sq.Miles XKSAT = 0.33 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.35
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.010	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03

0.010 = Total Area Avg. = 20 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. = 0.37

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0
% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 44

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PRB	0.132	60.0	0.28	0
CV	0.088	40.0	0.39	0

TOTAL = 0.220 Sq.Miles XKSAT = 0.32 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.220	DRL	100.	DRY	20	0	0.35	0.05	Min	0.03
0.220 = Total Area			Avg. =	20	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. = 0.36

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 45-1

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AL	0.040	50.0	0.40	0
PRB	0.032	40.0	0.28	0
TSC	0.008	10.0	0.14	0

TOTAL = 0.080 Sq.Miles XKSAT = 0.31 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.056	HIL	70.0	DRY	30	0	0.15	0.05	Min	0.03
0.024	DRL	30.0	DRY	20	0	0.35	0.05	Min	0.03
0.080 = Total Area			Avg. =	27	0%	0.210			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.37

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 45

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
PRB	0.114	30.0	0.28	0
PYD	0.068	17.9	0.20	0
CV	0.068	17.9	0.39	0
TSC	0.065	17.1	0.14	0
AL	0.065	17.1	0.40	0

TOTAL = 0.380 Sq.Miles XKSAT = 0.26 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.308	HIL	89.0	DRY	30	0	0.15	0.05	Min	0.03
0.038	DRL	11.0	DRY	20	0	0.35	0.05	Min	0.03

0.346 = Total Area Avg. = 29 0% 0.170

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 46-1

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AL	0.052	34.9	0.40	0
CV	0.052	34.9	0.39	0
AM	0.041	27.5	0.39	0
PRB	0.004	2.7	0.28	0

TOTAL = 0.149 Sq.Miles XKSAT = 0.39 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.120	HIL	80.0	DRY	30	0	0.15	0.05	Min	0.03
0.030	DRL	20.0	DRY	20	0	0.35	0.05	Min	0.03

0.150 = Total Area Avg. = 28 0% 0.190

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 46

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AL	0.245	28.8	0.40	0
CV	0.145	17.1	0.39	0
LB	0.102	12.0	0.40	0
AM	0.085	10.0	0.39	0
AHC	0.085	10.0	0.38	0
TB	0.068	8.0	0.40	0
GGA	0.068	8.0	0.25	0
PYD	0.025	2.9	0.20	0
VA	0.017	2.0	0.39	0
AGB	0.010	1.2	0.40	0

TOTAL = 0.850 Sq.Miles XKSAT = 0.37 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.680	HIL	80.0	DRY	30	0	0.15	0.05	Min	0.02
0.170	DRL	20.0	DRY	20	0	0.35	0.05	Min	0.03

0.850 = Total Area Avg. = 28 0% 0.190

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: WT4

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
CV	0.200	26.0	0.39	0
AL	0.192	24.9	0.40	0
PRB	0.192	24.9	0.28	0
PEA	0.012	1.6	0.37	0
ABA	0.012	1.6	0.38	0
GGA	0.008	1.0	0.25	0
CP	0.154	20.0	0.40	0

TOTAL = 0.770 Sq.Miles XKSAT = 0.36 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.770	drl	100.	DRY	20	0	0.35	0.05	Min	0.02

0.770 = Total Area Avg. = 20 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. = 0.40

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 100A

S-GRAPH PARAMETERS

Area = 0.18 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.57	18.0	0.101

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.57 mi Av.Slope= 31.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.23 mi

Lag = 41.30 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Va	35.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Mp	29.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Es	16.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Mr	8.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	0
TrA	6.0 %	Tremant	Sandy Clay Loam	0.26	0.16	0.00	----	0.09	0.17	0
TrB	3.0 %	Tremant	Sandy Clay Loam	0.31	0.21	0.00	----	0.27	0.51	0
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			----	----	0.00	4.58	~~0.22~~	0.38	0.

Land type weighted DTHETA = 0.00 0.33

per FCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
100A	0.18	0.50	0.00	~~4.58~~ 4.32	~~0.28~~	0.0	41.30

Adj. Xksat = 0.33 * ((90-10)/90 + 1) = 0.62

KMH

1-4-01

LOSS PARAMETERS FOR SUBBASIN: 101

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
GGA	0.054	33.8	0.25	0
TRB	0.030	18.8	0.13	0
MP	0.026	16.2	0.25	0
RBA	0.019	11.9	0.26	0
BS	0.018	11.2	0.39	0
TRA	0.008	5.0	0.11	0
MR	0.005	3.1	0.05	0

TOTAL = 0.160 Sq.Miles XKSAT = 0.21 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.160	Desert	100.	DRY	20	0	0.35	0.05	Low	0.05
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.160 = Total Area			Avg. =	20	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 @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 102A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MP	0.255	50.2	0.25	0
TRB	0.061	12.0	0.13	0
PEB	0.046	9.1	0.38	0
GGA	0.025	4.9	0.25	0
ES	0.031	6.1	0.25	0
MR	0.020	3.9	0.05	0
LB	0.025	4.9	0.40	0
PEA	0.015	3.0	0.37	0
GE	0.010	2.0	0.26	0
CB	0.010	2.0	0.40	0
ADB	0.005	1.0	0.40	0
TRA	0.005	1.0	0.11	0

TOTAL = 0.508 Sq.Miles XKSAT = 0.23 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.357	Desert	70.0	DRY	20	0	0.35	0.05	Low	0.05
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.153	RowCrop	30.0	WET	90	0	0.50	0.12	Hi	0.10

0.510 = Total Area Avg. = 41 0% 0.400

PERCENT OF SUBBASIN DRY = 70.0 %
NORMAL = 0.0 %
WET = 30.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 104

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
GGA	0.068	45.3	0.25	0
TRB	0.045	30.0	0.13	0
TRA	0.012	8.0	0.11	0
MP	0.015	10.0	0.25	0
MR	0.010	6.7	0.05	0

TOTAL = 0.150 Sq.Miles XKSAT = 0.17 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.150	Desert	100.	DRY	20	0	0.35	0.05	Low	0.05
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.150 = Total Area			Avg. =	20	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. = 0.19

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 105

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MP	0.147	69.7	0.25	0
MR	0.032	15.2	0.05	0
BT	0.017	8.1	0.25	0
TRA	0.015	7.1	0.11	0

TOTAL = 0.211 Sq.Miles XKSAT = 0.18 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.210	Desert	100.	DRY	20	0	0.35	0.05	Low	0.05
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.210 = Total Area			Avg. =	20	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. = 0.20

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 106

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MP	0.316	41.0	0.25	0
GGA	0.192	24.9	0.25	0
TRB	0.162	21.0	0.13	0
MR	0.062	8.1	0.05	0
TRA	0.038	4.9	0.11	0

TOTAL = 0.770 Sq.Miles XKSAT = 0.18 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.770	Desert	100.	DRY	20	0	0.35	0.05	Low	0.04
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.770 = Total Area			Avg. =	20	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. = 0.20

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 111

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MP	0.058	22.0	0.25	0
LCA	0.058	22.0	0.25	0
MR	0.037	14.1	0.05	0
GGA	0.018	6.8	0.25	0
BS	0.018	6.8	0.39	0
MA	0.013	4.9	0.40	0
AA	0.013	4.9	0.26	0
VF	0.011	4.2	0.01	0
VE	0.008	3.0	0.25	0
MO	0.008	3.0	0.39	0
CRB	0.008	3.0	0.40	0
TRB	0.005	1.9	0.13	0
RBA	0.005	1.9	0.26	0
LB	0.003	1.1	0.40	0

TOTAL = 0.263 Sq.Miles XKSAT = 0.19 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		WET	90	0	0.50	0.12	Hi	
0.213	SF-RES	84.5	NORMAL	40	30	0.25	0.03	Min	0.03
0.039	GOLF	15.5	NORMAL	50	0	0.25	0.03	Min	0.03

0.252 = Total Area Avg. = 42 25% 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. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 25
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 25

LOSS PARAMETERS FOR SUBBASIN: 111A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
LCA	0.031	5.1	0.25	0
ES	0.092	15.1	0.25	0
MP	0.061	10.0	0.25	0
MR	0.104	17.0	0.05	0
GGA	0.031	5.1	0.25	0
MO	0.024	3.9	0.39	0
BS	0.086	14.1	0.39	0
CRB	0.024	3.9	0.40	0
AA	0.104	17.0	0.26	0
TE	0.012	2.0	0.25	0
VF	0.018	2.9	0.01	0
PEA	0.012	2.0	0.37	0
MA	0.012	2.0	0.40	0

TOTAL = 0.611 Sq.Miles XKSAT = 0.20 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.061	Desert	10.0	DRY	25	0	0.35	0.03	Low	0.06
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.367	SF-RES	60.1	NORMAL	40	30	0.20	0.03	Min	0.03
0.183	GOLF	30.0	NORMAL	50	0	0.25	0.03	Min	0.03

0.611 = Total Area Avg. = 42 18% 0.230

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.27

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

% EFFECTIVE IMP. = 18

LOSS PARAMETERS FOR SUBBASIN: 112

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
ES	0.050	7.9	0.25	0
GGA	0.126	20.0	0.25	0
MP	0.095	15.1	0.25	0
AA	0.088	13.9	0.26	0
CB	0.114	18.1	0.40	0
TRA	0.095	15.1	0.11	0
PEA	0.032	5.1	0.37	0
MR	0.006	1.0	0.05	0
LCA	0.006	1.0	0.25	0
VF	0.013	2.1	0.01	0
TG	0.006	1.0	0.04	0

TOTAL = 0.631 Sq.Miles XKSAT = 0.22 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		WET	90	0	0.50	0.12	Hi	
0.350	SF-RES	70.0	NORMAL	40	30	0.25	0.03	Min	0.03
0.150	GOLF	30.0	NORMAL	50	0	0.50	0.03	Min	0.03

0.500 = Total Area Avg. = 44 21% 0.320

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 = 21
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 21

LOSS PARAMETERS FOR SUBBASIN: 113A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MP	0.300	60.0	0.25	0
MR	0.075	15.0	0.05	0
TG	0.050	10.0	0.04	0
GGA	0.045	9.0	0.25	0
AA	0.015	3.0	0.26	0
TRA	0.005	1.0	0.11	0
PEA	0.005	1.0	0.37	0
GXA	0.005	1.0	0.23	0

TOTAL = 0.500 Sq.Miles XKSAT = 0.16 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi.	
	RowCrop		WET	90	0	0.50	0.12	Hi	
0.500	SF-RES	100.	NORMAL	40	30	0.25	0.03	Min	0.02

0.500 = Total Area Avg. = 40 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. = 0.21

IMPERVIOUS AREA: URBAN @ 100 % effective = 30
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 30

LOSS PARAMETERS FOR SUBBASIN: 114

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MR	0.420	17.0	0.05	0
GXA	0.012	0.5	0.23	0
RBA	0.012	0.5	0.26	0
TRA	0.197	8.0	0.11	0
TG	0.012	0.5	0.04	0
PEA	0.037	1.5	0.37	0
GGA	0.173	7.0	0.25	0
AA	0.025	1.0	0.26	0
MP	0.889	36.0	0.25	0
TRB	0.235	9.5	0.13	0
ES	0.197	8.0	0.25	0
ABA	0.074	3.0	0.38	0
BS	0.025	1.0	0.39	0
VA	0.099	4.0	0.39	0
MO	0.049	2.0	0.39	0
LB	0.012	0.5	0.40	0

TOTAL = 2.468 Sq.Miles XKSAT = 0.17 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
2.074	M.D.R.	84.0	NORMAL	40	30	0.25	0.03	Low	0.04
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
0.025	Comm	1.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.370	Golf	15.0	NORMAL	50	0	0.50	0.05	Low	0.05
2.469 = Total Area			Avg. =	42	26%	0.290			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.23

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 26

LOSS PARAMETERS FOR SUBBASIN: 115

S[illegible]urvey Used Central County

X[illegible]

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MR	0.479	20.0	0.05	0
MP	0.706	29.5	0.25	0
BS	0.012	0.5	0.39	0
ES	0.215	9.0	0.25	0
TRA	0.072	3.0	0.11	0
MA	0.012	0.5	0.40	0
GGA	0.215	9.0	0.25	0
LB	0.192	8.0	0.40	0
TG	0.012	0.5	0.04	0
LCA	0.120	5.0	0.25	0
AA	0.024	1.0	0.26	0
TRB	0.096	4.0	0.13	0
MO	0.036	1.5	0.39	0
ADA	0.024	1.0	0.40	0
ABA	0.144	6.0	0.38	0
MA	0.012	0.5	0.40	0
PEA	0.024	1.0	0.37	0

TOTAL = 2.395 Sq.Miles XKSAT = 0.17 %Rock = 0

DTHETA

Dry = 0.39 PSIF = ~~5.70~~ 5.40

Normal = 0.25

Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
1.916	M.D.R.	80.0	NORMAL	40	30	0.25	0.03	Low	0.04
0.072	M.F.R.	3.0	NORMAL	50	45	0.25	0.03	Low	0.06
	Ind		NORMAL	60	55	0.15	0.03	Min	
0.048	Comm	2.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.359	Golf	15.0	NORMAL	50	0	0.50	0.05	Low	0.05
2.395 = Total Area			Avg. =	42	26%	0.290			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.23

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 50 % 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.
115	2.395	3.16	1.48	0.03	13.9	0.28	0.25	5.40	0.26	27	52

LOSS PARAMETERS FOR SUBBASIN: 116

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MP	0.172	26.0	0.25	0
GGA	0.238	36.0	0.25	0
LCA	0.092	13.9	0.25	0
BS	0.007	1.1	0.39	0
ES	0.086	13.0	0.25	0
MR	0.026	3.9	0.05	0
TRA	0.007	1.1	0.11	0
ABA	0.020	3.0	0.38	0
MA	0.013	2.0	0.40	0

TOTAL = 0.661 Sq.Miles XKSAT = 0.24 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.528	M.D.R.	80.0	NORMAL	40	30	0.25	0.03	Low	0.05
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
0.033	Comm	5.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.099	Golf	15.0	NORMAL	50	0	0.50	0.05	Low	0.06
0.660 = Total Area			Avg. =	43	28%	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. = 0.33

IMPERVIOUS AREA: URBAN @ 100 % effective = 28
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 28

LOSS PARAMETERS FOR SUBBASIN: 117

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
GGA	0.064	7.0	0.25	0
ES	0.212	23.1	0.25	0
LCA	0.156	17.0	0.25	0
ABA	0.018	2.0	0.38	0
MP	0.239	26.0	0.25	0
TRB	0.018	2.0	0.13	0
RBA	0.037	4.0	0.26	0
MR	0.175	19.0	0.05	0

TOTAL = 0.919 Sq.Miles XKSAT = 0.18 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.598	M.D.R.	65.0	NORMAL	40	30	0.25	0.05	Low	0.04
0.046	M.F.R.	5.0	NORMAL	50	45	0.25	0.05	Low	0.06
	Ind		NORMAL	60	55	0.15	0.03	Min	
0.046	Comm	5.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.138	Golf	15.0	NORMAL	50	0	0.50	0.05	Low	0.05
0.092	Pre-Dev	10.0	NORMAL	0	0	0.50	0.03	Low	0.06
0.920 = Total Area			Avg. =	37	26%	0.310			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.23

IMPERVIOUS AREA: URBAN @ 100 % effective = 26
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 26

LOSS PARAMETERS FOR SUBBASIN: 118
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S[illegible] Survey Used Central County
XK[illegible]
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Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
CALC	0.160	100.	0.24	0

TOTAL = 0.16 Sq.Miles XKSAT = 0.24 %Rock = 0

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

LAND USE
========

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
[illegible]160	Comm	100.	NORMAL	75	80	0.10	0.02	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	

0.160 = Total Area Avg. = 43 28% 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. = 0.33

IMPERVIOUS AREA: URBAN @ 100 % effective = 28
ROCK OUTCROP @ 50 % 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.
118	0.160	0.97	0.45	0.03	20.6	0.10	0.25	4.90	0.41	80	16

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 119

S-GRAPH PARAMETERS

Area = 0.86 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.23	38.0	0.221

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.23 mi Av.Slope= 30.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.62 mi

Lag = 80.98 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*6

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHE conc
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Sat
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rock outcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Roc cro
GgA	38.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.25	0.47	
Mp	27.0 %	Mohall	Clay Loam	0.26	0.16	0.00	---	0.05	0.09	
Mr	15.0 %	Mohall	Clay Loam	0.25	0.15	0.00	---	0.05	0.09	
LcA	11.0 %	Laveen	Loam	0.35	0.25	0.00	---	0.25	0.47	
Bt	4.0 %	Brios	Sandy Loam	0.35	0.26	0.00	---	0.50	0.50	
PeA	3.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	---	0.38	0.38	
Pa	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	---	0.39	0.39	
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	---	0.46	0.46	
Weight.Av	100.0 %			---	---	0.00	5.56	~~0.18~~	0.31	

Land type weighted DTHETA = 0.00 0.20 KMH 10-31-00 From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
119	0.86	0.50	0.00	~~5.56~~ 5.40	~~0.31~~	0.0	80.98

ADJ XKSAT = 0.20 * $\left(\frac{90-10}{90} + .1\right)$

= 0.38 KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 119A

S-GRAPH PARAMETERS

Area = 0.47 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	22.0	0.253

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 19.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 82.20 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHE cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satu
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rock outcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
Mp	51.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
LcA	18.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mr	17.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
PeB	7.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
PeA	6.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Pa	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	6.91	~~0.13~~	0.20	

Land type weighted DTHETA = 0.00 0.20 KMH 10-31-00 Rom FCDMC

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
119A	0.47	0.50	0.00	~~6.91~~ 5.40	~~0.20~~	0.0	82.20

ADJ XKSAT = 0.20 * ((90-10)/90 + 1)

= 0.38 KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 120

S-GRAPH PARAMETERS

Area = 0.54 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.33	41.0	0.240

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.33 mi Av.Slope= 30.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.67 mi

Lag = 85.98 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*6

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTH com
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Sat
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Roc cro
Mr	69.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
LcA	14.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
PeB	5.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mp	5.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Aa	4.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
GxA	3.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	7.23	~~0.11~~	0.19	

Land type weighted DTHETA = 0.00

0.09 KMH (0-31-00 From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
120	0.54	0.50	0.00	~~7.23~~ 7.30	~~0.19~~	0.0	85.98

ADJ XKSAT = 0.09 * ((90-10)/90 + 1)

= 0.17

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 121

S-GRAPH PARAMETERS

Area = 0.5 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	31.0	0.213

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 27.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 63.53 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*E

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTH cor
AGR	70 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Sat
DRL	30 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.46	0.0	69.0	1.66	0.099	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Roc cr
Mr	32.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.08	
GgA	26.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.41	
Mp	10.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.08	
Cb	10.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.85	
LcA	8.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.41	
TD	7.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.99	
Vh	3.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.76	
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.48	
Weight.Av	100.0 %			0.31	----	0.00	4.03	~~0.35~~	0.57	

Land type weighted DTHETA = 0.09 0.19 KMH 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
121	0.50	0.46	0.09	~~4.03~~ 5.52	~~0.57~~	0.0	63.53

ADJ XKSAT = $0.19 * \left(\frac{69-10}{90} + 1\right)^{5.52}$

= 0.31 KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 121A

S-GRAPH PARAMETERS

Area = 0.5 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	30.0	0.216

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 26.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 63.93 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHE conc
AGR	70 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Sat
DRL	30 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.46	0.0	69.0	1.66	0.099	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
Mr	32.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.08	
GgA	26.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.41	
Mp	10.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.08	
Cb	10.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.85	
LcA	8.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.41	
TD	7.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.99	
Vh	3.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.76	
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.48	
Weight.Av	100.0 %			0.31	----	0.00	4.03	~~0.25~~	0.57	

Land type weighted DTHETA = 0.09 0.17 KMN 10-31-00

From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
121A	0.50	0.46	0.09	~~4.03~~ 3.76	~~0.57~~	0.0	63.93

ADJ XKSAT = 0.17 * $\left(\frac{69-10}{70}+1\right)$

= 0.28 KMN 10-31-00

LOSS PARAMETERS FOR SUBBASIN: 122B

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MP	0.153	30.0	0.25	0
MR	0.046	9.0	0.05	0
MO	0.127	24.9	0.39	0
LE	0.031	6.1	0.04	0
TG	0.036	7.1	0.04	0
ES	0.061	12.0	0.25	0
GGA	0.010	2.0	0.25	0
MA	0.036	7.1	0.40	0
BS	0.005	1.0	0.39	0
LB	0.005	1.0	0.40	0

TOTAL = 0.510 Sq.Miles XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37
Normal = 0.25
Wet = 0.00

PSIF = ~~5.30~~ 6.40

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
0.040	Comm	8.0	NORMAL	75	80	0.10	0.02	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.421	SF-RES	84.0	NORMAL	50	30	0.25	0.03	Min	0.02
0.040	MF-RES	8.0	NORMAL	50	45	0.25	0.03	Min	0.03
0.501 = Total Area			Avg. =	51	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. = 0.29

IMPERVIOUS AREA:
URBAN @ 100 % effective = 35
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 35

LOSS PARAMETERS FOR SUBBASIN: 122A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
MP	0.008	2.1	0.25	0
MR	0.107	28.0	0.05	0
MO	0.008	2.1	0.39	0
AA	0.072	18.9	0.26	0
LE	0.042	11.0	0.04	0
TG	0.027	7.1	0.04	0
GGA	0.019	5.0	0.25	0
VG	0.027	7.1	0.91	0
GR	0.034	8.9	0.23	0
BT	0.019	5.0	0.25	0
LCA	0.019	5.0	0.25	0

TOTAL = 0.382 Sq.Miles XKSAT = 0.13 %Rock = 0

DTHETA

Dry = 0.38
Normal = 0.21
Wet = 0.00

PSIF = ~~6.40~~ 5.30

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.03	Low	
	M.D.R.		NORMAL	50	30	0.25	0.03	Low	
	M.F.R.		NORMAL	50	45	0.25	0.03	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
0.025	Comm	6.5	NORMAL	75	80	0.10	0.03	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.317	SF-RES	83.0	NORMAL	50	30	0.25	0.03	Min	0.03
0.040	MR-RES	10.5	NORMAL	50	45	0.25	0.03	Min	0.03
0.382 = Total Area			Avg. =	51	35%	0.240			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.21

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.19

IMPERVIOUS AREA:
URBAN @ 100 % effective = 35
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 35

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 123

S-GRAPH PARAMETERS

Area = 0.44 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	34.0	0.203

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 30.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.50 mi

Lag = 72.70 min Lag = 20*Kn*((1.2)*(L*Lca/S^.5)^.38)*

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DT co
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Sa
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Ro cr
GgA	43.0 %	Gilman	Loam	0.35	0.25	0.00	——	0.25	0.47	
Mr	22.0 %	Mohall	Clay Loam	0.25	0.15	0.00	——	0.05	0.09	
Mp	22.0 %	Mohall	Clay Loam	0.26	0.16	0.00	——	0.05	0.09	
Es	8.0 %	Estrella	Loam	0.35	0.25	0.00	——	0.25	0.47	
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	——	0.40	0.40	
Mo	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	——	0.06	0.11	
Weight.Av	100.0 %			——	——	0.00	6.21	~~0.16~~	0.30	

Land type weighted DTHETA = 0.00 0.17 LAV 10-31-00 FROM FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
123	0.44	0.50	0.00	~~6.21~~ 5.76	~~0.30~~	0.0	72.70

Adj XKSAT = 0.17 * CK (FCDMC MANUAL I- Hydrology, Pg 4-14)

$= 0.17 * \left(\frac{90-10}{90} + 1\right) = 0.32$ LAV 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 124

S-GRAPH PARAMETERS

Area = 0.57 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	41.0	0.264

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 28.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.78 mi

Lag = 94.87 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*6

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTH com
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Sat
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Roc cro
GgA	53.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mr	24.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Mp	23.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	6.41	~~0.18~~	0.29	

Land type weighted DTHETA = 0.00

0.17 LAW 10-31-00 FROM FCDM GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
124	0.57	0.50	0.00	~~6.41~~ 5.76	~~0.29~~	0.0	94.87

$$\text{Adj XKSAT} = 0.17 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.32$$ LAW 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 125

S-GRAPH PARAMETERS

Area = 1.00 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.41	34.0	0.287

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.41 mi Av.Slope= 24.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 39.24 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*6

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTH con
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Roc cro
GgA	64.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Mp	13.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	
LcA	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.28	
Es	9.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.28	
Te	3.0 %	Tremant	Sandy Clay Loam	0.26	0.16	0.00	----	0.09	0.10	
Mr	2.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.06	
Weight.Av	100.0 %			0.33	----	----	4.58	~~0.22~~	0.24	

Land type weighted DTHETA = 0.33

0.24 LAV 10-31-00 FROM FCDMC GI

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
125	1.00	0.35	0.33	~~4.58~~ 5.00	~~0.24~~	0.0	39.24

$$\text{Adj XKSAT} = 0.24 * \left(\frac{20-10}{90} + 1 \right)$$

$$= 0.27$$ LAV 10-31-00

LOSS PARAMETERS FOR SUBBASIN: 126

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
CALC	0.950	100.	0.22	0

TOTAL = 0.950 Sq.Miles XKSAT = 0.22 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.732	M.D.R.	77.1	NORMAL	40	30	0.25	0.03	Low	0.04
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
0.028	Comm	2.9	NORMAL	75	80	0.10	0.02	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.190	PRE-DEV	20.0	NORMAL	0	0	0.50	0.03	Min	0.03

0.950 = Total Area Avg. = 30 25% 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. = 0.27

IMPERVIOUS AREA: URBAN @ 100 % effective = 25
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 25

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 127

Note: This development pre-dates drainage ordinances.

S-GRAPH PARAMETERS

Area = 0.22 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.80	23.0	0.149

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.80 mi Av.Slope= 28.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.40 mi

Lag = 14.80 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*E

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTH con
RES	100 %	Residential	0.12	20.0	50.0	1.45	0.03	Nor
Weight.Av	100 %		0.12	20.0	50.0	1.45	0.030	

RTIMP is taken 50% of Rock&utcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Mao Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Roc cro
Mr	56.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.07	
Mp	20.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.07	
AbA	14.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Tu	3.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.35	
Aa	3.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.42	
Le	2.0 %	Laveen	Loam	0.34	0.23	0.00	----	0.23	0.33	
LcA	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.36	
Weight.Av	100.0 %			----	0.18	----	7.17	0.12	0.15	

Land type weighted DTHETA = 0.18 0.10 FROM GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
127	0.22	0.12	0.18	~~7.17~~ 7.00	~~0.15~~	20.0	14.80

Adj xksat = $0.10\left(\frac{50-10}{90}+1\right) = 0.14$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 128

Area = 0.41 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.96	39.0	0.151

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.96 mi Av.Slope= 40.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.48 mi

Lag = 63.68 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*6

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTH com
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Sat
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Roc crc
GgA	51.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	41.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Aa	5.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Te	3.0 %	Tremant	Sandy Clay Loam	0.26	0.16	0.00	----	0.09	0.17	
Weight.Av	100.0 %			---	---	0.00	3.59	0.25	0.47	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
128	0.41	0.50	0.00	~~3.59~~ 4.90	0.47	0.0	63.68

The xksat value did not change per FCDMC GIS.

11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 129

S-GRAPH PARAMETERS

Area = 0.43 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.92	44.0	0.133

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.92 mi Av.Slope= 47.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.46 mi

Lag = 50.81 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*6

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTH con
AGR	80 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Sat
RES	20 %	Residential	0.12	20.0	50.0	1.45	0.03	Nor
Weight.Av	100 %		0.42	4.0	82.0	1.80	0.102	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crops
Ae	43.0 %	Antho	Sandy Loam	0.35	0.25	0.00	---	0.41	0.41	
Aa	15.0 %	Agualt	Loam	0.35	0.25	0.00	---	0.29	0.52	
AbA	14.0 %	Antho	Sandy Loam	0.35	0.25	0.00	---	0.39	0.39	
GgA	13.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.25	0.45	
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	---	0.46	0.46	
Bt	4.0 %	Brios	Sandy Loam	0.35	0.26	0.00	---	0.50	0.50	
Vh	3.0 %	Vint	Loamy Sand	0.35	0.29	0.00	---	1.06	1.91	
Es	3.0 %	Estrella	Loam	0.35	0.25	0.00	---	0.25	0.45	
Weight.Av	100.0 %			---	0.25	0.00	4.24	~~0.39~~	0.48	

Land type weighted DTHETA = 0.05 0.33 KMH 10-31-00

From FEDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
129	0.43	0.42	0.05	~~4.24~~ 4.32	~~0.48~~	4.0	50.81

ADJ XKSAT = 0.33 * ((82-10)/90 + 1)
= 0.59

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 130

S-GRAPH PARAMETERS

Area = 1.00 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	43.0	0.258

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 30.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 90.67 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Mp	24.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Mr	22.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
AbA	16.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	15.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	7.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
LcA	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ae	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
PeA	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	5.01	0.20	0.28	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
130	1.00	0.50	0.00	~~5.01~~ 5.40	~~0.28~~	0.0	90.67

ADJ XKSAT = 0.20 * $\left(\frac{90-50}{90}+1\right)$

= 0.38

KMM 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 131A

S-GRAPH PARAMETERS

Area = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	34.0	0.203

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 30.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 75.67 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Mo	29.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
GgA	29.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	18.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
LcA	12.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Gt	4.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	
PeA	3.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Mr	3.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Ge	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	5.47	~~0.19~~	0.34	

Land type weighted DTHETA = 0.00 0.24 KMH 10-31-00

From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
131A	0.49	0.50	0.00	~~5.47~~ 5.00	~~0.34~~	0.0	75.67

ADJ XKSAT = 0.24 * $\left(\frac{90-10}{90}+1\right)$

= 0.45 KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 131

S-GRAPH PARAMETERS

Area = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	35.0	0.200

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 31.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 75.26 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockout crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
Mp	29.0 %	Mohall	Clay Loam	0.26	0.16	0.00	---	0.05	0.09	
GgA	29.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.25	0.47	
Es	18.0 %	Estrella	Loam	0.35	0.25	0.00	---	0.25	0.47	
LcA	12.0 %	Laveen	Loam	0.35	0.25	0.00	---	0.25	0.47	
Gt	4.0 %	Glendar	Silty Loam	0.38	0.24	0.00	---	0.14	0.26	
PeA	3.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	---	0.38	0.38	
Mr	3.0 %	Mohall	Clay Loam	0.25	0.15	0.00	---	0.05	0.09	
Ge	2.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.29	0.55	
Weight.Av	100.0 %			---	---	0.00	5.47	~~0.19~~	0.34	

Land type weighted DTHETA = 0.00 0.24 KMN 10-31-06 from FCDMC GLS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
131	0.49	0.50	0.00	~~5.47~~ 5.00	~~0.34~~	0.0	75.26

$$\text{ADJ XKSAT} = 0.24 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.45$$

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 132

S-GRAPH PARAMETERS

Area = 0.41 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.08	37.0	0.185

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.08 mi Av.Slope= 34.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.54 mi

Lag = 71.94 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	47.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.25	0.47	0
AbA	39.0 %	Antho	Sandy Loam	0.35	0.25	0.00	---	0.39	0.39	0
Vg	8.0 %	Vint	Loamy Sand	0.35	0.29	0.00	---	1.07	2.02	0
Ge	6.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.29	0.55	0
Weight.Av	100.0 %			---	---	0.00	4.15	~~0.37~~	0.57	0

Land type weighted DTHETA = 0.00 0.33 KMN 10-31-00

From FCDMC GLS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
132	0.41	0.50	0.00	~~4.15~~ 4.32	~~0.57~~	0.0	71.94

$$\text{ADJ XKSAT} = 0.33 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.62$$

KMN 10-31-00

LOSS PARAMETERS FOR SUBBASIN: 133

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
CALC	0.499	100.	0.27	0

TOTAL = 0.499 Sq.Miles XKSAT = 0.27 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.374	RowCrop	74.9	NORMAL	90	0	0.50	0.12	Hi	0.09
0.125	SF-RES	25.0	NORMAL	40	30	0.25	0.03	Min	0.03

0.499 = Total Area Avg. = 81 8% 0.440

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 = 8
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 8

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 134

S-GRAPH PARAMETERS

Area = 0.50 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	34.0	0.203

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 30.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 75.67 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockout crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	71.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	20.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Aa	5.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Ge	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	3.67	~~0.28~~	0.46	

Land type weighted DTHETA = 0.00 0.27 KMH 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From PCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
134	0.50	0.50	0.00	~~3.67~~ 4.74	~~0.46~~	0.0	75.67

$$\text{ADJ XKSAT} = 0.27 * \left(\frac{90-16}{90} + 1\right)$$

$$= 0.51$$

KMH 10-31-00

LOSS PARAMETERS FOR SUBBASIN: 135

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
CALC	0.490	100.	0.27	0

TOTAL = 0.490 Sq.Miles XKSAT = 0.27 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.250	RowCrop	51.0	NORMAL	90	0	0.50	0.12	Hi	0.09
0.240	SF-RES	49.0	NORMAL	40	30	0.25	0.03	Min	0.03
0.490 = Total Area			Avg. =	70	15%	0.380			

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 = 15
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 15

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 136

S-GRAPH PARAMETERS

Area = 0.46 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	32.0	0.218

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 27.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.52 mi

Lag = 75.41 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	54.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Aa	11.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Es	10.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mp	9.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Te	6.0 %	Tremant	Sandy Clay Loam	0.26	0.16	0.00	----	0.09	0.17	
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
RbA	4.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Weight.Av	100.0 %			----	----	0.00	3.67	~~0.24~~	0.42	

Land type weighted DTHETA = 0.00 0.26 KMH 10-31-06

INPUT VALUES FOR (MCUHP 2)PROGRAM

From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
136	0.46	0.50	0.00	~~3.67~~ 4.82	~~0.42~~	0.0	75.41

ADJ XKSAT = $0.26 * \left(\frac{90-10}{90} + 1\right)$

= 0.49

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 137

S-GRAPH PARAMETERS

Area = 0.54 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.48	40.0	0.285

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.48 mi Av.Slope= 27.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.81 mi

Lag = 99.14 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHE cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satu
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock croc
Es	32.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mp	25.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
GgA	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
RbA	10.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
LcA	8.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Aa	4.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Mr	3.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Ge	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	4.62	~~0.21~~	0.36	

Land type weighted DTHETA = 0.00 0.23

KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
137	0.54	0.50	0.00	~~4.62~~ 5.10	~~0.36~~	0.0	99.14

ADJ XKSAT = 0.23 * $\left(\frac{90-10}{90} + 1\right)$

= 0.43

KMH
10-31-00

LOSS PARAMETERS FOR SUBBASIN: 138

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
ABA	0.005	0.9	0.38	0
ES	0.146	27.0	0.25	0
GGA	0.277	51.3	0.25	0
LCA	0.051	9.4	0.25	0
MP	0.020	3.7	0.25	0
MR	0.023	4.3	0.05	0
TE	0.003	0.6	0.25	0
TG	0.001	0.2	0.04	0
TW	0.012	2.2	0.05	0
VE	0.002	0.4	0.25	0

TOTAL = 0.540 Sq.Miles XKSAT = 0.23 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.540	RowCrop	100.	NORMAL	90	0	0.50	0.12	Hi	0.09

0.540 = Total Area Avg. = 90 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. = 0.43

LOSS PARAMETERS FOR SUBBASIN: 138A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AA	0.017	3.7	0.26	0
ABA	0.042	9.1	0.38	0
CP	0.004	0.9	0.40	0
ES	0.097	21.0	0.25	0
GGA	0.031	6.7	0.25	0
GR	0.011	2.4	0.23	0
LCA	0.051	11.1	0.25	0
MP	0.184	39.9	0.25	0
MR	0.020	4.3	0.05	0
TE	0.004	0.9	0.25	0

TOTAL = 0.461 Sq.Miles XKSAT = 0.24 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.461	M.D.R.	100.	NORMAL	40	30	0.25	0.03	Low	0.05
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	

0.461 = Total Area Avg. = 40 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. = 0.32

LOSS PARAMETERS FOR SUBBASIN: 139

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
TOTAL	0.470	100.	0.14	0

TOTAL = 0.470 Sq.Miles XKSAT = 0.14 %Rock = 0

FCDMC GIS

DTHETA

Dry = 0.39 PSIF = 6.20
Normal = 0.23
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
0.023	OPEN	4.9	DRY	10	0	0.10	0.02	Min	0.03
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.400	M.D.R.	85.1	NORMAL	40	30	0.25	0.03	Low	0.05
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.047	RowCrop	10.0	NORMAL	90	0	0.50	0.12	Hi,	0.11
0.470 = Total Area			Avg. =	45	26%	0.270			

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

Res - 0.03
Golf - 0.03
Desert - 0.05
Ag - 0.12

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.24

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.19

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

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area	Length	Lca	Kn	Slope	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 140

S-GRAPH PARAMETERS

Area = 0.18 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.61	11.0	0.144

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.61 mi Av.Slope= 18.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.24 mi

Lag = 48.36 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
Mr	42.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
RbA	26.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
LcA	14.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mo	8.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
TrB	4.0 %	Tremant	Sandy Clay Loam	0.31	0.21	0.00	----	0.27	0.51	
GxA	4.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
TfA	2.0 %	Tremant	Sandy Clay Loam	0.26	0.16	0.00	----	0.07	0.13	
Weight.Av	100.0 %			----	----	0.00	5.47	~~0.19~~	0.25	

Land type weighted DTHETA = 0.00 0.18

TCDMC 0.15

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
140	0.18	0.50	0.00	~~5.47~~ 5.64	~~0.25~~	0.0	48.36

Adj. xksat = 0.18 ((90-10)/90 + 1) = 0.34

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 141

S-GRAPH PARAMETERS

Area = 0.47 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	26.0	0.205

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 25.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.52 mi

Lag = 30.64 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr) Rock cross
AKB	31.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33
AdB	18.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43
Vr	12.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.12	1.24
Ae	12.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41
Bs	8.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46
Aa	7.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.32
Vh	5.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.18
Ma	5.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40
GgA	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28
Weight.Av	100.0 %			0.34	----	----	4.07	~~0.50~~	0.52

Land type weighted DTHETA = 0.34 0.35 KMN 10-31-00

From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
141	0.47	0.35	0.34	~~4.07~~ 4.20	~~0.52~~	0.0	30.64

ADJ XKSAT = 0.35 * $\left(\frac{20-10}{10}+1\right)$

= 0.39

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 141A

S-GRAPH PARAMETERS

Area = 0.15 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.58	17.0	0.107

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.58 mi Av.Slope= 29.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.26 mi

Lag = 18.49 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
PeA	21.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Vh	18.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.18	
Ae	17.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
RbA	13.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Bs	10.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
GgA	9.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
AbA	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mo	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	
Weight.Av	100.0 %			0.35	----	----	4.08	~~0.49~~	0.52	

Land type weighted DTHETA = 0.35 0.33 KMN 10-31-00

INPUT VALUES FOR (MCUHP 2) PROGRAM From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
141A	0.15	0.35	0.35	~~4.08~~ 4.32	~~0.52~~	0.0	18.49

ADJ XKSAT = 0.33 * $\left(\frac{20-10}{90} + 1\right)$

= 0.37

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 142

S-GRAPH PARAMETERS

Area = 0.51 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	42.0	0.183

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 37.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 72.69 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ae	25.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	(
AbA	16.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Bs	12.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Va	11.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	(
Aa	11.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Es	9.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Mo	5.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	(
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
AdB	4.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	(
Vh	3.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	
Weight.Av	100.0 %			----	----	0.00	4.18	~~0.38~~	0.47	

Land type weighted DTHETA = 0.00 0.35 KMH 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
142	0.51	0.50	0.00	~~4.18~~ 4.20	~~0.47~~	0.0	72.69

ADJ XKSAT = 0.35 * $\left(\frac{90-10}{90}+1\right)$

= 0.66 KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 143

S-GRAPH PARAMETERS

Area = 0.50 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.11	39.0	0.187

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.11 mi Av.Slope= 35.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 73.10 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockou&crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	51.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	14.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	9.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Bs	7.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	4.00	0.34	0.41	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
143	0.50	0.50	0.00	~~4.00~~ 4.28	~~0.41~~	0.0	73.10

$$\text{ADJ XKSAT} = 0.34 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.64$$

KMW 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 144

S-GRAPH PARAMETERS

Area = 0.51 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.11	39.0	0.187

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.11 mi Av.Slope= 35.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 73.10 min Lag = 20*Km*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Km	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	53.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	30.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	12.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.65	~~0.28~~	0.46	

Land type weighted DTHETA = 0.00 0.27

KMH 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From FCDMC GLS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
144	0.51	0.50	0.00	~~3.65~~ 4.74	~~0.46~~	0.0	73.10

$$\text{ADJ XKSAT} = 0.27 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.51$$

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 145A

S-GRAPH PARAMETERS

rea = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	29.0	0.220

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 25.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 77.99 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	45.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
AbA	32.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Bs	9.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Mp	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	(
Gr	4.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	(
LcA	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Lb	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	(
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Weight.Av	100.0 %			----	----	0.00	3.78	~~0.30~~	0.42	(

Land type weighted DTHETA = 0.00 0.31 KMH 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From FCDMC GLS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
145A	0.49	0.50	0.00	~~3.78~~ 4.44	~~0.42~~	0.0	77.99

ADJ XKSAT = 0.31 * $\left(\frac{90-10}{90}+1\right)$

= 0.59

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 145

S-GRAPH PARAMETERS

Area = 0.48 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	34.0	0.203

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 30.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 75.67 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	45.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
AbA	32.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Bs	9.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Mp	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	(
Gr	4.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.26	(
LcA	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Lb	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	(
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Weight.Av	100.0 %			----	----	0.00	3.78	~~0.30~~	0.42	

Land type weighted DTHETA = 0.00 0.28

KMN 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
145	0.48	0.50	0.00	~~3.78~~ 4.66	~~0.42~~	0.0	75.67

$$\text{ADJ XKSAT} = 0.28 * \left(\frac{90-10}{90} + 1\right)$$
$$= 0.53$$

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 146

S-GRAPH PARAMETERS

Area = 0.90 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.35	50.0	0.222

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.35 mi Av.Slope= 37.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.68 mi

Lag = 83.98 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	91.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ge	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Mp	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	3.51	0.25	0.47	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
146	0.90	0.50	0.00	~~3.51~~ 4.90	0.47	0.0	83.98

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 147

S-GRAPH PARAMETERS

Area = 0.50 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	41.0	0.185

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 36.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 73.03 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET conc
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
GgA	81.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ge	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
AbA	9.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	3.59	~~0.27~~	0.47	

Land type weighted DTHETA = 0.00 0.26

KMN 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
147	0.50	0.50	0.00	~~3.59~~ 4.82	~~0.47~~	0.0	73.03

ADJ XKSAT = 0.26 * $\left(\frac{90-10}{90} + 1\right)$

= 0.49

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 148

S-GRAPH PARAMETERS

Area = 0.48 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	38.0	0.192

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 33.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 74.09 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	64.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
AbA	34.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	2.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Weight.Av	100.0 %			----	----	0.00	3.77	~~0.30~~	0.44	0

Land type weighted DTHETA = 0.00 0.26 KMH 10-31-00

From FCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
148	0.48	0.50	0.00	~~3.77~~ 4.82	~~0.44~~	0.0	74.09

$$\text{ADJ XKSAT} = 0.26 * \left(\frac{90-60}{90} + 1\right)$$

$$= 0.49$$

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 149

S-GRAPH PARAMETERS

Area = 0.48 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	31.0	0.213

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 27.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 77.01 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko croos
Ge	42.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
GgA	25.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ma	19.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Es	8.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.81	~~0.31~~	0.49	

Land type weighted DTHETA = 0.00 0.28

KMH 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
149	0.48	0.50	0.00	~~3.81~~ 4.66	~~0.49~~	0.0	77.01

ADJ XKSAT = 0.28 * (90-10/90 + 1)

= 0.53

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 150

S-GRAPH PARAMETERS

Area = 0.23 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.72	18.0	0.144

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.72 mi Av.Slope= 25.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.36 mi

Lag = 56.12 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables.4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	51.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Aa	34.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.25	0.55	(
Es	15.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Weight.Av	100.0 %			----	----	0.00	3.57	~~0.25~~	0.50	(

Land type weighted DTHETA = 0.00

0.25
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
150	0.23	0.50	0.00	~~3.57~~ 4.90	~~0.50~~	0.0	56.12

ADJ XKSAT = 0.25 * $\left(\frac{90-10}{90}+1\right)$

= 0.47

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 151

S-GRAPH PARAMETERS

Area = 0.25 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.72	16.0	0.153

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.72 mi Av.Slope= 22.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.36 mi

Lag = 57.39 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi-
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Es	60.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	27.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Aa	7.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Mp	5.0 %	Mohall	Clay Loam	0.26	0.15	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	3.79	~~0.25~~	0.46	

Land type weighted DTHETA = 0.00

0.25
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
151	0.25	0.50	0.00	~~3.79~~ 4.90	~~0.46~~	0.0	57.39

ADJ XKSAT = $0.25 * \left(\frac{90-10}{90} + 1\right)$

= 0.47

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 152

S-GRAPH PARAMETERS

Area = 0.35 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.90	21.0	0.186

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.90 mi Av.Slope= 23.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.45 mi

Lag = 67.37 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Mp	30.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	(
Es	30.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Mr	12.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	(
Ma	11.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Ge	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
GgA	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Weight.Av	100.0 %			----	----	0.00	5.16	~~0.20~~	0.31	

Land type weighted DTHETA = 0.00 0.23

KMH 10-31-00

From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
152	0.35	0.50	0.00	~~5.16~~ 5.10	~~0.31~~	0.0	67.37

ADJ XKSAT = 0.23 * ((90-10)/90 + 1)

= 0.43

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 153

S-GRAPH PARAMETERS

Area = 0.20 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.06	11.0	0.329

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.06 mi Av.Slope= 10.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.64 mi

Lag = 95.37 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	44.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Gt	17.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	
Ma	11.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Tw	8.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.45	
Bs	8.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Es	6.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
LcA	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	3.58	~~0.25~~	0.43	

Land type weighted DTHETA = 0.00 0.17

per FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
153	0.20	0.50	0.00	~~3.58~~ 5.76	~~0.43~~	0.0	95.37

Adj. xksat = $0.17 * \left(\frac{90-10}{90}+1\right) = 0.32$

KMH
1-4-01

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 154

S-GRAPH PARAMETERS

Area = 0.17 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.51	8.0	0.129

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.51 mi Av.Slope= 15.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.26 mi

Lag = 47.18 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	29.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Gt	20.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0
Ma	18.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Es	9.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ar	8.0 %	Avonda	Clay Loam	0.27	0.17	0.00	----	0.07	0.13	0
Bs	7.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
LcA	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ge	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Weight.Av	100.0 %			----	----	0.00	3.53	0.26	0.39	0

Land type weighted DTHETA = 0.00 0.16

Reduce GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
154	0.17	0.50	0.00	~~3.53~~ 5.88	~~0.39~~	0.0	47.18

Adj. XKSAT = 0.16 ((90-10)/60 + 1) = 0.30

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 155

S-GRAPH PARAMETERS

Area = 0.26 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.71	16.0	0.150

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.71 mi Av.Slope= 22.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.36 mi

Lag = 56.63 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condi-
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockout crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Mr	33.0 %	Mohall	Clay Loam	0.25	0.15	0.00	---	0.05	0.09	
Es	31.0 %	Estrella	Loam	0.35	0.25	0.00	---	0.25	0.47	
Tt	25.0 %	Trix	Clay Loam	0.26	0.15	0.00	---	0.05	0.09	
Ge	6.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.29	0.55	
Ma	5.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	---	0.40	0.40	
Weight.Av	100.0 %			---	---	0.00	6.71	~~0.14~~	0.25	

Land type weighted DTHETA = 0.00

0.09
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
155	0.26	0.50	0.00	~~6.71~~ 7.30	~~0.25~~	0.0	56.63

$$\text{ADJ XKSAT} = 0.09 * \left(\frac{90-10}{90}+1\right)$$

$$= 0.17$$

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 156A

S-GRAPH PARAMETERS

Area = 0.31 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.81	13.0	0.202

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.81 mi Av.Slope= 16.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.49 mi

Lag = 17.89 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
RES	100 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.12	20.0	50.0	1.45	0.030	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr) Rockc crops
GgA	30.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.36
RbA	27.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38
Vg	13.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.55
Es	13.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.36
Ma	7.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40
LcA	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.36
TrB	3.0 %	Trewant	Sandy Clay Loam	0.31	0.21	0.00	----	0.27	0.39
GxB	3.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39
Weight.Av	100.0 %			----	0.25	----	4.28	0.41	0.53

Land type weighted DTHETA = 0.25 0.32 fetal 8.16

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
156A	0.31	0.12	0.25	~~4.28~~ 4.38	~~0.53~~	20.0	17.89

Adj. XKsat = 0.32 ((50-10)/90 + 1) = 0.46 KMH 11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 156

S-GRAPH PARAMETERS

Area = 0.30 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.00	13.0	0.277

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.00 mi Av.Slope= 13.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.50 mi

Lag = 57.10 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	60 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
RES	40 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.35	8.0	74.0	1.71	0.084	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Tu	27.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.41	
Aa	26.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.50	
LcA	18.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.43	
Mp	13.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
RbA	9.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Mr	3.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Am	2.0 %	Avonda	Clay Loam	0.27	0.17	0.00	----	0.07	0.12	
TrB	1.0 %	Tremant	Sandy Clay Loam	0.31	0.21	0.00	----	0.27	0.46	
GxA	1.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	0.23	0.00	3.95	0.24	0.38	

Land type weighted DTHETA = 0.09

0.24
FCOMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
156	0.30	0.35	0.09	~~3.95~~ 5.00	~~0.38~~	8.0	57.10

adj XKsat = 0.24 (74-10 / 90 + 1) = 0.41

KMH
11-27-00

LOSS PARAMETERS FOR SUBBASIN: 157

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
TOTAL	0.890	100.	0.21	0

TOTAL = 0.890 Sq.Miles XKSAT = 0.21 %Rock = 0

DTHETA

FCD mc GIS

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.356	M.D.R.	40.0	NORMAL	40	30	0.25	0.03	Low	0.05
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.534	RowCrop	60.0	NORMAL	90	0	0.50	0.12	Hi,	0.09

0.890 = Total Area Avg. = 74 12% 0.400

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 = 12
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 12

LOSS PARAMETERS FOR SUBBASIN: 158

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
TOTAL	0.970	100.	0.36	0

TOTAL = 0.970 Sq.Miles XKSAT = 0.36 %Rock = 0

FCD mc GIS

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.097	Desert	10.0	DRY	25	0	0.35	0.03	Low	0.06
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.825	M.D.R.	85.0	NORMAL	40	30	0.25	0.03	Low	0.04
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.049	RowCrop	5.0	NORMAL	90	0	0.50	0.12	Hi	0.11
0.971 = Total Area			Avg. =	41	25%	0.270			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

IMPERVIOUS AREA: URBAN @ 100 % effective = 25
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 25

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 159

S-GRAPH PARAMETERS

Area = 0.58 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	63.0	0.174

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 50.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.56 mi

Lag = 29.68 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AKB	27.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
Vr	22.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.12	1.24	
Va	14.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Vh	10.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.18	
Ma	6.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Ge	5.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	
AdB	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Vg	2.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.19	
Es	1.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.28	
AbA	1.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			0.34	----	----	3.81	~~0.60~~	0.65	

Land type weighted DTHETA = 0.34 0.36

KMN 10-31-00

INPUT VALUES FOR (MOUHP 2)PROGRAM

Ram Fcone 645

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
159	0.58	0.35	0.34	~~3.81~~ 4.15	~~0.63~~	0.0	29.68

ADJ XKSAT = 0.36 * ((20-10)/20 + 1) = 0.40 KMN

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 160

S-GRAPH PARAMETERS

Area = 0.39 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	58.0	0.168

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 49.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.71 mi

Lag = 32.08 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Mao Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AKB	76.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	(
Ge	9.0 %	Silman	Loam	0.35	0.25	0.00	----	0.29	0.32	(
AdB	9.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	(
Ma	6.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Weight.Av	100.0 %			0.33	----	----	3.98	~~0.34~~	0.34	(

Land type weighted DTHETA = 0.33 0.29 KMN 10-31-00

INPUT VALUES FOR (MOUHP 2)PROGRAM

From FCDMC GLS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
160	0.39	0.35	0.33	~~3.98~~ 4.58	~~0.34~~	0.0	32.08

ADJ XKSAT = 0.29 * ((20-10)/90 + 1)

= 0.32

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 161

S-GRAPH PARAMETERS

Area = 0.50 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.11	38.0	0.190

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.11 mi Av.Slope= 34.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 69.17 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	90 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	10 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.49	0.0	83.0	1.81	0.113	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockoutcrops
GgA	37.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.25	0.45	
Vh	15.0 %	Vint	Loamy Sand	0.35	0.29	0.00	---	1.06	1.92	
AbA	15.0 %	Antho	Sandy Loam	0.35	0.25	0.00	---	0.39	0.39	
Ma	9.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	---	0.40	0.40	
Vr	7.0 %	Vint	Loamy Sand	0.35	0.29	0.00	---	1.12	2.03	
Ge	7.0 %	Gilman	Loam	0.35	0.25	0.00	---	0.29	0.53	
Ps	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	---	0.46	0.46	
Va	3.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	---	0.37	0.37	
AKB	1.0 %	Antho	Sandy Loam	0.32	0.22	0.00	---	0.33	0.33	
Weight.Av	100.0 %			0.35	---	0.00	4.09	~~0.49~~	0.77	

Land type weighted DTHETA = 0.03 0.31

KMN 10-31-00

From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
161	0.50	0.49	0.03	~~4.09~~ 4.44	~~0.77~~	0.0	69.17

ADJ XKSAT = 0.31 * $\left(\frac{83-10}{90}+1\right)$

= 0.56

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 162

S-GRAPH PARAMETERS

= 0.25 sq.mi

ath inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.61	22.0	0.102

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.61 mi Av.Slope= 36.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 30.0 % of (L)= 0.18 mi

Lag = 38.01 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	45.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Es	29.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Vh	9.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	0.
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0.
Mo	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Va	1.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0.
Weight.Av	100.0 %			----	----	0.00	3.96	~~0.34~~	0.59	0.

Land type weighted DTHETA = 0.00 0.27

KMN 10-31-00

INPUT VALUES FOR < MOUHP 2 >PROGRAM

From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
162	0.25	0.50	0.00	~~3.96~~ 4.74	~~0.59~~	0.0	38.01

$$\text{ADJ XKSAT} = 0.27 * \left(\frac{90-10}{20} + 1\right)$$

$$= 0.51$$

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 163

S-GRAPH PARAMETERS

Area = 0.75 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	36.0	0.198

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 32.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.45 mi

Lag = 68.77 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockout crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
SgA	30.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Es	16.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0
AbA	15.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Aa	12.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Bs	11.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Mb	10.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Va	4.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Ma	2.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Weight.Av	100.0 %			----	----	0.00	3.70	0.29	0.42	0

Land type weighted DTHETA = 0.00

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
163	0.75	0.50	0.00	~~3.70~~ 4.58	~~0.42~~	0.0	68.77

ADJ XKSAT = 0.29 * ((90-10)/90 + 1)

= 0.55

KMW
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 164A

S-GRAPH PARAMETERS

Area = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	37.0	0.195

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 33.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 74.46 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Mb	40.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.05	
LcA	30.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	16.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	9.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Es	5.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	5.59	~~0.18~~	0.31	

Land type weighted DTHETA = 0.00

0.27
KMH
10-31-00
from FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
164A	0.49	0.50	0.00	~~5.59~~ 4.74	0.31	0.0	74.46

$$\text{ADJ XKSAT} = 0.27 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.51$$

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 164

S-GRAPH PARAMETERS

rea = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	35.0	0.200

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 31.3 ft/mi Av.slope =(SUM(Li)/I)^2

Loa = 50.0 % of (L)= 0.56 mi

Lag = 73.26 min Lag = 20*Kn*(((1.2)*(L*Loa/S^.5)^.38)+60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Mp	40.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
LoA	30.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
GgA	16.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
AbA	9.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Es	5.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Weight.Av	100.0 %			----	----	0.00	5.59	~~0.18~~	0.31	(

Land type weighted DTHETA = 0.00 0.25

KMH 10-31-00 From FCDMC 06

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
164	0.49	0.50	0.00	~~5.59~~ 4.90	~~0.31~~	0.0	75.26

ADJ XKSAT = 0.25 * (90-10 / 90 + 1)

= 0.47

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 165

S-GRAPH PARAMETERS

Area = 0.90 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.40	52.0	0.230

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.40 mi Av.Slope= 37.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.70 mi

Lag = 86.28 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	58.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Es	24.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Mp	10.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	(
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
AbA	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Weight.Av	100.0 %			----	----	0.00	3.72	~~0.24~~	0.43	(

Land type weighted DTHETA = 0.00 0.26

KMH 10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
165	0.90	0.50	0.00	~~3.72~~ 4.82	~~0.43~~	0.0	86.28

ADJ XKSAT = 0.26 * $\left(\frac{90-10}{90}+1\right)$

= 0.49

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 166

S-GRAPH PARAMETERS

Area = 0.98 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.41	31.0	0.301

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.41 mi Av.Slope= 22.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 95.84 min Lag = 20*Kn*(((L)*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
GgA	61.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	20.0 %	Estrella	Loam	0.35	0.25	0.00.	----	0.25	0.47	
AbA	17.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	2.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Weight.Av	100.0 %			----	----	0.00	3.64	~~0.28~~	0.46	

Land type weighted DTHETA = 0.00 0.27

KMH
10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
166	0.98	0.50	0.00	~~3.64~~ 4.74	~~0.46~~	0.0	95.84

$$ADJ\ XKSAT = 0.27 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.51$$

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 167

S-GRAPH PARAMETERS

Area = 0.97 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.41	31.0	0.301

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.41 mi Av.Slope= 22.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 95.84 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	54.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	30.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ma	5.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
AbA	4.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mp	3.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	3.56	~~0.25~~	0.46	

Land type weighted DTHETA = 0.00

0.25
KMH
10-31-00
from PCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
167	0.97	0.50	0.00	~~3.56~~ 4.90	~~0.46~~	0.0	95.84

ADJ XKSAT = 0.25 * $\left(\frac{90-10}{90} + 1\right)$

= 0.47

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 168

S-GRAPH PARAMETERS

Area = 0.51 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	25.0	0.237

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 22.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 80.22 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crops
Es	28.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
LcA	23.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mp	22.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
AbA	11.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Aa	8.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Ma	6.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
GgA	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	4.01	~~0.23~~	0.38	

Land type weighted DTHETA = 0.00

0.24
KNL
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
168	0.51	0.50	0.00	~~4.01~~ 5.00	~~0.38~~	0.0	80.22

ADJ XKSAT = 0.24 * $\left(\frac{90-50}{90}+1\right)$

= 0.45

KNL
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 169

S-GRAPH PARAMETERS

Area = 0.51 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	24.0	0.242

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 21.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 80.85 min Lag = 30*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET- condi-
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Mao Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Mr	41.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
GgA	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Gt	10.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	
Es	8.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
LcA	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Tt	6.0 %	Trix	Clay Loam	0.25	0.16	0.00	----	0.05	0.09	
Ma	6.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
AbA	4.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	6.30	~~0.15~~	0.27	

Land type weighted DTHETA = 0.00 0.09

KMN 10-31-00

From PCDMC GLS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
169	0.51	0.50	0.00	~~6.30~~ 7.20	~~0.27~~	0.0	80.85

ADJ XKSAT = 0.09 * $\left(\frac{90-10}{90}+1\right)$

= 0.17

KMN 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 170

S-GRAPH PARAMETERS

Area = 0.29 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.89	14.0	0.224

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.89 mi Av.Slope= 15.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.31 mi

Lag = 51.08 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	75 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
RES	25 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.41	5.0	80.0	1.78	0.098	

RTIMP is taken 50% of Rockoutcrops for noncontiguous unceveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Mr	69.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	(
Le	9.0 %	Laveen	Loam	0.34	0.23	0.00	----	0.23	0.41	(
LcA	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.45	(
Es	6.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.45	(
Tu	4.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.43	(
Gr	3.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.27	(
Weight.Av	100.0 %			----	0.18	0.00	7.38	~~0.11~~	0.19	0

Land type weighted DTHETA = 0.04 0.09

KMN
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
170	0.29	0.41	0.04	~~7.38~~ 7.30	~~0.19~~	5.0	51.08

ADJ XKSAT = 0.09 * $\left(\frac{80-60}{90}+1\right)$

= 0.16

KMN
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 171

S-GRAPH PARAMETERS

Area = 0.70 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.62	25.0	0.412

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.62 mi Av.Slope= 15.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.57 mi

Lag = 93.48 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
LcA	27.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
RbA	19.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Mr	17.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Mp	15.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Gr	8.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	
Es	8.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
PsA	5.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	4.97	0.20	0.32	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
171	0.70	0.50	0.00	~~4.97~~ 5.40	~~0.32~~	0.0	93.48

ADJ XKSAT = 0.20 * ((90-10)/90 + 1)

= 0.38

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 172

S-GRAPH PARAMETERS

Area = 0.12 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.56	12.0	0.121

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.56 mi Av.Slope= 21.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.25 mi

Lag = 45.87 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
LcA	29.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
RbA	20.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Ma	17.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
PsA	13.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	10.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
GxB	8.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mp	3.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	3.91	~~0.33~~	0.42	

Land type weighted DTHETA = 0.00 0.29

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
172	0.12	0.50	0.00	~~3.91~~ 4.58	~~0.42~~	0.0	45.87

Adj. Xksat: 0.29 (90-10 / 90 + 1) = 0.55

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 173

S-GRAPH PARAMETERS

Area = 0.31 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	23.0	0.218

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 22.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.41 mi

Lag = 69.15 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockout crops for noncontigeous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Aa	50.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Br	12.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.52	0.52	(
Vh	10.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	(
GgA	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Ma	5.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Ge	5.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
RpE	2.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
GxB	2.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Cb	2.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	2.12	(
Mp	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	(
LcA	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Bt	1.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.50	0.50	(
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Weight.Av	100.0 %			----	----	0.00	4.25	0.42	0.53	(

Land type weighted DTHETA = 0.00 0.34

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
173	0.31	0.50	0.00	~~4.25~~ 4.00	0.69	0.0	69.15

Adj XKsat = 0.34 /90-10 KMH 11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 173A

S-GRAPH PARAMETERS

Area = 0.20 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.80	22.0	0.153

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.80 mi Av.Slope= 27.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.32 mi

Lag = 54.85 min Lag = 20*Kn*(((L*Lca/S^.5)^.39)*50)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHE cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satu
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
Mb	47.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
SgA	33.0 %	Silman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Br	10.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	
RbA	6.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Bt	4.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.50	0.50	
Weight.Av	100.0 %			----	----	0.00	5.03	~~0.20~~	0.30	

Land type weighted DTHETA = 0.00

0.33
KMH
10-31-00

INPUT VALUES FOR (MOUHP 2)PROGRAM

from FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
173A	0.20	0.50	0.00	~~5.03~~ 4.32	~~0.30~~	0.0	54.85

ADJ XKSAT = 0.33 * $\left(\frac{90-10}{90} + 1\right)$

= 0.62

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 1738

S-GRAPH PARAMETERS

Area = 0.20 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.89	16.0	0.210

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.89 mi Av.Slope= 18.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.45 mi

Lag = 57.91 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	70 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
DRL	30 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.46	0.0	69.0	1.66	0.099	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Mao Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock croo
Vg	32.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.77	
Aa	23.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.48	
Cb	22.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.85	
TD	14.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.99	
Ma	5.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Br	4.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	
Weight.Av	100.0 %			0.35	——	0.00	3.20	~~0.86~~	1.40	

Land type weighted DTHETA = 0.11 0.54

From FCDMC GIS
KMH
1-4-01

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
1738	0.20	0.46	0.11	~~3.20~~ 3.50	1.40	0.0	57.91

Adj. xksat = 0.54 * ((69-10)/90 + 1) = 0.89

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 174

S-GRAPH PARAMETERS

Area = 0.45 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	62.0	0.163

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 52.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 30.0 % of (L)= 0.35 mi

Lag = 24.34 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockou*crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AKB	63.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
GgB	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.29	
AbA	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	4.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
AbB	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			0.33	----	----	3.90	~~0.28~~	0.33	

Land type weighted DTHETA = 0.33 0.29

KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
174	0.45	0.35	0.33	~~3.90~~ 4.58	0.33	0.0	24.34

$$\text{ADJ XKSAT} = 0.29 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.32$$

10-31-00
KMH

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 175A

S-GRAPH PARAMETERS

Area = 0.47 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.48	74.0	0.209

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.48 mi Av.Slope= 50.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.89 mi

Lag = 37.99 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AKB	62.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
Vr	35.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.12	1.24	
Ae	2.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
AbA	1.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			0.33	----	----	3.80	~~0.61~~	0.65	

Land type weighted DTHETA = 0.33

0.35
KMN
10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

from FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
175A	0.47	0.35	0.33	~~3.80~~ 4.20	~~0.65~~	0.0	37.99

ADJ XKSAT = 0.35 * $\left(\frac{20-10}{90}+1\right)$

= 0.39

10-31-00
KMN

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 175

S-GRAPH PARAMETERS

Area = 0.28 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	55.0	0.173

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 46.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 30.0 % of (L)= 0.35 mi

Lag = 24.90 min Lag = CT*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	CK	Km	DTHETA condit
DRL	100 %	Desert range,flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockout crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock-o crops
AKB	61.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
GgB	19.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.29	
AbA	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Lb	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			0.33	----	----	3.87	~~0.32~~	0.33	

Land type weighted DTHETA = 0.33 0.28

KMH
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
175	0.28	0.35	0.33	~~3.87~~ 4.66	0.33	0.0	24.90

$$\text{Adj. } XKsat = 0.28 * \left(\frac{20-10}{90}+1\right) = 0.31$$

KMH
1-9-01

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 176

= 0.67 sq.mi

S-GRAPH PARAMETERS

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.33	51.0	0.215

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.33 mi Av.Slope= 38.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.67 mi

Lag = 34.37 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbB	26.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
AKB	21.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	0
AbA	20.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
PeA	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
GgA	9.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0
Va	5.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
TfA	3.0 %	Tremant	Sandy Clay Loam	0.26	0.16	0.00	----	0.07	0.08	0
GgB	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.29	0
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Lb	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	0
Weight.Av	100.0 %			0.34	----	----	4.03	0.35	0.35	0

Land type weighted DTHETA = 0.34

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
176	0.67	0.35	0.34	~~4.03~~ 4.20	~~0.35~~	0.0	34.37

ADJ XKSAT = 0.35 * $\left(\frac{20-10}{90}+1\right)$ = 0.39

KMW
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 176A

S-GRAPH PARAMETERS

Area = 0.62 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.45	60.0	0.225

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.45 mi Av.Slope= 41.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.73 mi

Lag = 86.82 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontigous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	62.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	23.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	9.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Aa	4.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Va	2.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Weight.Av	100.0 %			----	----	0.00	4.09	~~0.35~~	0.42	

Land type weighted DTHETA = 0.00 0.33

KMH
10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From FCDMC GLS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
176A	0.62	0.50	0.00	~~4.09~~ 4.32	~~0.42~~	0.0	86.82

ADJ XKSAT = 0.33 * ((90-60)/90 + 1)

= 0.62

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 177A

S-GRAPH PARAMETERS

Area = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	35.0	0.200

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 31.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 75.26 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	34.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	30.0 %	Silman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	10.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
LcA	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	6.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Ma	6.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Ae	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
Es	2.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.99	~~0.34~~	0.43	

Land type weighted DTHETA = 0.00

0.32
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
177A	0.49	0.50	0.00	~~3.99~~ 4.38	~~0.43~~	0.0	75.26

ADJ XKSAT = 0.32 * (90-10 / 90 + 1)

= 0.60 KMH

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 177

S-GRAPH PARAMETERS

Area = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	37.0	0.195

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 33.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 74.46 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weighted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	34.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	30.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	10.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
LcA	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	5.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Ma	6.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Ae	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
Es	2.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.99	~~0.34~~	0.43	

Land type weighted DTHETA = 0.00

0.33
KMA
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
177	0.49	0.50	0.00	~~3.99~~ 4.32	~~0.43~~	0.0	74.46

ADJ XKSAT = 0.33 * $\left(\frac{90-10}{90}+1\right)$

= 0.62

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 178

S-GRAPH PARAMETERS

Area = 0.44 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.09	32.0	0.201

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.09 mi Av.Slope= 29.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.55 mi

Lag = 74.60 min Lag = 20*Km*(((1.2)*(L*Lca/S^.5)^.38)+50)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Km	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock cross
BgA	39.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	29.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	26.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.75	~~0.28~~	0.45	

Land type weighted DTHETA = 0.00

0.28
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
178	0.44	0.50	0.00	~~3.75~~ 4.66	~~0.45~~	0.0	74.60

ADJ XKSAT = $0.28 * \left(\frac{90-50}{90} + 1\right)$

= 0.53

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 179

S-GRAPH PARAMETERS

Area = 0.46 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	31.0	0.213

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 27.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 77.01 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major components)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crops
Mp	38.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Es	27.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
SgA	24.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
LcA	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mr	3.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	6.02	~~0.17~~	0.32	

Land type weighted DTHETA = 0.00

0.24
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
179	0.46	0.50	0.00	~~6.02~~ 5.00	~~0.32~~	0.0	77.01

ADJ XKSAT = 0.24 * ((90-16)/90 + 1)

= 0.45

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 190

S-GRAPH PARAMETERS

Area = 0.99 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	33.0	0.295

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 23.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 95.35 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTmETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	50.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockcovrcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTmETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockcov crops
GgA	31.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	27.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mp	24.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.05	
LcA	12.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	4.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.33	0.33	
Mr	2.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.05	
Weight.Av	100.0 %			----	----	0.00	4.94	~~0.20~~	0.37	

Land type weighted DTHETA = 0.00 0.25

KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
180	0.99	0.50	0.00	~~4.94~~ 4.44	0.37	0.0	95.35

$$\text{ADJ XKSAT} = 0.25 * \left(\frac{90-80}{90} + 1\right)$$

$$= 0.47$$

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 181A

S-GRAPH PARAMETERS

Area = 0.39 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	26.0	0.251

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 22.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.53 mi

Lag = 80.39 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weighted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crops
BgA	33.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
LbA	19.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	18.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Es	13.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	10.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Ma	1.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Weight.Av	100.0 %			----	----	0.00	3.77	~~0.30~~	0.45	

Land type weighted DTHETA = 0.00

0.29
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
181A	0.39	0.50	0.00	~~3.77~~ 4.58	~~0.45~~	0.0	80.39

ADJ XKSAT = 0.29 * ((90-10)/90 + 1)

= 0.55

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 181

S-GRAPH PARAMETERS

Area = 0.37 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	28.0	0.224

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 25.0 ft/mi Av.slope =(SUM(Li)/I)^2

Loa = 30.0 % of (L)= 0.34 mi

Lag = 54.56 min Lag = 20*Kn*(((1.2)*(L*Loa/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	30.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	30.0	1.89	0.120	

RTIMP is taken 50% of Rockout crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr) Rocko crops
GgA	63.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.35	0.47
Ma	15.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40
AbA	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.33	0.33
Bs	7.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46
Aa	3.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.33
Va	2.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37
Es	2.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.35	0.47
Weight.Av	100.0 %			----	----	0.00	3.78	~~0.38~~	0.45

Land type weighted DTHETA = 0.00

0.29
KMH
10-31-06
From FCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
181	0.37	0.50	0.00	~~3.78~~ ~~4.58~~	~~0.45~~	0.0	54.56

ADJ XKSAT = 0.29 * (90-10 / 90 +1)

= 0.55

KMH
10-31-06

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 182

S-GRAPH PARAMETERS

Area = 0.24 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.66	14.0	0.143

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.66 mi Av.Slope= 21.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.33 mi

Lag = 54.19 min Lag = 20*Kn*(((L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
Ge	44.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Va	33.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
AbA	18.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.33	0.33	
Mp	5.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	3.89	~~0.32~~	0.44	

Land type weighted DTHETA = 0.00

0.31
KMG 10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
182	0.24	0.50	0.00	~~3.89~~ 4.44	~~0.44~~	0.0	54.19

ADJ XKSAT = 0.31 * $\left(\frac{90-10}{90}+1\right)$

= 0.58

KMG
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 183

S-GRAPH PARAMETERS

Area = 0.21 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.43	16.0	0.070

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.43 mi Av.Slope= 37.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.22 mi

Lag = 35.17 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoufcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	57.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.33	
GgA	20.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	15.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	8.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Weight.Av	100.0 %			---	---	0.00	3.98	~~0.34~~	0.42	

Land type weighted DTHETA = 0.00 0.33

KMH
10-31-00
From PCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
183	0.21	0.50	0.00	~~3.98~~ 4.32	~~0.42~~	0.0	35.17

ADJ XKSAT = 0.33 * $\left(\frac{90-10}{90} + 1\right)$

= 0.62

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 184

S-GRAPH PARAMETERS

Area = 0.79 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.14	21.0	0.266

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.14 mi Av.Slope= 18.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.51 mi

Lag = 81.02 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockou&crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Mp	20.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
GgA	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	15.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
AbA	15.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Es	13.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Lb	8.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
LcA	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Gt	3.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.25	
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Ge	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Ao	1.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	
Weight.Av	100.0 %			----	----	0.00	3.50	~~0.25~~	0.36	

Land type weighted DTHETA = 0.00 0.27

KMH 10-31-00 From PCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
184	0.79	0.50	0.00	~~3.50~~ 4.74	~~0.36~~	0.0	81.02

ADJ XKSAT = 0.27 * ((90-10)/90 + 1) = 0.51 KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 185

S-GRAPH PARAMETERS

Area = 0.69 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.11	24.0	0.239

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.11 mi Av.Slope= 21.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.50 mi

Lag = 77.02 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crops
LcA	39.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	21.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Tu	10.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.45	
Mp	9.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Gt	8.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	
GgA	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	4.10	0.23	0.42	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
185	0.69	0.50	0.00	~~4.10~~ 5.10	~~0.42~~	0.0	77.02

ADJ XKSAT = 0.23 * $\left(\frac{90-10}{90}+1\right)$

= 0.43

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 186

S-GRAPH PARAMETERS

Area = 0.33 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.11	18.0	0.275

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.11 mi Av.Slope= 16.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.67 mi

Lag = 90.74 min Lag = 20*Km*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Km	DTHET cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
LcA	95.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
RbA	3.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Tu	2.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.45	
Weight.Av	100.0 %			----	----	0.00	3.52	0.25	0.47	

Land type weighted DTHETA = 0.00

new ij

Same

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
186	0.33	0.50	0.00	~~3.52~~ 4.90	0.47	0.0	90.74

Adjust ?

WHITE TANKS/ASUA FRIA ADMS

SUBBASIN # : 187

S-GRAPH PARAMETERS

Area = 0.35 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.11	16.0	0.292

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.11 mi Av.Slope= 14.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 71.43 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	70 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
DRL	30 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.46	0.0	69.0	1.66	0.099	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
LcA	27.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.41	
RpE	21.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.33	
RbA	19.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
AbA	18.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Bt	7.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.50	0.50	
GxA	5.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mp	3.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.08	
Weight.Av	100.0 %			0.35	----	0.00	4.02	~~0.35~~	0.39	

Land type weighted DTHETA = 0.10 0.29

KMH 10-31-00

From PCDMCGIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
187	0.35	0.46	0.10	~~4.02~~ 4.58	~~0.39~~	0.0	71.43

ADJ XKSAT = 0.29 * $\left(\frac{69-10}{90}+1\right)$

= 0.48

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 188

S-GRAPH PARAMETERS

Area = 0.19 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.85	41.0	0.125

I=SUM(Ii)=SUM((Li^3/mi)^.5)

L = 0.86 mi Av.Slope= 47.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.34 mi

Lag = 21.75 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weighted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AKB	72.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
Vm	20.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.12	1.24	
GgA	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Weight.Av	100.0 %			0.33	----	----	4.11	~~0.48~~	0.51	

Land type weighted DTHETA = 0.33 .31

FCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
188	0.19	0.35	0.33	~~4.11~~ 4.44	0.31	0.0	21.75

Adj. xksat = 0.31 $\left(\frac{20-10}{90}+1\right)$ = 0.34

KMB
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 189

S-GRAPH PARAMETERS

Area = 0.51 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	35.0	0.217

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 29.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.59 mi

Lag = 32.95 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)+60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	41.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Ae	22.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
AKB	16.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
Ge	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	
Vr	8.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.12	1.24	
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Lb	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	
Weight.Av	100.0 %			0.35	----	----	4.17	~~0.38~~	0.40	

Land type weighted DTHETA = 0.35

0.31
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
189	0.51	0.35	0.35	~~4.17~~ 4.44	~~0.40~~	0.0	32.95

ADJ XKSAT = 0.31 * ((20-10)/90 + 1)
= 0.34

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 190

S-GRAPH PARAMETERS

Area = 0.86 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	44.0	0.193

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 37.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.41 mi

Lag = 66.12 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.69	0.120	

RTIMP is taken 50% of Rockcoverage for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockcoverage
Ma	38.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Ae	23.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
AbA	14.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.33	0.33	
Lb	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
LcA	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	4.18	~~0.28~~	0.42	

Land type weighted DTHETA = 0.00

0.37
KMH
10-31-06
From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
190	0.86	0.50	0.00	~~4.18~~ 4.44	~~0.42~~	0.0	66.12

ADJ XKSAT = 0.37 * (90-10 / 90 + 1)

= 0.74

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 191

S-GRAPH PARAMETERS

Area = 0.99 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	55.0	0.228

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 38.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 86.53 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weighted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major components)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
LcA	44.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	19.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
AtA	15.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mc	10.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Ma	5.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
PeA	4.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Va	3.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Weight.Av	100.0 %			----	----	0.00	3.59	~~0.27~~	0.41	

Land type weighted DTHETA = 0.00 0.28

KMH 10-31-00

From FCDMC GIS

INPUT VALUES FOR (MDUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
191	0.99	0.50	0.00	~~3.59~~ 4.66	~~0.41~~	0.0	86.53

ADJ XKSAT = 0.28 * (90-10 / 90 + 1)

= 0.53

KMH 10-31-00

LOSS PARAMETERS FOR SUBBASIN: 192A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
CALC	0.493	100.	0.34	0

TOTAL = 0.493 Sq.Miles XKSAT = 0.34 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.049	Desert	9.9	DRY	25	0	0.35	0.03	Low	0.06
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.370	RowCrop	75.1	WET	90	0	0.50	0.12	Hi	0.09
0.074	SF-RES	15.0	NORMAL	40	30	0.25	0.03	Min	0.03
0.493 = Total Area			Avg. =	78	5%	0.450			

PERCENT OF SUBBASIN DRY = 10.0 %
NORMAL = 15.0 %
WET = 75.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.07

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.60

IMPERVIOUS AREA: URBAN @ 100 % effective = 5
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 5

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 192

S-GRAPH PARAMETERS

Area = 0.5 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	44.0	0.179

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 39.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 72.05 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.39)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockout crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	56.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Bs	15.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Ma	11.0 %	Maricopa	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
GgA	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
LcA	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	2.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Mc	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Ge	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Es	2.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	4.18	0.38	0.41	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
192	0.50	0.50	0.00	~~4.18~~ 4.05	~~0.41~~	0.0	72.05

ADJ XKSAT = 0.38 * $\left(\frac{90-10}{90}+1\right)$

= 0.72 KMH

10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 193

S-GRAPH PARAMETERS

Area = 0.91 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.35	45.0	0.236

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.35 mi Av.Slope= 33.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.68 mi

Lag = 86.28 min Lag = 20*Kn*(((L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockou*crops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
SgA	67.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	14.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	10.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Ge	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	3.76	~~0.30~~	0.46	

Land type weighted DTHETA = 0.00

0.28
KMH
10-31-00
from PCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
193	0.91	0.50	0.00	~~3.75~~ 4.66	~~0.46~~	0.0	86.28

ADJ XKSAT = $0.28 * \left(\frac{90-10}{90} + 1\right)$

= 0.53 KMH 10-31-00

eec

Project Title Loop 303 White Tanks Project No. 99551 Date 3/10/01

Subject Sub basin Prep Prepared By MJL Checked By _____ Page _____

Sub basin 194B

MCUHP data prepared by FCD, not available.

Input data from Dysart Drain Report.

PSIF

3.75

eec

Project Title LOOP 303 White Tanks Project No. 99551 Date 3/10/01

Subject Sub basin Prep Prepared By MJR Checked By _____ Page _____

Sub basin 191A

MCUHP data prepared by FCD - not vailable.

Input from Dycart Drain Report.

PSIF
3.75

eec

Project Title Loop 303 White Tanks Project No. 99051 Date 3/10/01

Subject Sub basin Prep Prepared By MJR Checked By _____ Page _____

Sub basin 194C

MCUHP data prepared by FCD. Not available

Input from Dysart Drain Report.

P51F

3.75

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 195

S-GRAPH PARAMETERS

Area = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.41	22.0	0.357

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.41 mi Av.Slope= 15.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 102.29 min Lag = CU*KN*((L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
SgA	70.0 %	Silman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	14.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	10.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mb	6.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	3.51	~~0.25~~	0.44	

Land type weighted DTHETA = 0.00 0.26

KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
195	0.49	0.50	0.00	~~3.51~~ 4.82	~~0.44~~	0.0	102.29

ADJ XKSAT = 0.26 * ((90-10)/90 + 1)

= 0.49

KMH
10-31-00

WHITE TANKS/AGUA FRIA SDMS

SUBBASIN # : 196

S-GRAPH PARAMETERS

Area = 0.47 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	25.0	0.237

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 22.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 74.21 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	90 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.46	2.0	86.0	1.85	0.111	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
GgA	46.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.46	
AbA	28.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ge	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.54	
Es	13.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.46	
Weight.Av	100.0 %			----	0.25	0.00	3.74	0.29	0.45	

Land type weighted DTHETA = 0.03

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
196	0.47	0.46	0.03	~~3.74~~ 4.58	~~0.45~~	2.0	74.21

ADJ XKSAT = 0.29 * $\left(\frac{86-10}{90}+1\right)$

= 0.53

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 197

S-GRAPH PARAMETERS

Area = 1.00 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.48	25.0	0.360

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.48 mi Av.Slope= 16.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.74 mi

Lag = 104.54 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockou crops for noncontigaous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Es	29.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0
GgA	28.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
AbA	27.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Mp	11.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Tu	5.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.45	0
Weight.Av	100.0 %			----	----	0.00	3.58	~~0.27~~	0.41	0

Land type weighted DTHETA = 0.00 0.28

KMH
10-31-00

INPUT VALUES FOR (MCUHP 2)PROGRAM

From PCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
197	1.00	0.50	0.00	~~3.58~~ 4.64	~~0.41~~	0.0	104.54

$$\text{ADJ XKSAT} = 0.28 * \left(\frac{90-10}{90} + 1\right)$$

$$= 0.53$$

KMH
10-31-00

LOSS PARAMETERS FOR SUBBASIN: 198

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
CALC	0.902	100.	0.25	0

TOTAL = 0.902 Sq.Miles XKSAT = 0.25 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.125	Desert	12.6	DRY	25	0	0.35	0.03	Low	0.05
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
0.125	Comm	12.6	NORMAL	75	80	0.10	0.02	Min	0.03
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.684	RowCrop	68.7	WET	90	0	0.50	0.12	Hi	0.08
0.062	SF-RES	6.2	NORMAL	40	30	0.25	0.03	Min	0.03
0.996 = Total Area			Avg. =	78	12%	0.420			

PERCENT OF SUBBASIN DRY = 13.0 %
NORMAL = 19.0 %
WET = 69.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.09

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

IMPERVIOUS AREA: URBAN @ 100 % effective = 12
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 12

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 199

S-GRAPH PARAMETERS

Area = 0.11 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.81	10.0	0.231

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.81 mi Av.Slope= 12.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.49 mi

Lag = 75.21 min Lag = 20*Kn*(((L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc. crops
LcA	60.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
RbA	25.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.36	0.36	
Tu	9.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.45	
Ta	6.0 %	Toltec	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.67	~~0.29~~	0.45	

Land type weighted DTHETA = 0.00 0.25

KMH 10-31-00 From FCDMC GIS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
199	0.11	0.50	0.00	~~3.67~~ 4.90	~~0.45~~	0.0	75.21

ADJ XKSAT = 0.25 * ((90-10)/90 + 1)

= 0.47

KMH 10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 200

S-GRAPH PARAMETERS

Area = 0.29 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.11	37.0	0.192

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.11 mi Av.Slope= 33.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 52.30 min Lag = 20*Km*((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Km	DTHETA condit
AGR	50 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	50 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.43	0.0	55.0	1.50	0.085	

RTIMP is taken 50% of Rock&Impos for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocks crops
Ge	49.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.44	
LeD	24.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.38	
GxA	5.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.33	
RbB	4.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
GxB	4.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.35	0.33	
GpA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.38	
Weight.Av	100.0 %			0.35	----	0.00	3.70	~~0.25~~	0.4.	

Land type weighted DTHETA = 0.18

0.25
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MOLHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
200	0.29	0.43	0.18	~~3.70~~ 4.90	~~0.41~~	0.0	52.30

ADJ XKSAT = 0.25 * $\left(\frac{55-10}{90}+1\right)$

= 0.38

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 301

S-GRAPH PARAMETERS

Area = 0.34 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	14.0	0.279

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 13.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.36 mi

Lag = 30.10 min Lag = 30*Kn*(((L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET- condi-
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% if Rock outcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major components)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Total check
BgA	87.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
AbA	10.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Es	2.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.28	
Mb	1.0 %	Mohall	Clay Loam	0.35	0.15	0.00	----	0.05	0.06	
Weight.Av	100.0 %			0.35	----	----	3.53	~~0.25~~	0.29	

Land type weighted DTHETA = 0.35 0.26

FCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
301	0.34	0.35	0.35	~~3.53~~ 4.82	~~0.29~~	0.0	30.10

Adj. xksat = $0.26\left(\frac{26-10}{90}+1\right) = 0.29$

KMH
11-27-00

WHITE TANKS/GSUR FRIA ADMS

SUBBASIN # : 202

S-GRAPH PARAMETERS

Area = 0.48 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.17	9.0	0.422

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.17 mi Av.Slope= 7.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.58 mi

Lag = 101.54 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weighted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crops
Es	57.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mp	15.0 %	Mohall	Clay Loam	0.25	0.16	0.00	----	0.03	0.09	
Sg9	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ath	12.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.33	
La	3.0 %	La Palma	Silty Loam	0.39	0.25	0.00	----	0.16	0.30	
Weight.Av	100.0 %			----	----	0.00	3.33	~~0.23~~	0.40	

Land type weighted DTHETA = 0.00

0.26
KMN
10-31-00
from FCDMC GIS

INPUT VALUES FOR (XCUMP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
202	0.48	0.50	0.00	~~2.33~~	~~0.40~~	0.0	101.54

4.82

ADJ XKSAT = 0.26 * $\left(\frac{90-10}{90}+1\right)$

= 0.49

KMN
10-31-00

WHITE TANKS/ASUA FRIA DAMS

SUBBASIN # : 203

S-GRAPH PARAMETERS

Area = 0.11 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.50	2.0	0.204

I=SUM(Ii)=SUM((Li^3/hi)^.5)

L = 0.50 mi Av.Slope= 6.0 ft/mi Av.slope =(SUM(Li)/I) 2

Loa = 50.0 % of (L)= 0.25 mi

Lag = 22.24 min Lag = 20*Km*((L*Loa/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Km	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
La	64.0 %	La Palma	Silty Loam	0.33	0.25	0.00	----	0.16	0.16	
PsA	31.0 %	Pinal	Loam	0.33	0.25	0.00	----	0.25	0.23	
Es	5.0 %	Estrella	Loam	0.33	0.25	0.00	----	0.25	0.28	
Weight.Av	100.0 %			0.38	----	----	5.29	~~0.15~~	0.21	

Land type weighted DTHETA = 0.38

0.26
KMH
10-31-00
From FCDMC GIS

INPUT VALUES FOR (MOUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
203	0.11	0.35	0.38	~~5.29~~ 4.82	~~0.21~~	0.0	22.24

ADJ XKSAT = 0.26 * $\left(\frac{20-10}{90} + 1\right)$

= 0.29

KMH
10-31-00

WHITE TANKS/ASUA FRIA ADMS

SUBBASIN # : 204

S-GRAPH PARAMETERS

Area = 0.27 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	10.0	0.143

I=SUM(Ii)=SUM((Li^3/mi)^.5)

L = 0.59 mi Av.Slope= 16.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.29 mi

Lag = 21.64 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weighed average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
La	39.0 %	La Palma	Silty Loam	0.39	0.25	0.00	----	0.16	0.18	
RbE	17.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.35	
PvB	13.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.23	0.26	
GgA	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Cb	9.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.24	
PsA	4.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.25	0.26	
Lb	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	
LcA	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.28	
Weight.Av	100.0 %			0.37	----	----	3.55	~~4.82~~	0.34	

Land type weighted DTHETA = 0.37

0.26
KMH
10-31-00
From FCD MC GLS

INPUT VALUES FOR (XCUHP 2) PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
204	0.27	0.35	0.37	~~3.55~~ 4.82	~~0.34~~	0.0	21.64

ADJ XKSAT = 0.26 * ((20-10)/90 + 1)

= 0.29

KMH
10-31-00

WHITE TANKS/ASUA FRIA ADMS

SUBBASIN # : 205

S-GRAPH PARAMETERS

Area = 0.06 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.36	10.0	0.068

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.36 mi Av.Slope= 27.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.13 mi

Lag = 11.82 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.05	

RTIMP is taken 50% of Rock/concrete for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
Lb	53.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	
PvB	32.0 %	Pinal	Loam	0.36	0.25	0.00	----	0.23	0.26	
PgB	10.0 %	Silman	Loam	0.35	0.25	0.00	----	0.15	0.23	
La	5.0 %	La Palma	Silty Loam	0.39	0.25	0.00	----	0.15	0.18	
Weight.Av	100.0 %			0.36	----	----	3.50	~~0.25~~	0.28	

Land type weighted DTHETA = 0.36 0.34

KMH 10-31-00

Fom FCDMC GIS

INPUT VALUES FOR (MODHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
205	0.06	0.35	0.36	~~3.50~~ 4.28	0.28	0.0	11.82

$$ADJ\ XKSAT = 0.34 * \left(\frac{20-10}{20} + 1\right)$$

$$= 0.38$$

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 206

S-GRAPH PARAMETERS

Area = 0.12 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Li (mi^3/ft)^.5
0.57	29.0	0.080

I=SUM(Li)=SUM((Li^3/hi) .5)

L = 0.57 mi Av.Slope= 50.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.34 mi

Lag = 18.33 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rock&terrce for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock cross
RbE	56.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Se	23.0 %	Silman	Loam	0.35	0.25	0.00	----	0.29	0.32	
Lb	11.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	
CA2	10.0 %	Calthiorids	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			0.35	----	----	4.05	~~0.35~~	0.36	

Land type weighted DTHETA = 0.35

0.30
KMH
10-31-00
From FCDMC GLS

INPUT VALUES FOR (MCUHP 2)PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
206	0.12	0.35	0.35	~~4.05~~ 4.50	~~0.35~~	0.0	18.33

ADJ XKSAT = 0.30 * $\left(\frac{20-10}{10}+1\right)$

= 0.33

KMH
10-31-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 207A

= 0.5 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.21	50.0	0.188

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.21 mi Av.Slope= 41.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.61 mi

Lag = 31.53 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AKB	28.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	0
Vr	19.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.12	1.24	0
AdB	13.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	0
GgA	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0
Mp	6.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	0
Cb	5.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.24	0
Ae	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0
AbA	4.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Va	3.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
LcA	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.28	0
Ma	2.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Ge	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	0
Weight.Av	100.0 %			0.34	----	----	4.03	~~0.51~~	0.55	0

Land type weighted DTHETA = 0.34

0.36 Table 6.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
207A	0.50	0.35	0.34	~~4.03~~ 4.15	~~0.55~~	0.0	31.53

Adj. Xksat = 0.36 $\left(\frac{20-10}{90}+1\right)$ = 0.40

LMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 207

= 1 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.45	58.0	0.229

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.45 mi Av.Slope= 40.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.73 mi

Lag = 87.38 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	31.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Ma	22.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Ae	17.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	(
Mp	9.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	(
LcA	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Lb	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	(
LcA	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
GgA	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Cp	1.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	(
Weight.Av	100.0 %			----	----	0.00	3.99	~~0.34~~	0.39	(

Land type weighted DTHETA = 0.00

0.35 FCLMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
207	1.00	0.50	0.00	~~3.99~~ 4.20	~~0.39~~	0.0	87.38

Adj xksat = 0.35 ((90-10/90) + 1) = 0.66

KMH 11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 208

= 1 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.39	61.0	0.210

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.39 mi Av.Slope= 43.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.70 mi

Lag = 83.14 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	47.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	27.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
GgA	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Ae	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0
Aa	3.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Vh	1.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	0
Va	1.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Mp	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Weight.Av	100.0 %			----	----	0.00	4.18	0.38	0.42	0

Land type weighted DTHETA = 0.00

0.32

FCDMC 015

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
208	1.00	0.50	0.00	~~4.18~~ 4.20	0.42	0.0	83.14

Adj. xksat = $0.35\left(\frac{90-10}{90}+1\right) = 0.66$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 208

= 1 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.39	61.0	0.210

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.39 mi Av.Slope= 43.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.70 mi

Lag = 83.14 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	47.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	27.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
GgA	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Ae	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0
Aa	3.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Vh	1.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	0
Va	1.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Mp	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Weight.Av	100.0 %			----	----	0.00	4.18	0.38	0.42	0

Land type weighted DTHETA = 0.00

0.35

FCDMC 0.15

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
208	1.00	0.50	0.00	~~4.18~~ 4.20	0.42	0.0	83.14

Adj. xksat = 0.35 $\left(\frac{90-10}{90}+1\right)$ = 0.69

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 209

S-GRAPH PARAMETERS

= 0.5 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	36.0	0.198

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 32.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 74.85 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	43.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
AbA	29.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ge	19.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Bs	7.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Ma	2.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Weight.Av	100.0 %			----	----	0.00	3.85	~~0.32~~	0.46	0

Land type weighted DTHETA = 0.00 0.29

FCD.MC 0.15

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
209	0.50	0.50	0.00	~~3.85~~ 4.58	~~0.46~~	0.0	74.85

Adj. xksat = $0.29\left(\frac{90-10}{90}+1\right) = 0.55$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 209A

S-GRAPH PARAMETERS

a = 0.5 sq.mi

.ow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	33.0	0.215

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 28.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.58 mi

Lag = 78.04 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
AbA	75.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Bs	19.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
GgA	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	4.27	~~0.39~~	0.41	

Land type weighted DTHETA = 0.00

0.37 reduced 0.15

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
209A	0.50	0.50	0.00	~~4.27~~ 4.10	~~0.41~~	0.0	78.04

Adj. xksat = 0.37 (90-10/90 + 1) = 0.70

KMH 11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 210

S-GRAPH PARAMETERS

A = 0.46 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	32.0	0.210

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 28.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 76.55 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ge	72.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Bs	15.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
GgA	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
AbA	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Weight.Av	100.0 %			----	----	0.00	3.84	~~0.31~~	0.52	(

Land type weighted DTHETA = 0.00

0.28 FOLLOW 0.15

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
210	0.46	0.50	0.00	~~3.84~~ 4.66	0.52	0.0	76.55

Adj. xksat = 0.28 ((90-10)/90 + 1) = 0.53

KMH 11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 211

= 0.49 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	32.0	0.218

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 27.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.58 mi

Lag = 78.49 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ge	66.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
GgA	30.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Weight.Av	100.0 %			----	----	0.00	3.69	~~0.28~~	0.52	(

Land type weighted DTHETA = 0.00

0.26

FCDMC G-15

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
211	0.49	0.50	0.00	~~3.69~~ 4.82	~~0.52~~	0.0	78.49

Adj. xksat = $0.26\left(\frac{90-10}{90}+1\right) = 0.49$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 212

= 0.54 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.48	25.0	0.360

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.48 mi Av.Slope= 16.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.67 mi

Lag = 100.44 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	77.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ge	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			----	----	0.00	3.59	~~0.27~~	0.49	0

Land type weighted DTHETA = 0.00 0.26

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
212	0.54	0.50	0.00	~~3.59~~ 4.82	~~0.49~~	0.0	100.44

Adj xksat = $0.26\left(\frac{90-10}{90}+1\right) = 0.49$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # 213

a = 0.35 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	19.0	0.283

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 16.5 ft/mi

Lca = 55.0 % of (L)= 0.63 mi

Av.slope =(SUM(Li)/I)^2

Lag = 37.44 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	93.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Es	7.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.28	
Weight.Av	100.0 %			0.35	----	----	3.50	0.25	0.28	

Land type weighted DTHETA = 0.35

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
213	0.35	0.35	0.35	~~3.50~~ 4.90	0.28	0.0	37.44

The xksat value did not change for this sobbasin per FCDMC GIS.

KMH

11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 214

= 0.16 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.77	32.0	0.119

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.77 mi Av.Slope= 41.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.46 mi

Lag = 23.95 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AdB	38.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	0
AbA	21.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
GgA	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0
Va	11.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Ae	10.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0
Mo	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	0
Weight.Av	100.0 %			0.35	----	----	4.16	0.37	0.38	0

Land type weighted DTHETA = 0.35

0.36
FCDMC
0.15

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
214	0.16	0.35	0.35	4.16	0.38	0.0	23.95

Adj. Xksat = $0.36\left(\frac{20-10}{90}+1\right) = 0.40$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 215

. = 0.35 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	43.0	0.211

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 34.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.50 mi

Lag = 30.51 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET, condi-
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	63.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
AdB	20.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	
AKB	8.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
Mp	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	
Ae	4.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
Mo	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	
Weight.Av	100.0 %			0.34	----	----	3.71	0.29	0.31	

Land type weighted DTHETA = 0.34 0.28

FROM GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
215	0.35	0.35	0.34	~~3.71~~ 4.66	0.31	0.0	30.51

Adj. xksat = $0.28\left(\frac{20-10}{90}+1\right) = 0.31$ ✓

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 215A

S-GRAPH PARAMETERS

= 0.45 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.57	58.0	0.258

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.57 mi Av.Slope= 36.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 30.0 % of (L)= 0.47 mi

Lag = 32.34 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AKB	31.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	0
Ae	25.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0
GgA	15.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0
AHC	12.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.30	0.30	0
AdB	12.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	0
Mo	5.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	0
Weight.Av	100.0 %			0.33	----	----	3.94	0.33	0.34	0

Land type weighted DTHETA = 0.33

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
215A	0.45	0.35	0.33	~~3.94~~ 4.32	0.34	0.0	32.34

Adj. xksat = 0.33 ((20-10)/40 + 1) = 0.37

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 216

= 0.51 sq.mi

S-GRAPH PARAMETERS

/ path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	43.0	0.195

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 36.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.59 mi

Lag = 64.96 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	75 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	25 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.46	0.0	72.5	1.70	0.103	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	48.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	22.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
GgA	11.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.42	0
Ae	9.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0
Va	6.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
AdB	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	0
Weight.Av	101.0 %			0.35	----	0.00	4.21	~~0.38~~	0.40	0

Land type weighted DTHETA = 0.09 0.37

FROM GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
216	0.51	0.46	0.09	~~4.21~~ 4.10	~~0.40~~	0.0	64.96

Adj. xksat = $0.37\left(\frac{72.5-10}{90}+1\right) = 0.63$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 217

S-GRAPH PARAMETERS

a = 0.49 sq.mi

ow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	39.0	0.190

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 34.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 73.72 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
AbA	63.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Va	22.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Ma	7.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Cp	6.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	4.19	0.38	0.38	

Land type weighted DTHETA = 0.00

0.28

FCDMC SIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
217	0.49	0.50	0.00	~~4.19~~ 4.66	0.38	0.0	73.72

Adj xksat = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 218

S-GRAPH PARAMETERS

A = 1 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	55.0	0.228

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 38.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 86.53 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	47.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Va	43.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
GgA	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ma	2.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Weight.Av	100.0 %			----	----	0.00	4.20	0.38	0.39	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
218	1.00	0.50	0.00	~~4.20~~ 4.05	0.39	0.0	86.53

Adj. xksat = $0.38\left(\frac{90-10}{90}+1\right) = 0.72$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 219

S-GRAPH PARAMETERS

= 0.5 sq.mi

w path .. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	36.0	0.206

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 31.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.58 mi

Lag = 76.76 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	83.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Ma	10.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
GgA	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Weight.Av	100.0 %			----	----	0.00	4.21	0.38	0.40	(

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
219	0.50	0.50	0.00	~~4.21~~ 4.05	~~0.40~~	0.0	76.76

Adj xksat = 0.38 (90-10 / 90 + 1) = 0.72

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 220

S-GRAPH PARAMETERS

= 0.5 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	37.0	0.211

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 31.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.59 mi

Lag = 78.25 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	79.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
GgA	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			----	----	0.00	4.13	~~0.37~~	0.41	0

Land type weighted DTHETA = 0.00 0.35

Fobac 6-15

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
220	0.50	0.50	0.00	~~4.13~~ 4.20	~~0.41~~	0.0	78.25

Adj. xksat = $0.35\left(\frac{90-10}{90}+1\right) = 0.66$

KMH
11-29-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 221

S-GRAPH PARAMETERS

a = 0.48 sq.mi

w path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	26.0	0.232

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 23.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 79.63 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET. condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	88.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ge	12.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	3.53	0.25	0.48	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
221	0.48	0.50	0.00	~~3.53~~ 4.90	0.48	0.0	79.63

Adj. xksat = 0.23 ((90-10)/90 + 1) = 0.47

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

BASIN # : 221A

S-GRAPH PARAMETERS

i = 0.31 sq.mi

w path . (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.06	16.0	0.273

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.06 mi Av.Slope= 15.1 ft/mi Av.slope =(SUM(Li)/I)^2

)*60) Lca = 60.0 % of (L)= 0.64 mi

Lag = 88.82 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

DTHET. condi- Satur.

d bol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET. condi-
	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
ght.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Rockou crops

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Ge	77.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
GgA	23.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.66	~~0.28~~	0.53	

Land type weighted DTHETA = 0.00

0.26

FROM GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
221A	0.31	0.50	0.00	~~3.66~~ 4.82	~~0.53~~	0.0	88.82

Adj. xksat = 0.26 (90-10 / 90 + 1) = 0.49

KMH

11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 222

S-GRAPH PARAMETERS

a = 1.1 sq.mi

w path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.86	15.0	1.249

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 2.86 mi Av.Slope= 5.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 1.43 mi

Lag = 108.60 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	85 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
PAV	15 %	Pavement	0.05	100.0	0.0	1.00	0.12	Dry
Weight.Av	100 %		0.31	15.0	17.0	1.09	0.061	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Ge	46.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	
GgA	42.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.27	
Ld	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.28	
Ch	3.0 %	Casa Grande	Loam	0.35	0.25	0.00	----	0.24	0.26	
Gr	2.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.16	
Weight.Av	100.0 %			0.35	----	----	3.59	~~0.27~~	0.29	

Land type weighted DTHETA = 0.35 0.26

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
222	1.10	0.31	0.35	~~3.59~~ 4.82	0.29	15.0	108.60

Adj. xksat = $0.26\left(\frac{17-10}{90}+1\right) = 0.28$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 223

S-GRAPH PARAMETERS

a = 1.26 sq.mi

low path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.62	15.0	0.532

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.62 mi Av.Slope= 9.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.81 mi

Lag = 35.57 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHE cond
COM	80 %	Commercial	0.06	90.0	10.0	1.00	0.03	Dry
DRL	20 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.12	72.0	12.0	1.02	0.034	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
GgA	54.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.26	
Mr	19.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.05	
Gr	10.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.15	
PsA	9.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.25	0.26	
Ld	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.27	
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.05	
Weight.Av	100.0 %			0.33	----	----	5.09	0.20	0.20	

Land type weighted DTHETA = 0.33 0.19 Fc DUC. 4.19

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
223	1.26	0.12	0.33	~~5.09~~	~~0.20~~	72.0	35.57

5.52

Adj. xksat = $0.19\left(\frac{12-10}{90}+1\right) = 0.19$

KMH 11-27-06

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 224

S-GRAPH PARAMETERS

= 0.8 sq.mi

w path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.15	22.0	0.012
0.89	29.0	0.156

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.04 mi Av.Slope= 38.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.52 mi

Lag = 28.53 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ld	36.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.29	
Mr	30.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.06	
AbB	18.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
RpE	8.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
PeB	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			0.32	----	----	4.03	~~0.23~~	0.25	

Land type weighted DTHETA = 0.32 0.18

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
224	0.80	0.35	0.32	~~4.03~~ 5.64	~~0.25~~	0.0	28.53

Adj. xksat = $0.18\left(\frac{20-10}{90}+1\right) = 0.20$

KMH

11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 225

S-GRAPH PARAMETERS

a = 0.43 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	16.0	0.345

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 12.9 ft/mi

Lca = 50.0 % of (L)= 0.62 mi

Av.slope =(SUM(Li)/I)^2

Lag = 36.87 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET, condi
DRL	80 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	20 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.30	4.0	26.0	1.18	0.046	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Gf	22.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.30	0.35	(
PvB	17.0 %	Pinal	Loam	0.36	0.25	0.00	----	0.23	0.27	(
RbB	13.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
PsA	11.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.25	0.29	(
RpE	8.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Gt	6.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.16	(
Ld	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.31	(
LcB	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.31	(
La	4.0 %	La Palma	Silty Loam	0.39	0.25	0.00	----	0.16	0.19	(
Gh	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.29	(
Gr	3.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.18	(
GgA	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.29	(
Weight.Av	100.0 %			0.36	0.25	----	3.63	~~0.27~~	0.31	(

Land type weighted DTHETA = 0.33 0.23

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
225	0.43	0.30	0.33	~~3.63~~	~~0.31~~	4.0	36.87

5.10

Adj. xksat = $0.23\left(\frac{26-10}{90}+1\right) = 0.27$

KMH
12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 225A

S-GRAPH PARAMETERS

A = 0.37 sq.mi

Low path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	15.0	0.270

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 14.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.46 mi

Lag = 32.68 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
PvB	41.0 %	Pinal	Loam	0.36	0.25	0.00	----	0.23	0.26	
RpE	19.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ld	13.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.29	
Gr	13.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.17	
Ao	10.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	
GgA	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
La	1.0 %	La Palma	Silty Loam	0.39	0.25	0.00	----	0.16	0.18	
Weight.Av	100.0 %			0.35	----	----	3.91	~~0.24~~	0.25	

Land type weighted DTHETA = 0.35

0.21

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC 0.15

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
225A	0.37	0.35	0.35	~~3.91~~ 5.30	~~0.25~~	0.0	32.68

Adj. Xksat = $0.21\left(\frac{20-10}{90}+1\right) = 0.23$

KMH

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 226

S-GRAPH PARAMETERS

a = 1.18 sq.mi

ow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.30	11.0	0.447

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.30 mi Av.Slope= 8.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.65 mi

Lag = 29.71 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
RES	85 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
DRL	15 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.15	17.0	45.5	1.40	0.033	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
LcA	20.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.35	
Ld	16.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.36	
Es	16.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.35	
GgA	12.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.35	
PsB	9.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.27	0.38	
La	8.0 %	La Palma	Silty Loam	0.39	0.25	0.00	----	0.16	0.22	
AbB	4.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
RpE	3.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
RbB	3.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
PsA	3.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.25	0.35	
LcB	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.36	
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.07	
Gr	1.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.21	
Weight.Av	100.0 %			0.35	0.25	----	3.53	0.26	0.34	

Land type weighted DTHETA = 0.26

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
226	1.18	0.15	0.26	~~3.53~~ 4.82	0.34	17.0	29.71

Adj. xksat = 0.26 (45.5-10 / 90 + 1) = 0.36

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 227

= 0.23 sq.mi

S-GRAPH PARAMETERS

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.89	44.0	0.127

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.89 mi Av.Slope= 49.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.45 mi

Lag = 22.68 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	85 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	15 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.32	3.0	24.5	1.16	0.047	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
RpE	38.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
LcB	16.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.30	C
GgA	15.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.29	C
PsB	12.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.27	0.31	C
PvB	7.0 %	Pinal	Loam	0.36	0.25	0.00	----	0.23	0.27	C
LcA	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.29	C
La	5.0 %	La Palma	Silty Loam	0.39	0.25	0.00	----	0.16	0.19	C
Weight.Av	100.0 %			0.35	0.25	----	3.77	~~0.30~~	0.33	C

Land type weighted DTHETA = 0.34

0.27

FEMA GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
227	0.23	0.32	0.34	~~3.77~~ 4.74	~~0.33~~	3.0	22.68

Adj. xksat = 0.77 ($\frac{24.5-10}{90}$ + 1) = 0.31

KAS

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 228

S-GRAPH PARAMETERS

= 0.28 sq.mi

w path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.89	21.0	0.183

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.89 mi Av.Slope= 23.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.45 mi

Lag = 27.77 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
PsA	25.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.25	0.28	
PvB	20.0 %	Pinal	Loam	0.36	0.25	0.00	----	0.23	0.26	
RpE	17.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	14.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Lb	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	
La	9.0 %	La Palma	Silty Loam	0.39	0.25	0.00	----	0.16	0.18	
LcB	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.29	
GgB	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.29	
Weight.Av	100.0 %			0.36	----	----	3.58	~~0.26~~	0.29	

Land type weighted DTHETA = 0.36

0.27

FEDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
228	0.28	0.35	0.36	~~3.58~~	~~0.29~~	0.0	27.77

4.74

Adj xksat = $0.27\left(\frac{20-10}{90}+1\right) = 0.30$

KMH

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 228A

= 0.08 sq.mi

S-GRAPH PARAMETERS

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.56	30.0	0.077

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.56 mi Av.Slope= 53.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.25 mi

Lag = 16.06 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
RpE	77.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
CA2	18.0 %	Calthiorids	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
TD	5.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.33	(
Weight.Av	100.0 %			0.35	----	----	4.23	~~0.43~~	0.44	(

Land type weighted DTHETA = 0.35 0.33

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
228A	0.08	0.35	0.35	~~4.23~~ 4.32	~~0.44~~	0.0	16.06

Adj. xksat = $0.33\left(\frac{20-10}{90}+1\right) = 0.37$

KMH
12-18-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 229

S-GRAPH PARAMETERS

A = 0.51 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.97	70.0	0.114

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.97 mi Av.Slope= 72.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.39 mi

Lag = 21.15 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
DRL	90 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.33	2.0	23.0	1.14	0.048	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
RpE	81.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
GgA	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.29	(
PsB	2.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.27	0.31	(
Weight.Av	100.0 %			0.35	0.25	----	4.11	~~0.36~~	0.37	(

Land type weighted DTHETA = 0.34

0.28

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
229	0.51	0.33	0.34	~~4.11~~ 4.66	~~0.37~~	2.0	21.15

Adj. xksat = 0.28 (23-10 / 90 + 1) = 0.32

KMH

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 230

S-GRAPH PARAMETERS

= 0.04 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.36	10.0	0.068

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.36 mi Av.Slope= 27.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.13 mi

Lag = 28.36 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	93.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
PeA	7.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Weight.Av	100.0 %			----	----	0.00	3.55	~~0.26~~	0.47	

Land type weighted DTHETA = 0.00

0.16

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
230	0.04	0.50	0.00	~~3.55~~ 5.88	~~0.47~~	0.0	28.36

Adj. xksat = 0.16 $\left(\frac{90-10}{90}+1\right)$ = 0.30

KMH

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 230A

S-GRAPH PARAMETERS

a = 0.18 sq.mi

w path c. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.47	52.0	0.045
0.28	14.0	0.040

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.75 mi Av.Slope= 79.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.26 mi

Lag = 16.92 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
RpE	69.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	19.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
PsB	10.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.27	0.30	
LcA	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.28	
Weight.Av	100.0 %			0.35	----	----	4.03	~~0.35~~	0.36	

Land type weighted DTHETA = 0.35

0.28

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FROM GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
230A	0.18	0.35	0.35	~~4.03~~ 4.66	~~0.36~~	0.0	16.92

Adj. xkSat = 0.28 (20-10 / 90 + 1) = 0.31

KMH

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 231

= 0.35 sq.mi

S-GRAPH PARAMETERS

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	30.0	0.225

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 26.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.46 mi

Lag = 34.68 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	90 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
AGR	10 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.37	0.0	27.0	1.19	0.057	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Vg	30.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.27	0.
RpE	14.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Br	11.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	0.
GgA	9.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.30	0.
Cb	9.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.33	0.
Ao	9.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	0.
Vh	6.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.26	0.
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
CA2	3.0 %	Calthiorids	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
TD	2.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.43	0
LcA	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.30	0
Weight.Av	100.0 %			0.34	----	0.00	3.61	~~0.69~~	0.79	0

Land type weighted DTHETA = 0.31 0.45

INPUT VALUES FOR < MCUHP 2 >PROGRAM

Follow GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
231	0.35	0.37	0.31	~~3.61~~ 3.775	~~0.79~~	0.0	34.68

Adj. XKsat = $0.45\left(\frac{27-10}{90}+1\right) = 0.54$

KMH

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 232

= 0.93 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.63	128.0	0.184

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.63 mi Av.Slope= 78.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.65 mi

Lag = 32.16 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET, condi-
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
PYD	25.0 %	Pinmat	Sandy Loam	0.31	0.22	0.00	----	0.33	0.33	
AHC	25.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.30	0.30	
AKB	19.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
Va	12.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
AGB	10.0 %	Antho	Sandy Loam	0.35	0.26	0.00	----	0.62	0.62	
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	
Weight.Av	100.0 %			0.33	----	----	4.08	~~0.36~~	0.36	

Land type weighted DTHETA = 0.33 0.31

INPUT VALUES FOR < MCUHP 2 >PROGRAM

per FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
232	0.93	0.35	0.33	~~4.08~~ 4.44	0.36	0.0	32.16

Adj. xksat = 0.31 * $\left(\frac{20-10}{40}+1\right)$ = 0.34

KMH

1-4-01

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 233

= 0.5 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.27	36.0	0.239

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.27 mi Av.Slope= 28.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.61 mi

Lag = 34.60 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) n

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
AbA	44.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
AKB	15.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	0.
AdA	13.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Ae	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0.
AdB	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	0.
Ma	7.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Va	2.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0.
GgA	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0.
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Weight.Av	100.0 %			0.35	----	----	4.22	~~0.39~~	0.39	0

Land type weighted DTHETA = 0.35 0.37

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
233	0.50	0.35	0.35	~~4.22~~ 4.10	~~0.39~~	0.0	34.60

Adj xksat = 0.37 (90-10 / 90 + 1) = 0.41

KMH

11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 234

S-GRAPH PARAMETERS

A = 0.53 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	36.0	0.230

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 29.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.60 mi

Lag = 81.18 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	36.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	32.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Va	14.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Bs	12.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
GgA	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	4.25	~~0.39~~	0.40	

Land type weighted DTHETA = 0.00 0.38

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
234	0.53	0.50	0.00	~~4.25~~ 4.05	~~0.40~~	0.0	81.18

Adj. Xksat = $0.38\left(\frac{90-10}{90}+1\right) = 0.72$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 235

= 0.47 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.21	29.0	0.247

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.21 mi Av.Slope= 24.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.58 mi

Lag = 82.64 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ma	67.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
AbA	16.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Va	15.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	(
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Weight.Av	100.0 %			----	----	0.00	4.27	0.40	0.40	(

Land type weighted DTHETA = 0.00

0.39

From GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
235	0.47	0.50	0.00	~~4.27~~ 4.00	~~0.40~~	0.0	82.64

Adj. xksat = 0.39 $\left(\frac{90-10}{90}+1\right)$ = 0.74

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 236

a = 1 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	46.0	0.249

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 32.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 89.52 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
Es	33.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ge	21.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Va	20.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
AbA	17.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	5.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.88	~~0.32~~	0.45	

Land type weighted DTHETA = 0.00 0.31

FCDMC 0.15

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
236	1.00	0.50	0.00	~~3.88~~ 4.44	~~0.45~~	0.0	89.52

Adj. xksat = $0.31\left(\frac{90-10}{90}+1\right) = 0.59$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 237

S-GRAPH PARAMETERS

= 0.5 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.27	31.0	0.257

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.27 mi Av.Slope= 24.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.61 mi

Lag = 85.44 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	70.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	C
Es	14.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	C
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Va	5.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	C
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C
Ge	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	C
Weight.Av	100.0 %			----	----	0.00	3.61	0.27	0.46	C

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
237	0.50	0.50	0.00	~~3.61~~ 4.90	~~0.46~~	0.0	85.44

Adj. xksat = 0.77 ((90-10/40 + 1) = 0.51

KAH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 238

Area = 0.5 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	31.0	0.230

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 26.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.59 mi

Lag = 80.92 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	97.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Es	1.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
AbA	1.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Weight.Av	100.0 %			----	----	0.00	3.52	0.25	0.47	(

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
238	0.50	0.50	0.00	~~3.52~~ 4.90	0.47	0.0	80.92

The xksat value did not change per FCDMC GIS.

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 239

S-GRAPH PARAMETERS

a = 0.48 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.09	26.0	0.223

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.09 mi Av.Slope= 23.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.55 mi

Lag = 77.60 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	98.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Mr	1.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	0
LcA	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.56	0.25	0.47	0

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
239	0.48	0.50	0.00	~~3.56~~ 4.90	0.47	0.0	77.60

The xKsat value did not change per FCDMC GIS.

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 240

S-GRAPH PARAMETERS

Area = 0.4 sq.mi

w path c. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.92	19.0	0.202

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.92 mi Av.Slope= 20.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.46 mi

Lag = 70.11 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
GgA	65.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ge	25.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
RaB	8.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mr	1.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
Mp	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Weight.Av	100.0 %			----	----	0.00	3.59	0.27	0.48	

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
240	0.40	0.50	0.00	~~3.59~~ 4.74	0.48	0.0	70.11

Adj xksat = $0.27\left(\frac{90-10}{90}+1\right) = 0.51$

KMH
11-27-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 241

= 1.51 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.41	33.0	0.046
0.89	24.0	0.171

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.30 mi Av.Slope= 35.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.46 mi

Lag = 38.24 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	80 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
AGR	20 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.38	0.0	34.0	1.27	0.064	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
RpE	21.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.32	
AbA	12.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ge	9.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.37	
LcB	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.33	
AbB	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Cb	5.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.42	
PvB	4.0 %	Pinal	Loam	0.36	0.25	0.00	----	0.23	0.29	
LcA	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.32	
Lb	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.34	
Es	4.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.32	
RaB	3.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ld	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.33	
Gt	3.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.18	
Gr	3.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.19	
Weight.Av	100.0 %			0.35	----	0.00	4.04	0.35	0.40	

Land type weighted DTHETA = 0.28

0.27
FCDMC AIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
241	1.51	0.38	0.28	~~4.04~~ 4.74	0.40	0.0	38.24

Adj xksat = $0.27\left(\frac{34-10}{90}+1\right) = 0.34$

KMH
11-27-00

LOSS PARAMETERS FOR SUBBASIN: 242

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.820	100.	0.26	0

TOTAL = 0.820 Sq.Miles XKSAT = 0.26 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.820	Desert	100.	DRY	25	0	0.35	0.03	Low	0.04
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.820 = Total Area			Avg. =	25	0%	0.350			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.30

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

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 242A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.100	100.	0.35	0

TOTAL = 0.100 Sq.Miles XKSAT = 0.35 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.100	Desert	100.	DRY	25	0	0.35	0.03	Low	0.06
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.100 = Total Area			Avg. =	25	0%	0.350			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

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

LOSS PARAMETERS FOR SUBBASIN: 242B

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.300	100.	0.25	0

TOTAL = 0.300 Sq.Miles XKSAT = 0.25 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.300	Desert	100.	DRY	25	0	0.35	0.03	Low	0.05
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.300 = Total Area			Avg. =	25	0%	0.350			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.29

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

LOSS PARAMETERS FOR SUBBASIN: 243

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.150	100.	0.24	0

TOTAL = 0.150 Sq.Miles XKSAT = 0.24 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.150	Desert	100.	DRY	25	0	0.35	0.03	Low	0.05
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.150 = Total Area			Avg. =	25	0%	0.350			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.28

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

LOSS PARAMETERS FOR SUBBASIN: 243A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.180	100.	0.34	0

TOTAL = 0.180 Sq.Miles XKSAT = 0.34 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.30
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.180	M.D.R.	100.	NORMAL	40	30	0.25	0.03	Low	0.05
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	

0.180 = Total Area Avg. = 40 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. = 0.45

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

% EFFECTIVE IMP. = 30

LOSS PARAMETERS FOR SUBBASIN: 243B

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.090	100.	0.35	0

TOTAL = 0.090 Sq.Miles XKSAT = 0.35 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.055	M.D.R.	61.1	NORMAL	40	30	0.25	0.03	Low	0.06
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.035	RowCrop	38.9	NORMAL	90	0	0.50	0.12	Hi,	0.12
0.090 = Total Area			Avg. =	64	18%	0.350			

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 = 18
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 18

LOSS PARAMETERS FOR SUBBASIN: 244

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.250	100.	0.27	0

TOTAL = 0.250 Sq.Miles XKSAT = 0.27 %Rock = 0

DTHETA

Dry = 0.35
Normal = 0.25
Wet = 0.00

PSIF = ~~4.65~~ 4.55

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.006	Desert	2.4	DRY	25	0	0.35	0.03	Low	0.07
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.244	RowCrop	97.6	NORMAL	90	0	0.50	0.12	Hi,	0.10
0.250 = Total Area			Avg. =	88	0%	0.500			

PERCENT OF SUBBASIN
DRY = 2.0 %
NORMAL = 98.0 %
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

LOSS PARAMETERS FOR SUBBASIN: 244A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.110	100.	0.26	0

TOTAL = 0.110 Sq.Miles XKSAT = 0.26 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.078	Desert	70.9	DRY	25	0	0.35	0.03	Low	0.06
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
0.032	M.D.R.	29.1	NORMAL	40	30	0.25	0.03	Low	0.06
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.110 = Total Area			Avg. =	28	9%	0.320			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.32

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.31

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

LOSS PARAMETERS FOR SUBBASIN: 245

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.240	100.	0.22	0

TOTAL = 0.240 Sq.Miles XKSAT = 0.22 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
0.080	Ind	33.3	NORMAL	60	55	0.15	0.03	Min	0.03
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.160	RowCrop	66.7	NORMAL	90	0	0.50	0.12	Hi	0.10

0.240 = Total Area Avg. = 84 18% 0.380

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 = 18
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 18

LOSS PARAMETERS FOR SUBBASIN: 245A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	57.600	100.	0.46	0

TOTAL = 57.600 Acres XKSAT = 0.46 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.74
Normal = 0.26
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
57.600	Desert	100.	DRY	20	0	0.35	0.05	Low	0.06
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

57.600 = Total Area Avg. = 20 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. = 0.51

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.
245A	0.090	0.40	0.20	0.05	17.5	0.35	0.35	3.74	0.51	0	16

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 246

= 0.75 sq.mi

S-GRAPH PARAMETERS

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.62	58.0	0.271

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.62 mi Av.Slope= 35.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.78 mi

Lag = 39.83 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ma	29.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C
AdB	24.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.43	0.43	C
AbA	19.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Va	8.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	C
GgA	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	C
AKB	7.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	C
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	C
Mo	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	C
Lb	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	C
Weight.Av	100.0 %			0.35	----	----	4.22	0.~~39~~	0.39	C

Land type weighted DTHETA = 0.35 0.38

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
246	0.75	0.35	0.35	~~4.22~~ 4.05	0.39	0.0	39.83

$$\text{Adj } X_{ksat} = 0.38\left(\frac{20-10}{90}+1\right) = 0.42$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 247

S-GRAPH PARAMETERS

= 0.5 sq.mi

ath inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	40.0	0.218

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 32.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.60 mi

Lag = 79.57 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	53.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	37.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Lb	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0
Va	1.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Weight.Av	100.0 %			----	----	0.00	4.21	0.38	0.40	0

Land type weighted DTHETA = 0.00

0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
247	0.50	0.50	0.00	~~4.21~~ 4.00	0.40	0.0	79.57

Adj. XKsat = $0.39\left(\frac{90-10}{90}+1\right) = 0.48$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 248

S-GRAPH PARAMETERS

1 = 1 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.45	48.0	0.252

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.45 mi Av.Slope= 33.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.73 mi

Lag = 90.58 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	72.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Ma	12.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C
Lb	8.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	C
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	C
Va	1.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	C
Pa	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Weight.Av	100.0 %			----	----	0.00	4.22	0.39	0.40	C

Land type weighted DTHETA = 0.00

0.39

FLD SIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
248	1.00	0.50	0.00	~~4.22~~ 4.00	0.40	0.0	90.58

Adj. Xksat = .39 $\left(\frac{90-10}{90}+1\right)$ = 0.74

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 249

S-GRAPH PARAMETERS

= 1 sq.mi

ath inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	45.0	0.252

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 31.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 89.89 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ge	38.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Ma	20.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Ge	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Bs	10.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
AbA	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Va	6.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	(
Es	5.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Weight.Av	100.0 %			----	----	0.00	3.98	~~0.34~~	0.48	(

Land type weighted DTHETA = 0.00

0.31

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
249	1.00	0.50	0.00	~~3.98~~ 4.44	0.48	0.0	89.89

Adj. XKsat = $0.31\left(\frac{90-10}{90}+1\right) = \underline{\underline{0.59}}$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 250

S-GRAPH PARAMETERS

Area = 0.49 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	28.0	0.224

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 25.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 78.51 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satu
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crops
Es	35.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ge	25.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Va	20.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
GgA	16.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.73	~~0.29~~	0.47	

Land type weighted DTHETA = 0.00 0.28

FCD SIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
250	0.49	0.50	0.00	~~3.73~~ 4.66	0.47	0.0	78.51

Adj. XKsat = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 250A

= 0.51 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	29.0	0.256

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 23.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.60 mi

Lag = 84.59 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Es	83.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0
GgA	12.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ge	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Weight.Av	100.0 %			----	----	0.00	3.59	~~0.25~~	0.47	0

Land type weighted DTHETA = 0.00 0.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FLD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
250A	0.51	0.50	0.00	~~3.59~~ 4.90	0.47	0.0	84.59

Same Adj & Ksat

∴ no Calc.

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 251

= 0.5 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	24.0	0.242

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 21.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 80.85 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
LcA	38.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	31.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	17.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ge	14.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	3.53	~~0.26~~	0.48	

Land type weighted DTHETA = 0.00 0.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM FLD SIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
251	0.50	0.50	0.00	~~3.53~~ 4.90	0.48	0.0	80.85

$Adj.\ XKsat = 0.25\left(\frac{90-10}{90}+1\right) = 0.47$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 252

= 0.5 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	23.0	0.247

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 20.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 81.50 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	47.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Mp	21.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Lb	15.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0
GgA	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ge	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Va	5.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Weight.Av	100.0 %			----	----	0.00	4.45	~~0.22~~	0.40	0

Land type weighted DTHETA = 0.00 0.27

FLD SIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
252	0.50	0.50	0.00	~~4.45~~ 4.74	0.40	0.0	81.50

Adj. $Xksat = 0.27\left(\frac{40-10}{40}+1\right) = \underline{0.51}$

LOSS PARAMETERS FOR SUBBASIN: 253

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	648.200	100.	0.20	0

TOTAL = 648.200 Acres XKSAT = 0.20 %Rock = 0

DTHETA

Dry = 0.37
Normal = 0.25
Wet = 0.00

PSIF = ~~5.30~~ 5.40

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
648.200	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.08

648.20 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

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.
253	1.013	1.22	0.61	0.12	23.4	0.50	0.00	5.30	0.38	0	85

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 253A

S-GRAPH PARAMETERS

= 0.25 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.09	40.0	0.180

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.09 mi Av.Slope= 36.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.65 mi

Lag = 29.38 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
DRL	80 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
LWN	20 %	Lawn & Turf	0.20	50%Rock-	95.0	1.94	0.03	Norma
Weight.Av	100 %		0.32	0.0	35.0	1.28	0.046	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	62.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Lb	27.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.34	
RpE	8.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	
PeB	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			0.35	0.25	----	4.04	0.35	0.37	

Land type weighted DTHETA = 0.33 0.36 found

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
253A	0.25	0.32	0.33	~~4.04~~ 4.05	~~0.37~~	0.0	29.38

Adj. xksat = 0.38 ((55-10)/90 + 1) = 0.49

KMH 11-27-00

LOSS PARAMETERS FOR SUBBASIN: 254

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
Mp	176.700	100.	0.33	0

TOTAL = 176.700 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	20	0	0.35	0.05	Low	
73.700	RES.	41.7	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
103.000	Golf	58.3	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

176.70 = Total Area Avg. = 50 8% 0.340

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 = 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.
254	0.276	0.98	0.46	0.03	36.7	0.34	0.25	4.35	0.48	8	16

eec

Project Title Loop 303 White Tanks Project No. 99551 Date

Subject Sub basin Prep. Prepared By MJR Checked By Page

Sub basin 254A

Sub basin is part of FCD model for the RIXanal Over-chute. Sheet not available.

x ksat from EEC GIS = 0.40

Land use: Res., Golf ∴ Veg. Cover 50%

adjusted x ksat = $.4\left[\frac{50-10}{90}+1\right] = 0.58$

PSIF = 3.95

LOSS PARAMETERS FOR SUBBASIN: 254B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	85.600	100.	0.27	0

TOTAL = 85.600 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
85.600	Desert	100.	DRY	20	0	0.35	0.05	Low	0.05
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

85.600 = Total Area Avg. = 20 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. = 0.30

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.
254B	0.134	0.30	0.15	0.05	30.0	0.35	0.35	4.65	0.30	0	12

eec

Project Title LOOP 303 Master Drainage Study Project No. 99551 Date

Subject Sub Basins Prepared By MJC Checked By Page

255A

Sub Basin Hydrograph and L&S parameters are not available. Refer to FCDMC Drainage Report for the RID Canal over-chute for MCUHP input.

PSIF

3.88

LOSS PARAMETERS FOR SUBBASIN: 256

oil Survey Used Aguila/Carefree

KSAT

ap Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	275.200	100.	0.12	0

OTAL = 275.200 Acres XKSAT = 0.12 %Rock = 0

DTHETA

ry = 0.37 PSIF = 6.60
ormal = 0.19
et = 0.00

AND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
44.000	RES.	16.0	NORMAL	50	20	0.12	0.03	Low	0.06
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
31 [illegible]	AGRI	84.0	WET	90	0	0.50	0.12	Hi	0.09

75.20 = Total Area Avg. = 85 3% 0.440

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

UBBASIN DTHETA WEIGHTED BY LAND USE = 0.03

UBBASIN XKSAT ADJUSTED FOR VEG. = 0.22

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

INPUT VALUES FOR MCUHP2 PROGRAM

UBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
56	0.430	1.06	0.42	0.11	17.9	0.44	0.03	6.60	0.22	3	65

38)*60)

DTHETA
condit
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SAT Rockou
r) crops

09	0
51	0
39	0
09	0
39	0
11	0
39	0
43	0
00	0
24	0

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 257

S-GRAPH PARAMETERS

Area = 0.34 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.21	14.0	0.356

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.21 mi Av.Slope= 11.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.61 mi

Lag = 96.39 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Mr	45.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	C
Lb	11.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	C
AbA	11.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Mp	9.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	C
Cp	9.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	C
Mo	6.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	C
Pa	5.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Le	3.0 %	Laveen	Loam	0.34	0.23	0.00	----	0.23	0.43	C
Vh	1.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	C
Weight.Av	100.0 %			----	----	0.00	5.82	~~0.18~~	0.24	C

Land type weighted DTHETA = 0.00 0.13

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
257	0.34	0.50	0.00	~~5.82~~ 6.40	~~0.24~~	0.0	96.39

Adj. xksat = 0.13 ((90-10)/90 + 1) = 0.25

KMH

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 258

Area = 0.38 sq.mi

S-GRAPH PARAMETERS

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	28.0	0.198

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 27.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.46 mi

Lag = 35.12 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET. condi
DRL	85 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
AGR	15 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.37	0.0	30.5	1.23	0.061	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Vh	20.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.30	
Br	18.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	
GxB	15.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
PeB	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Pa	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	9.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Aa	5.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.36	
RpE	4.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mo	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	
Ao	2.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	
Mp	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	
Weight.Av	100.0 %			0.35	----	0.00	3.99	~~0.53~~	0.58	

Land type weighted DTHETA = 0.29 , 0.34

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
258	0.38	0.37	0.29	~~3.99~~ 4.28	~~0.58~~	0.0	35.12

Adj. Xksat = $0.34\left(\frac{30.5-10}{90}+1\right) = 0.42$

KMN
12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 258A

S-GRAPH PARAMETERS

Area = 0.12 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.71	17.0	0.145

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.71 mi Av.Slope= 23.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.43 mi

Lag = 25.00 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Pa	43.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
RpE	27.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	16.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
RaB	10.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Mo	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	0
Cp	2.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0
Weight.Av	100.0 %			0.35	----	----	4.22	~~0.39~~	0.39	0

Land type weighted DTHETA = 0.35 0.40

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
258A	0.12	0.35	0.35	~~4.22~~	~~0.39~~	0.0	25.00

3.95

Adj. XKsat = 0.40 ((20-10)/90 + 1) = 0.44

KMH
12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 259

S-GRAPH PARAMETERS

Area = 0.2 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	12.0	0.131

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.59 mi Av.Slope= 20.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.29 mi

Lag = 20.90 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Br	29.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	C
Vh	24.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.18	C
GgA	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	C
RpE	11.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Ge	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	C
Bt	4.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.50	0.50	C
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C
Aa	3.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.32	C
Weight.Av	100.0 %			0.35	----	----	3.93	~~0.56~~	0.59	C

Land type weighted DTHETA = 0.35

0.36

per FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
259	0.20	0.35	0.35	~~3.93~~	0.59	0.0	20.90

4.15

Adj xksat = 0.36 * (20-10 / 90 + 1) = 0.40

KMH

1-4-01

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 260

S-GRAPH PARAMETERS

= 0.5 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.30	59.0	0.193

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.30 mi Av.Slope= 45.4 ft/mi

Lca = 48.0 % of (L)= 0.62 mi

Av.slope =(SUM(Li)/I)^2

Lag = 29.63 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	80 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	20 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.30	4.0	26.0	1.18	0.046	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Bs	34.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
AKB	20.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
Ma	18.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Cb	10.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.32	
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ae	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
Lb	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.32	
AdA	1.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Weight.Av	100.0 %			0.34	0.25	----	4.13	~~0.47~~	0.49	

Land type weighted DTHETA = 0.33 0.39

INPUT VALUES FOR < MOUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
260	0.50	0.30	0.33	~~4.13~~ 4.00	0.49	4.0	29.63

Adj. xksat = 0.39 $\left(\frac{26-10}{90}+1\right)$ = 0.46

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 261

S-GRAPH PARAMETERS

Area = 0.41 sq.mi

ath .mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	51.0	0.193

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 41.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.74 mi

Lag = 82.71 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou: crops %
AbA	31.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Lb	26.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0.
Ma	20.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Mo	12.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Ae	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0.
GgA	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Weight.Av	100.0 %			----	----	0.00	3.87	~~0.32~~	0.40	0.

Land type weighted DTHETA = 0.00 0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD-GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
261	0.41	0.50	0.00	~~3.87~~ 4.00	0.40	0.0	82.71

Adj. xksat = 0.39 $\left(\frac{90-10}{90}+1\right)$ = 0.74

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 262

= 1.03 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	55.0	0.228

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 38.7 ft/mi

Lca = 50.0 % of (L)= 0.71 mi

Av.slope =(SUM(Li)/I)^2

Lag = 86.53 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Lb	70.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
Ma	14.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Mo	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	
AbA	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Pa	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Es	2.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	1.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Ge	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.68	~~0.28~~	0.46	

Land type weighted DTHETA = 0.00 0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
262	1.03	0.50	0.00	~~3.68~~ 4.00	0.46	0.0	86.53

Adj. xksat = 0.39 $\left(\frac{90-10}{90}+1\right)$ = 0.74

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 263

= 0.5 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	35.0	0.208

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 30.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.58 mi

Lag = 77.17 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Lb	34.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	[illegible]
Es	22.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	[illegible]
AbA	17.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	[illegible]
Va	14.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	[illegible]
Ge	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	[illegible]
Weight.Av	100.0 %			----	----	0.00	3.78	~~0.30~~	0.47	[illegible]

Land type weighted DTHETA = 0.00 0.33

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
263	0.50	0.50	0.00	~~3.78~~ 4.32	0.47	0.0	77.17

Adjust Xksat = $0.33\left(\frac{90-10}{90}+1\right)$ = 0.62

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 264

S-GRAPH PARAMETERS

= 0.5 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.09	37.0	0.187

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.09 mi Av.Slope= 33.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.55 mi

Lag = 72.57 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ge	71.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Lb	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	(
Es	6.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
Ma	4.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Va	3.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	(
AbA	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
LcA	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Weight.Av	100.0 %			----	----	0.00	3.80	~~0.31~~	0.52	(

Land type weighted DTHETA = 0.00 0.29

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
264	0.50	0.50	0.00	~~3.80~~ 4.58	0.52	0.0	72.57

$$Adj.\ XKsat = 0.29\left(\frac{90-10}{90}+1\right) = 0.55$$

LOSS PARAMETERS FOR SUBBASIN: 265

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	160.460	100.	0.30	0

TOTAL = 160.500 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
160.500	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.09

160.50 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.57

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.
265	0.251	1.18	0.77	0.12	18.6	0.50	0.00	4.50	0.57	0	96

LOSS PARAMETERS FOR SUBBASIN: 265A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	588.800	100.	0.26	0

TOTAL = 588.800 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	20	0	0.35	0.05	Low	
47.500	RES.	8.1	NORMAL	50	20	0.12	0.03	Low	0.06
	Comm		DRY	10	90	0.06	0.03	Min	
30.500	Golf	5.2	NORMAL	50	0	0.50	0.03	Min	0.03
510.800	AGRI	86.8	WET	90	0	0.50	0.12	Hi	0.08

588.80 = Total Area Avg. = 85 2% 0.470

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.03

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

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.
265A	0.920	1.24	0.43	0.11	21.0	0.47	0.03	4.70	0.48	2	69

LOSS PARAMETERS FOR SUBBASIN: 266

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	544.000	100.	0.25	0

TOTAL = 544.000 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	20	0	0.35	0.05	Low	
389.700	RES.	71.6	NORMAL	50	20	0.12	0.03	Low	0.04
	Comm		DRY	10	90	0.06	0.03	Min	
154.300	Golf	28.4	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

544.00 = Total Area Avg. = 50 14% 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. = 0.36

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.
266	0.850	1.85	1.10	0.03	14.1	0.23	0.25	4.80	0.36	14	34

LOSS PARAMETERS FOR SUBBASIN: 267

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	764.400	100.	0.18	0

TOTAL = 764.400 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	20	0	0.35	0.05	Low	
540.110	RES.	70.7	NORMAL	50	20	0.12	0.03	Low	0.04
	Comm		DRY	10	90	0.06	0.03	Min	
224.290	Golf	29.3	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

764.40 = Total Area Avg. = 50 14% 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. = 0.26

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.
267	1.194	1.94	0.85	0.03	12.4	0.23	0.25	5.60	0.26	14	32

LOSS PARAMETERS FOR SUBBASIN: 268

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	155.000	100.	0.25	0

TOTAL = 155.000 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	20	0	0.35	0.05	Low	
133.400	RES.	86.1	NORMAL	50	20	0.12	0.03	Low	0.05
21.600	Comm	13.9	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

155.00 = Total Area Avg. = 49 30% 0.110

PERCENT OF SUBBASIN DRY = 14.0 %
NORMAL = 86.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.36

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.
268	0.242	0.53	0.27	0.03	17.0	0.11	0.26	4.80	0.36	30	12

LOSS PARAMETERS FOR SUBBASIN: 269

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	147.100	100.	0.27	0

TOTAL = 147.100 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	20	0	0.35	0.05	Low	
125.100	RES.	85.0	NORMAL	50	20	0.12	0.03	Low	0.05
22.000	Comm	15.0	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

147.10 = Total Area Avg. = 49 30% 0.110

PERCENT OF SUBBASIN DRY = 15.0 %
NORMAL = 85.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

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.
269	0.230	0.83	0.42	0.03	14.5	0.11	0.26	4.65	0.39	30	17

LOSS PARAMETERS FOR SUBBASIN: 269B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	170.000	100.	0.40	0

TOTAL = 170.000 Acres XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
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	Desert	23.5	DRY	20	0	0.35	0.05	Low	0.06
130.000	RES.	76.5	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

170.00 = Total Area Avg. = 42 15% 0.170

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.27

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.54

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.
269B	0.266	0.79	0.42	0.04	29.1	0.17	0.27	3.95	0.54	15	20

eec

Project Title Loop 303 White Tanks update Project No. 99551 Date 3/10/01

Subject Sub basin Prep Prepared By MJL Checked By _____ Page _____

Subbasin 270

HEC-1 data Revised by FCD for RI canal over chute design.

P51F

3.58

eec

Project Title LOOP 203 White Tanks Project No. 99551 Date

Subject Sub basin Prep. Prepared By MJC Checked By Page

Sub basin 2711

Part of FCD Model for RID canal over-chute.
Data modified by FCD.

PS1F

4.3

eec

Project Title LOOP 303 White Tanks Project No. 99551 Date 3/10/01

Subject Sub basin Prop sheets Prepared By MJL Checked By _____ Page _____

Sub basin 2712

Part of FCD model of RID canal overchute.
Data modified by FCD.

PSIF
4.30

LOSS PARAMETERS FOR SUBBASIN: 271A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	154.700	100.	0.25	0

TOTAL = 154.700 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	20	0	0.35	0.05	Low	
100.900	RES.	65.2	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
800	AGRI	34.8	WET	90	0	0.50	0.12	Hi	0.11

154.70 = Total Area Avg. = 66 13% 0.250

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 65.0 %
WET = 35.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.16

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

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.
271A	0.242	0.91	0.49	0.06	8.8	0.25	0.16	4.80	0.41	13	43

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 271C

= 0.18 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.65	16.0	0.131

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.65 mi Av.Slope= 24.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.29 mi

Lag = 20.85 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Lb	42.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	0.
RpE	18.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
GxB	16.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
GgA	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0.
PeB	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
RaB	5.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Weight.Av	100.0 %			0.35	----	----	3.90	~~0.33~~	0.34	0.

Land type weighted DTHETA = 0.35 0.32

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
271C	0.18	0.35	0.35	~~3.90~~	~~0.34~~	0.0	20.85

~~4.32~~
4.15

$$Adj\ xksat = .32\left[\frac{80-10}{40}+1\right] = 0.36$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 272

S-GRAPH PARAMETERS

= 0.2 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	9.0	0.151

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.59 mi Av.Slope= 15.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.29 mi

Lag = 22.08 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	27.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0.
Vh	21.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.18	0.
Br	21.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	0
RpE	9.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
TD	8.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.33	0
Ge	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	0
GxB	3.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Lb	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	0
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			0.35	----	----	3.88	~~0.58~~	0.62	0

Land type weighted DTHETA = 0.35 0.30

· FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
272	0.20	0.35	0.35	~~3.88~~	~~0.62~~	0.0	22.08

~~4.50~~
4.30

Adj. Xksat = $.3\left[\frac{20-10}{90}+1\right] = 0.33$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 273

= 0.65 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	68.0	0.205

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 47.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 33.24 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	90 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.33	2.0	23.0	1.14	0.048	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ma	34.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Cp	21.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0
Bs	14.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Va	11.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
AbA	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
LcA	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.29	0
TrB	3.0 %	Tremant	Sandy Clay Loam	0.31	0.21	0.00	----	0.27	0.31	0
Lb	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.31	0
TB	1.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.37	0
Mo	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	0
GgA	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.29	0
Weight.Av	100.0 %			0.35	0.25	----	4.25	~~0.39~~	0.40	0

Land type weighted DTHETA = 0.34 0.38

INPUT VALUES FOR < MCUHP 2 >PROGRAM ECD 6/15

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
273	0.65	0.33	0.34	~~4.25~~ 4.05	0.40	2.0	33.24

Adj: Xksat = $0.38\left(\frac{23-10}{90}+1\right) = \underline{0.43}$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 274

= 0.66 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.86	74.0	0.295

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.86 mi Av.Slope= 39.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 49.0 % of (L)= 0.91 mi

Lag = 104.88 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
Ma	42.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Ae	14.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
Es	12.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	7.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Va	6.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Lb	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mo	3.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	
Cb	3.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	2.12	
TD	2.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	2.27	
Te	1.0 %	Tremant	Sandy Clay Loam	0.26	0.16	0.00	----	0.09	0.17	
Cp	1.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	4.29	~~0.40~~	0.50	

Land type weighted DTHETA = 0.00 0.37

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
274	0.66	0.50	0.00	~~4.29~~ 4.10	0.50	0.0	104.88

$$Adj.\ x\ Ksat = 0.37\left(\frac{90-10}{90}+1\right) = 0.70$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 275

S-GRAPH PARAMETERS

= 0.11 sq.mi

Flo ath inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.50	21.0	0.077

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.50 mi Av.Slope= 42.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.20 mi

Lag = 35.41 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Va	48.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0.
Es	24.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Mo	7.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
GgA	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Aa	6.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Ma	4.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Weight.Av	100.0 %			----	----	0.00	3.84	~~0.31~~ 0.35	0.40	0.

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
275	0.11	0.50	0.00	~~3.84~~ 4.20	0.40	0.0	35.41

$$\text{Adj. XKsat} = 0.35\left(\frac{40-10}{40}+1\right) = \underline{0.66}$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 276

= 0.26 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.06	41.0	0.170

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.06 mi Av.Slope= 38.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.53 mi

Lag = 69.30 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Ma	43.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
GgA	16.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	15.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Ge	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Aa	9.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Va	4.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Weight.Av	100.0 %			----	----	0.00	4.08	~~0.36~~	0.45	

Land type weighted DTHETA = 0.00 0.32

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
276	0.26	0.50	0.00	~~4.08~~ 4.38	0.45	0.0	69.30

Adj. X k sat = $0.32\left(\frac{90-10}{90}+1\right) = \underline{0.60}$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 277

S-GRAPH PARAMETERS

= 0.91 sq.mi

ath i)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.60	58.0	0.266

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.60 mi Av.Slope= 36.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.80 mi

Lag = 77.55 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	70 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	20 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.43	2.0	72.0	1.69	0.097	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Lb	25.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.46	0
LcA	22.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.42	0
Es	13.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.42	0
Aa	13.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.49	0
Ge	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.49	0
Mo	6.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.10	0
Ma	4.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Tu	3.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.41	0
Va	2.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Weight.Av	100.0 %			0.34	0.24	0.00	3.60	~~0.27~~	0.42	0

Land type weighted DTHETA = 0.09 0.31

FLD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
277	0.91	0.43	0.09	~~3.60~~ 4.44	0.42	2.0	77.55

Adjusted xksat = $0.31\left[\frac{72-10}{90}+1\right] = \underline{0.52}$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 278

S-GRAPH PARAMETERS

= 1 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.92	39.0	0.426

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.92 mi Av.Slope= 20.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.96 mi

Lag = 92.27 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	60 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
DRL	30 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.42	2.0	65.0	1.61	0.090	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Lb	39.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.44	
LcA	31.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.40	
Mp	8.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.08	
GgA	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.40	
AbA	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Va	3.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Ge	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.47	
PeA	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Pa	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			0.34	0.24	0.00	3.55	~~0.26~~	0.39	

Land type weighted DTHETA = 0.13 , 0.32

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FLD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
278	1.00	0.42	0.13	~~3.55~~ 4.38	0.39	2.0	92.27

Adj. xksat = 0.32 ((65-10)/50 + 1) = 0.52

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 279

S-GRAPH PARAMETERS

Area = 0.05 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.27	10.0	0.044

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.27 mi Av.Slope= 37.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.12 mi

Lag = 23.74 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET. condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	61.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
LcA	34.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	5.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.96	~~0.34~~	0.42	

Land type weighted DTHETA = 0.00 0.33

FLD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
279	0.05	0.50	0.00	~~3.96~~ 4.32	0.42	0.0	23.74

$$\text{Adj } K_{sat} = 0.33\left[\frac{90-10}{90}+1\right] = 0.62$$

LOSS PARAMETERS FOR SUBBASIN: 279A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
Mp	44.500	100.	0.26	0

TOTAL = 44.500 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
44.500	Comm	100.	NORMAL	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

44.500 = Total Area Avg. = 10 90% 0.060

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 90
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 90

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
279A	0.070	0.34	0.17	0.03	25.0	0.06	0.25	4.70	0.26	90	8

LOSS PARAMETERS FOR SUBBASIN: 279B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	19.200	100.	0.46	0

TOTAL = 19.200 Acres XKSAT = 0.46 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.74
Normal = 0.26
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
19.200	Comm	100.	NORMAL	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

19.200 = Total Area Avg. = 10 90% 0.060

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 90
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 90

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
279B	0.030	0.25	0.13	0.03	12.0	0.06	0.26	3.74	0.46	90	7

LOSS PARAMETERS FOR SUBBASIN: 279C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	32.000	100.	0.32	0

TOTAL = 32.000 Acres XKSAT = 0.32 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.40
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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
32.000	Comm	100.	NORMAL	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

32.000 = Total Area Avg. = 10 90% 0.060

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 = 90
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 90

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
279C	0.050	0.25	0.13	0.03	28.0	0.06	0.25	4.40	0.32	90	6

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 279D

S-GRAPH PARAMETERS

= 0.02 sq.mi

H th inc. i)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.20	6.0	0.037

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.20 mi Av.Slope= 30.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.10 mi

Lag = 20.48 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Lb	60.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0.
LcA	40.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	3.56	0.26	~~0.50~~ .36	0.

Land type weighted DTHETA = 0.00

per FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
279D	0.02	0.50	0.00	~~3.56~~ 4.15	~~0.50~~	0.0	20.48

MJR

$$\text{Adj xksat} = .36\left[\frac{90-10}{90}+1\right] = 0.68$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 280

S-GRAPH PARAMETERS

= 0.61 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.45	36.0	0.291

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.45 mi Av.Slope= 24.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.70 mi

Lag = 94.19 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	24.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ge	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Es	16.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0
LcA	13.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Lb	11.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Va	5.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Mp	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			----	----	0.00	3.62	~~0.27~~	0.46	0

Land type weighted DTHETA = 0.00 0.28

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD: GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
280	0.61	0.50	0.00	~~3.62~~ 4.66	0.46	0.0	94.19

$$Adj.\ xksat = 0.28\left(\frac{40-10}{40}+1\right) = \underline{0.53}$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 280A

= 0.06 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.44	1.0	0.292

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.44 mi Av.Slope= 2.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.15 mi

Lag = 53.16 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) n

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Es	28.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ge	23.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
GgA	19.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
AbA	18.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
LcA	12.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	3.68	0.28	0.48	0.

Land type weighted DTHETA = 0.00 0.28

PER FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
280A	0.06	0.50	0.00	~~3.68~~ 4.66	0.48	0.0	53.16

ADJ XKSAT = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

LOSS PARAMETERS FOR SUBBASIN: 281

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	544.000	100.	0.25	0

TOTAL = 544.000 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	20	0	0.35	0.05	Low	
20.700	RES.	3.8	NORMAL	50	20	0.12	0.03	Low	0.06
	Comm		DRY	10	90	0.06	0.03	Min	
19.600	Golf	3.6	NORMAL	50	0	0.50	0.03	Min	0.03
503.700	AGRI	92.6	WET	90	0	0.50	0.12	Hi	0.08

544.00 = Total Area Avg. = 87 1% 0.490

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.02

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

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.
281	0.850	1.27	0.61	0.11	18.9	0.49	0.02	4.80	0.46	1	85

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 282

S-GRAPH PARAMETERS

= 0.12 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.45	11.0	0.091

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.45 mi Av.Slope= 24.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 25.0 % of (L)= 0.11 mi

Lag = 30.30 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
LcA	42.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	23.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Le	19.0 %	Laveen	Loam	0.34	0.23	0.00	----	0.23	0.43	
PeA	11.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Lb	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.58	~~0.27~~	0.46	

Land type weighted DTHETA = 0.00 0.21

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
282	0.12	0.50	0.00	~~3.58~~ 5.30	0.46	0.0	30.30

Adj. XKsat = $0.21\left(\frac{90-10}{90}+1\right) = 0.40$

LOSS PARAMETERS FOR SUBBASIN: 283

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	87.400	100.	0.25	0

TOTAL = 87.400 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
87.400	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.10

87.400 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

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.
283	0.137	0.80	0.30	0.12	11.2	0.50	0.00	4.80	0.47	0	64

LOSS PARAMETERS FOR SUBBASIN: 284

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	216.000	100.	0.25	0

TOTAL = 216.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
216.000	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.09

216.00 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

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.
284	0.338	0.80	0.40	0.12	17.5	0.50	0.00	4.80	0.47	0	65

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 285

S-GRAPH PARAMETERS

= 0.04 sq.mi

r l c path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.29	8.0	0.055

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.29 mi Av.Slope= 27.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.15 mi

Lag = 27.60 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	100.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	0

Land type weighted DTHETA = 0.00

No change
mjc

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
285	0.04	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	27.60

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 285A

S-GRAPH PARAMETERS

= 0.06 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.27	4.0	0.070

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.27 mi Av.Slope= 14.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.14 mi

Lag = 29.41 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET: condi:
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	100.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	

Land type weighted DTHETA = 0.00

No change

MJK

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
285A	0.06	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	29.41

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 285B

S-GRAPH PARAMETERS

= 0.06 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.27	5.0	0.063

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.27 mi Av.Slope= 18.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.14 mi

Lag = 28.19 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops. for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	100.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	0

Land type weighted DTHETA = 0.00

No Change THR

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
285B	0.06	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	28.19

LOSS PARAMETERS FOR SUBBASIN: 286

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	448.000	100.	0.16	0

TOTAL = 448.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
33.000	Comm	7.4	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
415.000	AGRI	92.6	WET	90	0	0.50	0.12	Hi	0.08

448.00 = Total Area Avg. = 89 7% 0.470

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.03

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.30

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.
286	0.700	1.18	0.40	0.11	18.6	0.47	0.03	5.80	0.30	7	70

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 287

= 0.23 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.56	9.0	0.140

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.56 mi Av.Slope= 16.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.28 mi

Lag = 50.42 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	32.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
PeA	21.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
LcB	16.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.49	0
Gt	13.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0
Mp	12.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
GgB	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.49	0
Weight.Av	100.0 %			----	----	0.00	3.77	~~0.24~~	0.38	0

Land type weighted DTHETA = 0.00 0.22

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
287	0.23	0.50	0.00	~~3.77~~ 5.20	0.38	0.0	50.42

$$\text{Adj } Xksat = 0.22\left[\frac{40-10}{40}+1\right] = 0.41$$

LOSS PARAMETERS FOR SUBBASIN: 287A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	217.600	100.	0.26	0

TOTAL = 217.600 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
38.600	Comm	17.7	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
179.000	AGRI	82.3	WET	90	0	0.50	0.12	Hi	0.09

217.60 = Total Area Avg. = 88 16% 0.420

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.06

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.49

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.
287A	0.340	0.86	0.34	0.10	24.4	0.42	0.06	4.70	0.49	16	51

LOSS PARAMETERS FOR SUBBASIN: 287B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	64.000	100.	0.27	0

TOTAL = 64.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
38.600	Comm	60.3	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
25.400	AGRI	39.7	WET	90	0	0.50	0.12	Hi	0.11

64.000 = Total Area Avg. = 79 54% 0.230

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.21

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

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.
287B	0.100	0.47	0.24	0.07	36.2	0.23	0.21	4.65	0.48	54	21

LOSS PARAMETERS FOR SUBBASIN: 287C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	147.200	100.	0.06	0

TOTAL = 147.200 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
78.000	Comm	53.0	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
69.200	AGRI	47.0	WET	90	0	0.50	0.12	Hi	0.10

147.20 = Total Area Avg. = 82 48% 0.270

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.11

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.
287C	0.230	0.62	0.31	0.07	29.0	0.27	0.15	8.40	0.11	48	29

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 287D

S-GRAPH PARAMETERS

= 0.23 sq.mi

Path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.60	15.0	0.120

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.60 mi Av.Slope= 25.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.30 mi

Lag = 48.86 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Gr	37.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	C
Mr	26.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	C
LcA	20.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	C
GgA	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	C
Weight.Av	100.0 %			----	----	0.00	6.26	~~0.16~~	0.30	C

Land type weighted DTHETA = 0.00 0.15

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
287D	0.23	0.50	0.00	~~6.26~~ 6.0	~~0.30~~	0.0	48.86

$$\text{Adj. Xksat} = 0.15\left[\frac{90-10}{90}+1\right] = 0.28$$

LOSS PARAMETERS FOR SUBBASIN: 287E

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
Mp	128.000	100.	0.25	0

TOTAL = 128.000 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	20	0	0.35	0.05	Low	
20.000	RES.	15.6	NORMAL	50	20	0.12	0.03	Low	0.06
80.000	Comm	62.5	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
28.000	AGRI	21.9	WET	90	0	0.50	0.12	Hi	0.11

128.00 = Total Area Avg. = 65 59% 0.170

PERCENT OF SUBBASIN DRY = 62.0 %
NORMAL = 16.0 %
WET = 22.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

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.
287E	0.200	0.50	0.25	0.05	22.0	0.17	0.26	4.80	0.40	59	18

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 288

S-GRAPH PARAMETERS

= 0.22 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	19.0	0.294

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 16.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.57 mi

Lag = 87.45 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Mp	75.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
LcA	25.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	7.50	~~0.10~~	0.19	0

Land type weighted DTHETA = 0.00 0.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
288	0.22	0.50	0.00	~~7.50~~ 4.90	0.19	0.0	87.45

$$\text{Adj } K_{sat} = 0.25\left(\frac{90-10}{90}+1\right) = \underline{0.47}$$

LOSS PARAMETERS FOR SUBBASIN: 288A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	44.800	100.	0.20	0

TOTAL = 44.800 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
44.800	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.11

44.800 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

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.
288A	0.070	0.45	0.23	0.12	13.3	0.50	0.00	5.30	0.38	0	45

LOSS PARAMETERS FOR SUBBASIN: 288B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	596.200	100.	0.24	0

TOTAL = 596.200 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	20	0	0.35	0.05	Low	
276.600	RES.	46.4	NORMAL	50	20	0.12	0.03	Low	0.05
31.400	Comm	5.3	DRY	10	90	0.06	0.03	Min	0.03
171.200	Golf	28.7	NORMAL	50	0	0.50	0.03	Min	0.03
117.000	AGRI	19.6	WET	90	0	0.50	0.12	Hi	0.10

596.20 = Total Area Avg. = 59 14% 0.300

PERCENT OF SUBBASIN DRY = 5.0 %
NORMAL = 75.0 %
WET = 20.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.20

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.37

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.
288B	0.932	1.44	0.68	0.05	11.8	0.30	0.20	4.90	0.37	14	43

LOSS PARAMETERS FOR SUBBASIN: 289

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	170.900	100.	0.14	0

TOTAL = 170.900 Acres XKSAT = 0.14 %Rock = 0

DTHETA

Dry = 0.39 PSIF = 6.20
Normal = 0.23
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
51.800	RES.	30.3	NORMAL	50	20	0.12	0.03	Low	0.06
38.900	Comm	22.8	DRY	10	90	0.06	0.03	Min	0.03
80.200	Golf	46.9	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

170.90 = Total Area Avg. = 49 27% 0.280

PERCENT OF SUBBASIN DRY = 23.0 %
NORMAL = 77.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.27

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.20

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.
289	0.267	0.80	0.28	0.03	7.5	0.28	0.27	6.20	0.20	27	17

LOSS PARAMETERS FOR SUBBASIN: 289A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	132.000	100.	0.29	0

TOTAL = 132.000 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
92.000	Desert	69.7	DRY	20	0	0.35	0.05	Low	0.05
	RES.		NORMAL	50	20	0.12	0.03	Low	
40.000	Comm	30.3	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

132.00 = Total Area Avg. = 20 27% 0.260

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.32

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.
289A	0.206	0.53	0.26	0.04	15.1	0.26	0.35	4.55	0.32	27	18

LOSS PARAMETERS FOR SUBBASIN: 289B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	186.700	100.	0.11	0

TOTAL = 186.700 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	20	0	0.35	0.05	Low	
105.700	RES.	56.6	NORMAL	50	20	0.12	0.03	Low	0.05
6.700	Comm	3.6	DRY	10	90	0.06	0.03	Min	0.03
74.300	Golf	39.8	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

186.70 = Total Area Avg. = 50 15% 0.270

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. = 0.16

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.
289B	0.292	0.63	0.28	0.03	6.3	0.27	0.18	6.80	0.16	15	16

eec

Project Title Loop 303 White Tanks Project No. 99551 Date

Subject Sub basin Prep. Prepared By MJR Checked By Page

Sub basin 254A

Sub basin is part of FCD model for the RIXanal Over-chute. Sheet not available.

x ksat from EEC GIS = 0.40

Land use: Res., Golf ∴ Veg. Cover 50%

adjusted x ksat = $.4\left[\frac{50-10}{90}+1\right] = 0.58$

PSIF = 3.95

LOSS PARAMETERS FOR SUBBASIN: 254B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	85.600	100.	0.27	0

TOTAL = 85.600 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
85.600	Desert	100.	DRY	20	0	0.35	0.05	Low	0.05
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

85.600 = Total Area Avg. = 20 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. = 0.30

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.
254B	0.134	0.30	0.15	0.05	30.0	0.35	0.35	4.65	0.30	0	12

eec

Project Title LOOP 303 Master Drainage Study Project No. 99551 Date

Subject Sub Basins Prepared By MJC Checked By Page

255A

Sub Basin Hydrograph and L&S parameters are not available. Refer to ECDMC Drainage Report for the RID Canal over-chute for MCUHP input.

PSIF

3.88

LOSS PARAMETERS FOR SUBBASIN: 256

ıil Survey Used Aguila/Carefree

:SAT

ıp Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
IP	275.200	100.	0.12	0

)TAL = 275.200 Acres XKSAT = 0.12 %Rock = 0

)THETA

:y = 0.37 PSIF = 6.60
)rmal = 0.19
:t = 0.00

ND USE

AREA acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
14.000	RES.	16.0	NORMAL	50	20	0.12	0.03	Low	0.06
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
31	AGRI	84.0	WET	90	0	0.50	0.12	Hi	0.09

75.20 = Total Area Avg. = 85 3% 0.440

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

JBBASIN DTHETA WEIGHTED BY LAND USE = 0.03

JBBASIN XKSAT ADJUSTED FOR VEG. = 0.22

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

INPUT VALUES FOR MCUHP2 PROGRAM

JBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
56	0.430	1.06	0.42	0.11	17.9	0.44	0.03	6.60	0.22	3	65

38)*60)

DTHETA condit
Satur.
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SAT Rockou
r) crops
09 C
51 C
39 C
09 C
39 C
11 C
39 0
43 C
00 0
24 0

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 257

S-GRAPH PARAMETERS

= 0.34 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.21	14.0	0.356

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.21 mi Av.Slope= 11.6 ft/mi

Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.61 mi

Lag = 96.39 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Mr	45.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	C
Lb	11.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	C
AbA	11.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Mp	9.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	C
Cp	9.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	C
Mo	6.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	C
Pa	5.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Le	3.0 %	Laveen	Loam	0.34	0.23	0.00	----	0.23	0.43	C
Vh	1.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	C
Weight.Av	100.0 %			----	----	0.00	5.82	~~0.18~~	0.24	C

Land type weighted DTHETA = 0.00 0.13

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
257	0.34	0.50	0.00	~~5.82~~ 6.40	~~0.24~~	0.0	96.39

Adj. XKsat = 0.13 ((90-10)/90 + 1) = 0.25

KMH

12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 258

Area = 0.38 sq.mi

S-GRAPH PARAMETERS

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	28.0	0.198

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 27.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.46 mi

Lag = 35.12 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET. condi
DRL	85 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
AGR	15 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.37	0.0	30.5	1.23	0.061	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Vh	20.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.30	
Br	18.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	
GxB	15.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
PeB	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Pa	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	9.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Aa	5.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.36	
RpE	4.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mo	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	
Ao	2.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	
Mp	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	
Weight.Av	100.0 %			0.35	----	0.00	3.99	~~0.53~~	0.58	

Land type weighted DTHETA = 0.29 0.34

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
258	0.38	0.37	0.29	~~3.99~~ 4.28	~~0.58~~	0.0	35.12

Adj. Xksat = $0.34\left(\frac{30.5-10}{90}+1\right) = 0.42$

KMH
12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 258A

S-GRAPH PARAMETERS

Area = 0.12 sq.mi

Hpath (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.71	17.0	0.145

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.71 mi Av.Slope= 23.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.43 mi

Lag = 25.00 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Pa	43.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
RpE	27.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	16.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
RaB	10.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Mo	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	0
Cp	2.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0
Weight.Av	100.0 %			0.35	----	----	4.22	~~0.39~~	0.39	0

Land type weighted DTHETA = 0.35 0.40

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC G15

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
258A	0.12	0.35	0.35	~~4.22~~ 3.95	~~0.39~~	0.0	25.00

Adj. XKsat = 0.40 ((20-10)/90 + 1) = 0.44

KMH
12-14-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 259

S-GRAPH PARAMETERS

= 0.2 sq.mi

Length (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	12.0	0.131

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.59 mi Av.Slope= 20.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.29 mi

Lag = 20.90 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Br	29.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	C
Vh	24.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.18	C
GgA	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	C
RpE	11.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Ge	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	C
Bt	4.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.50	0.50	C
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C
Aa	3.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.32	C
Weight.Av	100.0 %			0.35	----	----	3.93	~~0.56~~	0.59	C

Land type weighted DTHETA = 0.35

0.36

per FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
259	0.20	0.35	0.35	~~3.93~~	0.59	0.0	20.90

4.15

$$\text{Adj XKsat} = 0.36 * \left(\frac{70-10}{90} + 1\right) = 0.40$$

KMH

1-4-01

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 260

S-GRAPH PARAMETERS

= 0.5 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.30	59.0	0.193

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.30 mi Av.Slope= 45.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.62 mi

Lag = 29.63 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	80 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	20 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.30	4.0	26.0	1.18	0.046	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Bs	34.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
AKB	20.0 %	Antho	Sandy Loam	0.32	0.22	0.00	----	0.33	0.33	
Ma	18.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Cb	10.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.32	
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ae	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
Lb	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.32	
AdA	1.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Weight.Av	100.0 %			0.34	0.25	----	4.13	~~0.47~~	0.49	

Land type weighted DTHETA = 0.33 0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
260	0.50	0.30	0.33	~~4.13~~ 4.00	0.49	4.0	29.63

Adj. xksat = 0.39 $\left(\frac{26-10}{90}+1\right)$ = 0.46

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 261

S-GRAPH PARAMETERS

Ar[illegible] = 0.41 sq.mi

[illegible]th [illegible] (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	51.0	0.193

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 41.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.74 mi

Lag = 82.71 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou: crops %
AbA	31.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Lb	26.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0.
Ma	20.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Mo	12.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Ae	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	0.
GgA	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Weight.Av	100.0 %			----	----	0.00	3.87	~~0.32~~	0.40	0.

Land type weighted DTHETA = 0.00 0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD-GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
261	0.41	0.50	0.00	~~3.87~~ 4.00	0.40	0.0	82.71

Adj. xksat = 0.39 $\left(\frac{90-10}{90}+1\right)$ = 0.74

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 262

= 1.03 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	55.0	0.228

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 38.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 86.53 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Lb	70.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
Ma	14.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Mo	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	
AbA	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Pa	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	
Es	2.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Va	1.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Ge	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.68	~~0.28~~	0.46	

Land type weighted DTHETA = 0.00 0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
262	1.03	0.50	0.00	~~3.68~~ 4.00	0.46	0.0	86.53

Adj. xksat = $0.39\left(\frac{90-10}{90}+1\right) = \underline{0.74}$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 263

= 0.5 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	35.0	0.208

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 30.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.58 mi

Lag = 77.17 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Lb	34.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
Es	22.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	17.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Va	14.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Ge	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Weight.Av	100.0 %			----	----	0.00	3.78	~~0.30~~	0.47	

Land type weighted DTHETA = 0.00 0.33

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
263	0.50	0.50	0.00	~~3.78~~ 4.32	0.47	0.0	77.17

Adjust Xksat = 0.33 $\left(\frac{90-10}{90}+1\right)$ = 0.62

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 264

= 0.5 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.09	37.0	0.187

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.09 mi Av.Slope= 33.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.55 mi

Lag = 72.57 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ge	71.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Lb	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0
Es	6.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Ma	4.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Va	3.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
AbA	3.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
LcA	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.80	~~0.31~~ 0.29	0.52	0

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
264	0.50	0.50	0.00	~~3.80~~ 4.58	0.52	0.0	72.57

$$Adjust\ Ksat = 0.29\left(\frac{90-10}{90}+1\right) = 0.55$$

LOSS PARAMETERS FOR SUBBASIN: 265

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	160.460	100.	0.30	0

TOTAL = 160.500 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
160.500	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.09

160.50 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.57

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.
265	0.251	1.18	0.77	0.12	18.6	0.50	0.00	4.50	0.57	0	96

LOSS PARAMETERS FOR SUBBASIN: 265A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	588.800	100.	0.26	0

TOTAL = 588.800 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	20	0	0.35	0.05	Low	
47.500	RES.	8.1	NORMAL	50	20	0.12	0.03	Low	0.06
	Comm		DRY	10	90	0.06	0.03	Min	
30.500	Golf	5.2	NORMAL	50	0	0.50	0.03	Min	0.03
510.800	AGRI	86.8	WET	90	0	0.50	0.12	Hi	0.08

588.80 = Total Area Avg. = 85 2% 0.470

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.03

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

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.
265A	0.920	1.24	0.43	0.11	21.0	0.47	0.03	4.70	0.48	2	69

LOSS PARAMETERS FOR SUBBASIN: 266

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	544.000	100.	0.25	0

TOTAL = 544.000 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	20	0	0.35	0.05	Low	
389.700	RES.	71.6	NORMAL	50	20	0.12	0.03	Low	0.04
	Comm		DRY	10	90	0.06	0.03	Min	
154.300	Golf	28.4	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

544.00 = Total Area Avg. = 50 14% 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. = 0.36

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.
266	0.850	1.85	1.10	0.03	14.1	0.23	0.25	4.80	0.36	14	34

LOSS PARAMETERS FOR SUBBASIN: 267

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	764.400	100.	0.18	0

TOTAL = 764.400 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	20	0	0.35	0.05	Low	
540.110	RES.	70.7	NORMAL	50	20	0.12	0.03	Low	0.04
	Comm		DRY	10	90	0.06	0.03	Min	
224.290	Golf	29.3	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

764.40 = Total Area Avg. = 50 14% 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. = 0.26

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.
267	1.194	1.94	0.85	0.03	12.4	0.23	0.25	5.60	0.26	14	32

LOSS PARAMETERS FOR SUBBASIN: 268

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	155.000	100.	0.25	0

TOTAL = 155.000 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	20	0	0.35	0.05	Low	
133.400	RES.	86.1	NORMAL	50	20	0.12	0.03	Low	0.05
21.600	Comm	13.9	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

155.00 = Total Area Avg. = 49 30% 0.110

PERCENT OF SUBBASIN DRY = 14.0 %
NORMAL = 86.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.36

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.
268	0.242	0.53	0.27	0.03	17.0	0.11	0.26	4.80	0.36	30	12

LOSS PARAMETERS FOR SUBBASIN: 269

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	147.100	100.	0.27	0

TOTAL = 147.100 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	20	0	0.35	0.05	Low	
125.100	RES.	85.0	NORMAL	50	20	0.12	0.03	Low	0.05
22.000	Comm	15.0	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

147.10 = Total Area Avg. = 49 30% 0.110

PERCENT OF SUBBASIN DRY = 15.0 %
NORMAL = 85.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

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.
269	0.230	0.83	0.42	0.03	14.5	0.11	0.26	4.65	0.39	30	17

LOSS PARAMETERS FOR SUBBASIN: 269B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	170.000	100.	0.40	0

TOTAL = 170.000 Acres XKSAT = 0.40 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.95
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	Desert	23.5	DRY	20	0	0.35	0.05	Low	0.06
130.000	RES.	76.5	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

170.00 = Total Area Avg. = 42 15% 0.170

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.27

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.54

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.
269B	0.266	0.79	0.42	0.04	29.1	0.17	0.27	3.95	0.54	15	20

eec

Project Title Loop 303 White Tanks update Project No. 99551 Date 3/10/01

Subject Sub basin Prep Prepared By MJL Checked By _____ Page _____

Subbasin 270

HEC-1 data Reviewed by FCD for RI canal over chute design.

PSIF

3.58

eec

Project Title Loop 303 White Tanks Project No. 99551 Date

Subject Sub basin Prep. Prepared By MJC Checked By Page

Sub basin 2711

Part of FCD Model for RID canal over-chute.
Data modified by FCD.

PSIF
4.3

eec

Project Title LOOP 303 White Tanks Project No. 99551 Date 3/10/01

Subject Sub basin Prep sheets Prepared By MJL Checked By _____ Page _____

Sub basin 2712

Part of FCD Model of RID canal Over-chute.

Data modified by FCD.

PS1F

4.30

LOSS PARAMETERS FOR SUBBASIN: 271A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	154.700	100.	0.25	0

TOTAL = 154.700 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	20	0	0.35	0.05	Low	
100.900	RES.	65.2	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
800	AGRI	34.8	WET	90	0	0.50	0.12	Hi	0.11

154.70 = Total Area Avg. = 66 13% 0.250

PERCENT OF SUBBASIN DRY = 0.0 %
NORMAL = 65.0 %
WET = 35.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.16

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

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.
271A	0.242	0.91	0.49	0.06	8.8	0.25	0.16	4.80	0.41	13	43

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 271C

= 0.18 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.65	16.0	0.131

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.65 mi Av.Slope= 24.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.29 mi

Lag = 20.85 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Lb	42.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	0.
RpE	18.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
GxB	16.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
GgA	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0.
PeB	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
RaB	5.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Weight.Av	100.0 %			0.35	----	----	3.90	~~0.33~~	0.34	0.

Land type weighted DTHETA = 0.35 0.32

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS MJR

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
271C	0.18	0.35	0.35	~~3.90~~	~~0.34~~	0.0	20.85

~~4.32~~
4.15

$$Adj\ xksat = .32\left[\frac{80-10}{90}+1\right] = 0.36$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 272

= 0.2 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	9.0	0.151

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.59 mi Av.Slope= 15.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.29 mi

Lag = 22.08 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	27.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0.
Vh	21.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.18	0.
Br	21.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	0.
RpE	9.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
TD	8.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.33	0.
Ge	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	0
GxB	3.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Lb	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	0
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			0.35	----	----	3.88	~~0.58~~	0.62	0

Land type weighted DTHETA = 0.35 0.30

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
272	0.20	0.35	0.35	~~3.88~~	~~0.62~~	0.0	22.08

~~4.50~~
4.30

$$Adj.\ Xksat = .3\left[\frac{20-10}{90}+1\right] = 0.33$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 273

= 0.65 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	68.0	0.205

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 47.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 33.24 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	90 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.33	2.0	23.0	1.14	0.048	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ma	34.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C
Cp	21.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	C
Bs	14.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	C
Va	11.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	C
AbA	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
LcA	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.29	C
TrB	3.0 %	Tremant	Sandy Clay Loam	0.31	0.21	0.00	----	0.27	0.31	C
Lb	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.31	C
TB	1.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	1.37	C
Mo	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.07	C
GgA	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.29	C
Weight.Av	100.0 %			0.35	0.25	----	4.25	~~0.39~~	0.40	C

Land type weighted DTHETA = 0.34 0.38

INPUT VALUES FOR < MCUHP 2 >PROGRAM FLD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
273	0.65	0.33	0.34	~~4.25~~ 4.05	0.40	2.0	33.24

Adj: Xksat = 0.38 $\left(\frac{25-10}{40}+1\right)$ = 0.43

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 274

= 0.66 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.86	74.0	0.295

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.86 mi Av.Slope= 39.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 49.0 % of (L)= 0.91 mi

Lag = 104.88 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
Ma	42.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Ae	14.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.41	0.41	
Es	12.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	7.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Va	6.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Lb	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Mo	3.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	
Cb	3.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	2.12	
TD	2.0 %	Torri-	Loamy Sand	0.35	0.30	0.00	----	1.20	2.27	
Te	1.0 %	Tremant	Sandy Clay Loam	0.26	0.16	0.00	----	0.09	0.17	
Cp	1.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	4.29	~~0.40~~	0.50	

Land type weighted DTHETA = 0.00 0.37

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
274	0.66	0.50	0.00	~~4.29~~ 4.10	0.50	0.0	104.88

$$Adj.\ XKsat = 0.37\left(\frac{90-10}{90}+1\right) = 0.70$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 275

S-GRAPH PARAMETERS

= 0.11 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.50	21.0	0.077

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.50 mi Av.Slope= 42.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.20 mi

Lag = 35.41 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Va	48.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0.
Es	24.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Mo	7.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
GgA	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Aa	6.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Ma	4.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Weight.Av	100.0 %			----	----	0.00	3.84	~~0.31~~	0.40	0.

Land type weighted DTHETA = 0.00 0.35

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
275	0.11	0.50	0.00	~~3.84~~ 4.20	0.40	0.0	35.41

$$\text{Adj. XKsat} = 0.35\left(\frac{40-10}{40}+1\right) = \underline{0.66}$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 276

= 0.26 sq.mi

S-GRAPH PARAMETERS

F... path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.06	41.0	0.170

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.06 mi Av.Slope= 38.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.53 mi

Lag = 69.30 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET: condi:
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Ma	43.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
GgA	16.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	15.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Ge	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	
Aa	9.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
Va	4.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Weight.Av	100.0 %			----	----	0.00	4.08	~~0.36~~	0.45	

Land type weighted DTHETA = 0.00 0.32

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
276	0.26	0.50	0.00	~~4.08~~ 4.38	0.45	0.0	69.30

Adj. X K sat = $0.32\left(\frac{90-10}{90}+1\right) = \underline{0.60}$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 277

S-GRAPH PARAMETERS

[illegible] = 0.91 sq.mi

[illegible]th in[illegible]i)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.60	58.0	0.266

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.60 mi Av.Slope= 36.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.80 mi

Lag = 77.55 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	70 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	20 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.43	2.0	72.0	1.69	0.097	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Lb	25.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.46	0
LcA	22.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.42	0
Es	13.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.42	0
Aa	13.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.49	0
Ge	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.49	0
Mo	6.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.10	0
Ma	4.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Tu	3.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.41	0
Va	2.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Weight.Av	100.0 %			0.34	0.24	0.00	3.60	~~0.27~~	0.42	0

Land type weighted DTHETA = 0.09 0.31

FLD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
277	0.91	0.43	0.09	~~3.60~~ 4.44	0.42	2.0	77.55

Adjusted xksat = $0.31\left[\frac{72-10}{90}+1\right] = \underline{0.52}$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 278

S-GRAPH PARAMETERS

= 1 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.92	39.0	0.426

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.92 mi Av.Slope= 20.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.96 mi

Lag = 92.27 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	60 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
ORL	30 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.42	2.0	65.0	1.61	0.090	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Lb	39.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.44	
LcA	31.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.40	
Mp	8.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.08	
GgA	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.40	
AbA	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Va	3.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	
Ge	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.47	
PeA	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Pa	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			0.34	0.24	0.00	3.55	~~0.26~~	0.39	

Land type weighted DTHETA = 0.13 0.32

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FLD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
278	1.00	0.42	0.13	~~3.55~~ 4.38	0.39	2.0	92.27

Adj. xksat = 0.32 ((65-10/50 + 1) = 0.52

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 279

S-GRAPH PARAMETERS

Area = 0.05 sq.mi

Length (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.27	10.0	0.044

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.27 mi Av.Slope= 37.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.12 mi

Lag = 23.74 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHET. condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
AbA	61.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
LcA	34.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Es	5.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.96	~~0.34~~	0.42	

Land type weighted DTHETA = 0.00 0.33

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
279	0.05	0.50	0.00	~~3.96~~ 4.32	0.42	0.0	23.74

$$\text{Adj } xksat = 0.33\left[\frac{90-10}{90}+1\right] = 0.62$$

LOSS PARAMETERS FOR SUBBASIN: 279A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
Mp	44.500	100.	0.26	0

TOTAL = 44.500 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
44.500	Comm	100.	NORMAL	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

44.500 = Total Area Avg. = 10 90% 0.060

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.25

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 90
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 90

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
279A	0.070	0.34	0.17	0.03	25.0	0.06	0.25	4.70	0.26	90	8

LOSS PARAMETERS FOR SUBBASIN: 279B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	19.200	100.	0.46	0

TOTAL = 19.200 Acres XKSAT = 0.46 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.74
Normal = 0.26
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
19.200	Comm	100.	NORMAL	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

19.200 = Total Area Avg. = 10 90% 0.060

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 90
ROCK OUTCROP @ 100 % effective = 0
% EFFECTIVE IMP. = 90

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
279B	0.030	0.25	0.13	0.03	12.0	0.06	0.26	3.74	0.46	90	7

LOSS PARAMETERS FOR SUBBASIN: 279C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	32.000	100.	0.32	0

TOTAL = 32.000 Acres XKSAT = 0.32 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 4.40
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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
32.000	Comm	100.	NORMAL	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

32.000 = Total Area Avg. = 10 90% 0.060

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 = 90
ROCK OUTCROP @ 100 % effective = 0

% EFFECTIVE IMP. = 90

INPUT VALUES FOR MCUHP2 PROGRAM

SUBBASIN	Area sq. mi.	Length mi.	Lca	Kn	Slope ft/mi	IA in.	DTHETA	PSIF	XKSAT adj.	RTIMP %	Lag min.
279C	0.050	0.25	0.13	0.03	28.0	0.06	0.25	4.40	0.32	90	6

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 279D

S-GRAPH PARAMETERS

= 0.02 sq.mi

Length inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.20	6.0	0.037

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.20 mi Av.Slope= 30.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.10 mi

Lag = 20.48 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Lb	60.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0.
LcA	40.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	3.56	0.26	~~0.50~~ .36	0.

Land type weighted DTHETA = 0.00

per FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
279D	0.02	0.50	0.00	~~3.56~~ 4.15	~~0.50~~	0.0	20.48

MJR

$$\text{Adj } xksat = .36\left[\frac{90-10}{90}+1\right] = 0.68$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 280

S-GRAPH PARAMETERS

= 0.61 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.45	36.0	0.291

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.45 mi Av.Slope= 24.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.70 mi

Lag = 94.19 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	24.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ge	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Es	16.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0
LcA	13.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Lb	11.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Va	5.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Mp	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			----	----	0.00	3.62	~~0.27~~	0.46	0

Land type weighted DTHETA = 0.00 0.28

FCD: GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
280	0.61	0.50	0.00	~~3.62~~ 4.66	0.46	0.0	94.19

$$\text{Adj. } xk_{sat} = 0.28\left(\frac{40-10}{40}+1\right) = \underline{0.53}$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 280A

= 0.06 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.44	1.0	0.292

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.44 mi Av.Slope= 2.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.15 mi

Lag = 53.16 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) n

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Es	28.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ge	23.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
GgA	19.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
AbA	18.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
LcA	12.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	3.68	0.28	0.48	0.

Land type weighted DTHETA = 0.00 0.28

PER FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
280A	0.06	0.50	0.00	~~3.68~~ 4.66	0.48	0.0	53.16

ADJ XKSAT = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

LOSS PARAMETERS FOR SUBBASIN: 281

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	544.000	100.	0.25	0

TOTAL = 544.000 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	20	0	0.35	0.05	Low	
20.700	RES.	3.8	NORMAL	50	20	0.12	0.03	Low	0.06
	Comm		DRY	10	90	0.06	0.03	Min	
19.600	Golf	3.6	NORMAL	50	0	0.50	0.03	Min	0.03
503.700	AGRI	92.6	WET	90	0	0.50	0.12	Hi	0.08

544.00 = Total Area Avg. = 87 1% 0.490

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.02

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

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.
281	0.850	1.27	0.61	0.11	18.9	0.49	0.02	4.80	0.46	1	85

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 282

= 0.12 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	I1 (mi^3/ft)^.5
0.45	11.0	0.091

I=SUM(I1)=SUM((Li^3/Hi)^.5)

L = 0.45 mi Av.Slope= 24.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 25.0 % of (L)= 0.11 mi

Lag = 30.30 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET. condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
LcA	42.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	23.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Le	19.0 %	Laveen	Loam	0.34	0.23	0.00	----	0.23	0.43	
PeA	11.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Lb	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.58	~~0.27~~	0.46	

Land type weighted DTHETA = 0.00 0.21

INPUT VALUES FOR < MOUHP 2 >PROGRAM

FLD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
282	0.12	0.50	0.00	~~3.58~~ 5.30	0.46	0.0	30.30

$$Adj.\ Xksat = 0.21\left(\frac{90-10}{90}+1\right) = 0.40$$

LOSS PARAMETERS FOR SUBBASIN: 283

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	87.400	100.	0.25	0

TOTAL = 87.400 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
87.400	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.10

87.400 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

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.
283	0.137	0.80	0.30	0.12	11.2	0.50	0.00	4.80	0.47	0	64

LOSS PARAMETERS FOR SUBBASIN: 284

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	216.000	100.	0.25	0

TOTAL = 216.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
216.000	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.09

216.00 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

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.
284	0.338	0.80	0.40	0.12	17.5	0.50	0.00	4.80	0.47	0	65

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 285

S-GRAPH PARAMETERS

= 0.04 sq.mi

r.c. path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.29	8.0	0.055

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.29 mi Av.Slope= 27.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.15 mi

Lag = 27.60 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	100.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	0

Land type weighted DTHETA = 0.00

No Change MJR

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
285	0.04	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	27.60

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 285A

S-GRAPH PARAMETERS

= 0.06 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.27	4.0	0.070

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.27 mi Av.Slope= 14.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.14 mi

Lag = 29.41 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET: condi-
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	100.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	(

Land type weighted DTHETA = 0.00

No change

MJK

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
285A	0.06	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	29.41

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 2858

S-GRAPH PARAMETERS

= 0.06 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.27	5.0	0.063

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.27 mi Av.Slope= 18.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.14 mi

Lag = 28.19 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops.
for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	100.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	(

Land type weighted DTHETA = 0.00

No Clerge

THR

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
2858	0.06	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	28.19

LOSS PARAMETERS FOR SUBBASIN: 286

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	448.000	100.	0.16	0

TOTAL = 448.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
33.000	Comm	7.4	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
415.000	AGRI	92.6	WET	90	0	0.50	0.12	Hi	0.08

448.00 = Total Area Avg. = 89 7% 0.470

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.03

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.30

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.
286	0.700	1.18	0.40	0.11	18.6	0.47	0.03	5.80	0.30	7	70

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 287

= 0.23 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.56	9.0	0.140

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.56 mi Av.Slope= 16.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.28 mi

Lag = 50.42 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	32.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
PeA	21.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
LcB	16.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.49	0
Gt	13.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0
Mp	12.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
GgB	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.49	0
Weight.Av	100.0 %			----	----	0.00	3.77	~~0.24~~	0.38	0

Land type weighted DTHETA = 0.00 0.22

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
287	0.23	0.50	0.00	~~3.77~~ 5.20	0.38	0.0	50.42

$$\text{Adj } Xksat = 0.22\left[\frac{40-10}{40}+1\right] = 0.41$$

LOSS PARAMETERS FOR SUBBASIN: 287A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	217.600	100.	0.26	0

TOTAL = 217.600 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
38.600	Comm	17.7	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
179.000	AGRI	82.3	WET	90	0	0.50	0.12	Hi	0.09

217.60 = Total Area Avg. = 88 16% 0.420

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.06

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.49

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.
287A	0.340	0.86	0.34	0.10	24.4	0.42	0.06	4.70	0.49	16	51

LOSS PARAMETERS FOR SUBBASIN: 287B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	64.000	100.	0.27	0

TOTAL = 64.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
38.600	Comm	60.3	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
25.400	AGRI	39.7	WET	90	0	0.50	0.12	Hi	0.11

64.000 = Total Area Avg. = 79 54% 0.230

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.21

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.48

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.
287B	0.100	0.47	0.24	0.07	36.2	0.23	0.21	4.65	0.48	54	21

LOSS PARAMETERS FOR SUBBASIN: 287C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	147.200	100.	0.06	0

TOTAL = 147.200 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
78.000	Comm	53.0	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
69.200	AGRI	47.0	WET	90	0	0.50	0.12	Hi	0.10

147.20 = Total Area Avg. = 82 48% 0.270

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.11

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.
287C	0.230	0.62	0.31	0.07	29.0	0.27	0.15	8.40	0.11	48	29

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 287D

S-GRAPH PARAMETERS

= 0.23 sq.mi

Fl[illegible]ath inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.60	15.0	0.120

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.60 mi Av.Slope= 25.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.30 mi

Lag = 48.86 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Gr	37.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	C
Mr	26.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	C
LcA	20.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	C
GgA	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	C
Weight.Av	100.0 %			----	----	0.00	6.26	~~0.16~~	0.30	C

Land type weighted DTHETA = 0.00 0.15

FCD GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
287D	0.23	0.50	0.00	~~6.26~~	~~0.30~~	0.0	48.86

6.0

$$\text{Adj. Xksat} = 0.15\left[\frac{90-10}{90}+1\right] = 0.28$$

LOSS PARAMETERS FOR SUBBASIN: 287E

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
Mp	128.000	100.	0.25	0

TOTAL = 128.000 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	20	0	0.35	0.05	Low	
20.000	RES.	15.6	NORMAL	50	20	0.12	0.03	Low	0.06
80.000	Comm	62.5	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
28.000	AGRI	21.9	WET	90	0	0.50	0.12	Hi	0.11

128.00 = Total Area Avg. = 65 59% 0.170

PERCENT OF SUBBASIN DRY = 62.0 %
NORMAL = 16.0 %
WET = 22.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.40

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.
287E	0.200	0.50	0.25	0.05	22.0	0.17	0.26	4.80	0.40	59	18

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 288

Area = 0.22 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	19.0	0.294

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 16.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.57 mi

Lag = 87.45 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Mp	75.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
LcA	25.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	7.50	~~0.10~~	0.19	0

Land type weighted DTHETA = 0.00 6.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCD GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
288	0.22	0.50	0.00	~~7.50~~ 4.90	0.19	0.0	87.45

$$\text{Adj } X\,K_{sat} = 0.25\left(\frac{90-10}{90}+1\right) = \underline{0.47}$$

LOSS PARAMETERS FOR SUBBASIN: 288A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	44.800	100.	0.20	0

TOTAL = 44.800 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
44.800	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.11

44.800 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.38

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.
288A	0.070	0.45	0.23	0.12	13.3	0.50	0.00	5.30	0.38	0	45

LOSS PARAMETERS FOR SUBBASIN: 288B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	596.200	100.	0.24	0

TOTAL = 596.200 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	20	0	0.35	0.05	Low	
276.600	RES.	46.4	NORMAL	50	20	0.12	0.03	Low	0.05
31.400	Comm	5.3	DRY	10	90	0.06	0.03	Min	0.03
171.200	Golf	28.7	NORMAL	50	0	0.50	0.03	Min	0.03
117.000	AGRI	19.6	WET	90	0	0.50	0.12	Hi	0.10

596.20 = Total Area Avg. = 59 14% 0.300

PERCENT OF SUBBASIN DRY = 5.0 %
NORMAL = 75.0 %
WET = 20.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.20

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.37

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.
288B	0.932	1.44	0.68	0.05	11.8	0.30	0.20	4.90	0.37	14	43

LOSS PARAMETERS FOR SUBBASIN: 289

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	170.900	100.	0.14	0

TOTAL = 170.900 Acres XKSAT = 0.14 %Rock = 0

DTHETA

Dry = 0.39 PSIF = 6.20
Normal = 0.23
Wet = 0.00

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
51.800	RES.	30.3	NORMAL	50	20	0.12	0.03	Low	0.06
38.900	Comm	22.8	DRY	10	90	0.06	0.03	Min	0.03
80.200	Golf	46.9	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

170.90 = Total Area Avg. = 49 27% 0.280

PERCENT OF SUBBASIN DRY = 23.0 %
NORMAL = 77.0 %
WET = 0.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.27

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.20

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.
289	0.267	0.80	0.28	0.03	7.5	0.28	0.27	6.20	0.20	27	17

LOSS PARAMETERS FOR SUBBASIN: 289A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	132.000	100.	0.29	0

TOTAL = 132.000 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
92.000	Desert	69.7	DRY	20	0	0.35	0.05	Low	0.05
	RES.		NORMAL	50	20	0.12	0.03	Low	
40.000	Comm	30.3	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

132.00 = Total Area Avg. = 20 27% 0.260

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.35

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.32

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.
289A	0.206	0.53	0.26	0.04	15.1	0.26	0.35	4.55	0.32	27	18

LOSS PARAMETERS FOR SUBBASIN: 289B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	186.700	100.	0.11	0

TOTAL = 186.700 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	20	0	0.35	0.05	Low	
105.700	RES.	56.6	NORMAL	50	20	0.12	0.03	Low	0.05
6.700	Comm	3.6	DRY	10	90	0.06	0.03	Min	0.03
74.300	Golf	39.8	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

186.70 = Total Area Avg. = 50 15% 0.270

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. = 0.16

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.
289B	0.292	0.63	0.28	0.03	6.3	0.27	0.18	6.80	0.16	15	16

LOSS PARAMETERS FOR SUBBASIN: 289C

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	190.000	100.	0.22	0

TOTAL = 190.000 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
188.000	Desert	98.9	DRY	20	0	0.35	0.05	Low	0.05
	RES.		NORMAL	50	20	0.12	0.03	Low	
2.000	Comm	1.1	DRY	10	90	0.06	0.03	Min	0.04
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

190.00 = Total Area Avg. = 20 1% 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. = 0.24

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.
289C	0.297	0.63	0.28	0.05	12.7	0.35	0.36	5.10	0.24	1	23

LOSS PARAMETERS FOR SUBBASIN: 289D

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	163.000	100.	0.25	0

TOTAL = 163.000 Acres XKSAT = 0.25 %Rock = 0

DTHETA

Dry = 0.35
Normal = 0.25
Wet = 0.00

PSIF = ~~4.80~~ 4.79

LAND USE

AREA Acres	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
122.800	RES.	75.3	NORMAL	50	20	0.12	0.03	Low	0.05
19.100	Comm	11.7	DRY	10	90	0.06	0.03	Min	0.03
21.100	Golf	12.9	NORMAL	50	0	0.50	0.03	Min	0.03
	AGRI		WET	90	0	0.50	0.12	Hi	

163.00 = Total Area Avg. = 49 26% 0.160

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. = 0.36

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.
289D	0.255	0.94	0.57	0.03	11.7	0.16	0.26	4.80	0.36	26	21

LOSS PARAMETERS FOR SUBBASIN: 290

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	352.000	100.	0.29	0

TOTAL = 352.000 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	20	0	0.35	0.05	Low	
190.000	RES.	54.0	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
162.000	AGRI	46.0	WET	90	0	0.50	0.12	Hi	0.09

352.00 = Total Area Avg. = 71 11% 0.290

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.14

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.49

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.
290	0.550	1.33	0.45	0.07	18.8	0.29	0.14	4.55	0.49	11	48

LOSS PARAMETERS FOR SUBBASIN: 291

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	634.000	100.	0.28	0

TOTAL = 634.000 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	20	0	0.35	0.05	Low	
634.000	RES.	100.	NORMAL	50	20	0.12	0.03	Low	0.04
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

634.00 = Total Area Avg. = 50 20% 0.120

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 = 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.
291	0.991	1.06	0.57	0.03	24.5	0.12	0.25	4.60	0.40	20	19

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 292

S-GRAPH PARAMETERS

= 0.96 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.36	56.0	0.212

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.36 mi Av.Slope= 41.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.68 mi

Lag = 37.59 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	55 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	30 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
AGR	15 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.30	6.0	39.5	1.33	0.055	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko. crops
LcA	32.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.33	
PeA	18.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Cp	13.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
GgA	11.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.33	
Aa	8.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.39	
TrB	7.0 %	Tremant	Sandy Clay Loam	0.31	0.21	0.00	----	0.27	0.36	
Lb	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.36	
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
CV	1.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.34	0.34	
Weight.Av	100.0 %			0.35	0.25	0.00	3.78	0.30	0.36	

Land type weighted DTHETA = 0.27 0.29

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
292	0.96	0.30	0.27	~~3.78~~ 4.58	0.36	6.0	37.59

Adj. XKsat = $0.29\left(\frac{39.5-10}{90}+1\right) = 0.39$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 293

S-GRAPH PARAMETERS

= 0.77 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.94	37.0	0.150

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.94 mi Av.Slope= 39.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.47 mi

Lag = 52.80 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	75 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	15 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.44	2.0	75.5	1.73	0.101	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	22.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.43	C
Va	16.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	C
AbA	15.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Mo	9.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.10	C
Ma	8.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C
Aa	8.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.50	C
Bs	7.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	C
Ge	5.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.50	C
Mr	4.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	C
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	C
GgA	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.43	C
Es	1.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.43	C
Cp	1.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	C
Weight.Av	100.0 %			0.34	0.24	0.00	3.74	0.29	0.37	C

Land type weighted DTHETA = 0.07 0.29 FOSMC GE

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
293	0.77	0.44	0.07	~~3.74~~ 4.58	0.37	2.0	52.80

Adj xksat = $0.29\left(\frac{75.5-10}{90}+1\right) = 0.50$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 293A

S-GRAPH PARAMETERS

= 0.07 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.38	4.0	0.117

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.38 mi Av.Slope= 10.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.19 mi

Lag = 40.70 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	57.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
LcA	43.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	0

Land type weighted DTHETA = 0.00

0.26 FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
293A	0.07	0.50	0.00	~~3.50~~ 4.82	0.47	0.0	40.70

$$\text{Adj XKSAT} = 0.26\left(\frac{90-10}{90}+1\right) = 0.49$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 294

. = 0.18 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.71	13.0	0.166

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.71 mi Av.Slope= 18.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.25 mi

Lag = 21.44 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	61.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.28	(
Es	14.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.28	(
PeA	7.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
Gt	7.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.16	(
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Mp	2.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	(
Lb	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	(
Weight.Av	100.0 %			0.35	----	----	3.54	0.26	0.28	(

Land type weighted DTHETA = 0.35 0.33

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
294	0.18	0.35	0.35	~~3.54~~ 4.32	0.28	0.0	21.44

ADJ XKSAT = $0.33\left(\frac{20-10}{90}+1\right) = 0.37$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 294A

S-GRAPH PARAMETERS

= 0.26 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.68	11.0	0.169

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.68 mi Av.Slope= 16.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.34 mi

Lag = 24.32 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Lb	51.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	C
GgA	24.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	C
LcA	19.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.28	C
AbA	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
Mp	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	C
Weight.Av	100.0 %			0.35	----	----	3.58	0.27	0.29	C

Land type weighted DTHETA = 0.35 0.25 FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
294A	0.26	0.35	0.35	~~3.58~~ 4.90	0.29	0.0	24.32

ADJ XKSAT = $0.25\left(\frac{20-10}{90}+1\right) = 0.28$

LOSS PARAMETERS FOR SUBBASIN: 295

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
ZZ	0.310	100.	0.22	0

TOTAL = 0.310 Sq.Miles XKSAT = 0.22 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.232	Desert	74.8	DRY	20	0	0.35	0.05	Low	0.05
0.078	RES.	25.2	NORMAL	50	20	0.12	0.03	Low	0.06
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	
0.310 = Total Area			Avg. =	26	5%	0.290			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.33

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.26

IMPERVIOUS AREA: URBAN @ 100 % effective = 5
ROCK OUTCROP @ 50 % effective = 0
% EFFECTIVE IMP. = 5

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 295A

S-GRAPH PARAMETERS

= 0.06 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.47	14.0	0.086

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.47 mi Av.Slope= 29.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.21 mi

Lag = 14.77 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	85 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	15 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.32	3.0	24.5	1.16	0.047	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
LcA	60.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.29	(
Lb	40.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.31	(
Weight.Av	100.0 %			0.35	0.25	----	3.54	0.26	0.30	(

Land type weighted DTHETA = 0.34 0,27

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
295A	0.06	0.32	0.34	~~3.54~~ 4.74	0.30	3.0	14.77

ADJ XKSAT = $0.27\left(\frac{24.5-10}{90}+1\right) = 0.31$

LOSS PARAMETERS FOR SUBBASIN: 296

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
ZZ	0.375	100.	0.26	0

TOTAL = 0.375 Sq.Miles XKSAT = 0.26 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.169	Desert	45.1	DRY	20	0	0.35	0.05	Low	0.05
0.150	RES.	40.0	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
[illegible]056	AGRI	14.9	WET	90	0	0.50	0.12	Hi	0.11
0.375 = Total Area			Avg. =	42	8%	0.280			

PERCENT OF SUBBASIN DRY = 45.0 %
NORMAL = 40.0 %
WET = 15.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA: URBAN @ 100 % effective = 8
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 8

LOSS PARAMETERS FOR SUBBASIN: 296A

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
ZZ	0.386	100.	0.27	0

TOTAL = 0.386 Sq.Miles XKSAT = 0.27 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.271	Desert	70.0	DRY	20	0	0.35	0.05	Low	0.05
0.116	RES.	30.0	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	
0.387 = Total Area			Avg. =	28	6%	0.280			

PERCENT OF SUBBASIN DRY = 70.0 %
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 = 6
ROCK OUTCROP @ 50 % effective = 0
% EFFECTIVE IMP. = 6

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 297

S-GRAPH PARAMETERS

A = 0.38 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	16.0	0.296

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 14.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.45 mi

Lag = 80.22 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	81.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
GgA	19.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	0

Land type weighted DTHETA = 0.00

0.25
FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
297	0.38	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	80.22

ADJ XKSAT = $0.25\left(\frac{90-10}{90}+1\right) = 0.47$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 297A

= 0.27 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.83	19.0	0.173

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.83 mi Av.Slope= 22.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.42 mi

Lag = 63.58 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
LcA	72.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
GgA	28.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	0.

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
297A	0.27	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	63.58

The xksat value did not change per FCDMC GIS

KMH
1-4-01

LOSS PARAMETERS FOR SUBBASIN: 298

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	538.000	100.	0.25	0

TOTAL = 538.000 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	20	0	0.35	0.05	Low	
120.000	RES.	22.3	NORMAL	50	20	0.12	0.03	Low	0.05
70.000	Comm	13.0	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
348.000	AGRI	64.7	WET	90	0	0.50	0.12	Hi	0.09

538.00 = Total Area Avg. = 80 16% 0.360

PERCENT OF SUBBASIN DRY = 13.0 %
NORMAL = 22.0 %
WET = 65.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.10

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.44

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.
298	0.841	1.13	0.49	0.09	20.4	0.36	0.10	4.80	0.44	16	57

LOSS PARAMETERS FOR SUBBASIN: 299

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	256.000	100.	0.25	0

TOTAL = 256.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
40.000	Comm	15.6	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
216.000	AGRI	84.4	WET	90	0	0.50	0.12	Hi	0.09

256.00 = Total Area Avg. = 89 14% 0.430

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.06

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

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.
299	0.400	0.76	0.34	0.11	13.8	0.43	0.06	4.80	0.47	14	55

eec

ct Title Loop 303 Master Drainage Study Project No. 99551 Date

Subject Sub Basins Prepared By MJR Checked By Page

Sub 6

Sub basin Hydrograph and LG parameters are not available. Refer to FCDMC Drainage Report for the RID canal. Overclute for MCUHP Input.

PSIF
6.00

eec

Project Title Loop 303 master Drainage Study Project No. 88551 Date

Subject Sub basin prep sheet Prepared By GR Checked By Page

Sub 7

Sub-basin parameters not available. Refer to FCDMC Drainage Rept. for the RIB canal over chute

PSIF
6.80

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 300

S-GRAPH PARAMETERS

= 0.39 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.68	11.0	0.169

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.68 mi Av.Slope= 16.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.34 mi

Lag = 58.37 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	35.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Mp	24.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.09	0
LcA	19.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Mr	18.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	0
Vf	4.0 %	Vecont	Clay	0.18	0.08	0.00	----	0.04	0.08	0
Weight.Av	100.0 %			----	----	0.00	6.36	0.16	0.30	0

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
300	0.39	0.50	0.00	~~6.36~~ 5.88	0.30	0.0	58.37

The xksat value did not change per FCDMC GIS.

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 301

= 0.3 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.62	11.0	0.147

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.62 mi Av.Slope= 17.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.31 mi

Lag = 17.82 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
RES	50 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
DRL	50 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.24	10.0	35.0	1.28	0.040	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	43.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.32	0
Mp	20.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.05	0.06	0
Gr	18.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.19	0
LcA	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.32	0
Mr	8.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.06	0
Es	2.0 %	Estrella	Loam	0.35	0.25	0.00	----	0.25	0.32	0
Weight.Av	100.0 %			0.33	0.22	----	5.79	~~0.18~~	0.23	0

Land type weighted DTHETA = 0.28 0.21

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
301	0.30	0.24	0.28	~~5.79~~ 5.30	~~0.23~~	10.0	17.82

Adj. xksat= $0.21\left(\frac{35-10}{90}+1\right) = 0.27$

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 302

S-GRAPH PARAMETERS

= 0.15 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.65	14.0	0.140

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.65 mi Av.Slope= 21.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.31 mi

Lag = 20.16 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	80 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	20 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.30	4.0	26.0	1.18	0.046	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	47.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.29	0
GgA	26.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.29	0
LcB	20.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.31	0
RpE	4.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ld	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.31	0
Weight.Av	100.0 %			0.35	0.25	----	3.54	~~0.26~~	0.30	0

Land type weighted DTHETA = 0.33

0.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD MC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
302	0.15	0.30	0.33	~~3.54~~ 4.90	0.30	4.0	20.16

Adj. xksat = $0.25\left(\frac{26-10}{90}+1\right) = 0.29$

KMH

12-28-00

LOSS PARAMETERS FOR SUBBASIN: 303

S[illegible]Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
AL	0.338	37.3	0.40	0
AGB	0.172	19.0	0.40	0
CP	0.047	5.2	0.40	0
CV	0.133	14.7	0.39	0
HLC	0.159	17.6	0.14	0
PA	0.011	1.2	0.40	0
PRB	0.045	5.0	0.28	0

TOTAL = 0.905 Sq.Miles XKSAT = 0.33 %Rock = 0

DTHETA

Dry = 0.35 PSIF = ~~4.35~~ 4.40
Normal = 0.25
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
0.905	Desert	100.	DRY	20	0	0.35	0.05	Low	0.04
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		DRY	10	90	0.06	0.03	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
	RowCrop		NORMAL	85	0	0.50	0.10	Hi	
0.905 = Total Area			Avg. =	20	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. = 0.37

IMPERVIOUS AREA: URBAN @ 100 % effective = 0
ROCK OUTCROP @ 50 % 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.
303	0.905	1.80	1.26	0.05	30.0	0.35	0.35	4.40	0.37	0	52

LOSS PARAMETERS FOR SUBBASIN: <*****

Soil Survey Used Central County

[illegible] =

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 303A

S-GRAPH PARAMETERS

A = 0.42 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.06	51.0	0.153

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.06 mi Av.Slope= 48.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.42 mi

Lag = 25.45 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.1	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
CV	67.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.34	0.34	
PRB	25.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
AL	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.42	0.42	
Weight.Av	100.0 %			0.35	----	----	4.08	0.36	0.36	

Land type weighted DTHETA = 0.35 0.36

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
303A	0.42	0.35	0.35	~~4.08~~ 4.15	0.36	0.1	25.45

ADJ XKSAT = $0.36\left(\frac{20-10}{90}+1\right) = 0.40$

VV

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 304

= 1.1 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.33	59.0	0.200

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.33 mi Av.Slope= 44.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.53 mi

Lag = 30.71 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
CV	55.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.34	0.34	(
PRB	26.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Cp	14.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	(
Pa	3.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
LcA	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.28	(
AbA	1.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Weight.Av	100.0 %			0.35	----	----	4.09	0.36	0.36	(

Land type weighted DTHETA = 0.35

0.36
FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
304	1.10	0.35	0.35	~~4.09~~ 4.15	0.36	0.0	30.71

ADJ XKSAT= $0.36\left(\frac{20-10}{90}+1\right)=0.40$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 305

= 0.92 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	43.0	0.181

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 38.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 72.37 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Cp	80.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	(
AbA	16.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Ma	4.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Weight.Av	100.0 %			----	----	0.00	4.25	0.39	0.39	(

Land type weighted DTHETA = 0.00 0.40

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
305	0.92	0.50	0.00	~~4.25~~ 3.95	0.39	0.0	72.37

ADJ XKSAT = $0.40\left(\frac{90-10}{90}+1\right) = 0.76$

√√

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 306

= 0.49 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.92	26.0	0.173

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.92 mi Av.Slope= 28.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.46 mi

Lag = 66.06 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
LcA	59.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Cp	19.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	(
GgA	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
CrB	3.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.40	0.40	(
Aa	1.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Weight.Av	100.0 %			----	----	0.00	3.67	0.28	0.46	

Land type weighted DTHETA = 0.00 0.27

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
306	0.49	0.50	0.00	~~3.67~~ 4.74	0.46	0.0	66.06

ADJ XKSAT = $0.27\left(\frac{90-10}{90}+1\right) = 0.51$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 307

a = 0.21 sq.mi

S-GRAPH PARAMETERS

flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	18.0	0.107

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.59 mi Av.Slope= 30.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.24 mi

Lag = 42.67 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHE cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satu
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
LcA	70.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Cp	12.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	3.59	0.27	0.46	

Land type weighted DTHETA = 0.00 0.26

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
307	0.21	0.50	0.00	~~3.59~~ 4.82	0.46	0.0	42.67

ADJ XKSAT = $0.26\left(\frac{90-10}{90}+1\right) = 0.49$

WHITE TANKS/AGUA FRIA ADMS

BASIN # : 308

= 0.32 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.74	24.0	0.130

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.74 mi Av.Slope= 32.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.41 mi

Lag = 56.55 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	91.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
GgA	9.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	0

Land type weighted DTHETA = 0.00 0.25

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
308	0.32	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	56.55

ADJ XKSAT = $0.25\left(\frac{90-10}{90}+1\right) = 0.47$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 309

S-GRAPH PARAMETERS

Ai = 1.07 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.27	38.0	0.232

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.27 mi Av.Slope= 29.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.64 mi

Lag = 83.48 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi-
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	50.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	23.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
PeA	10.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
AbA	6.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Mo	4.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	
Lb	3.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
Mr	2.0 %	Mohall	Clay Loam	0.25	0.15	0.00	----	0.05	0.09	
RbA	1.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Cp	1.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	3.57	0.26	0.44	

Land type weighted DTHETA = 0.00 : 0.28

FCDMC : GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
309	1.07	0.50	0.00	~~3.57~~ 4.66	0.44	0.0	83.48

ADJ XKSAT = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 310

= 0.19 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.65	17.0	0.127

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.65 mi Av.Slope= 26.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.26 mi

Lag = 47.29 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Lb	26.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0.
LcA	21.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
PeA	18.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0.
PeB	13.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
LcB	11.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.49	0.
GgA	11.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	3.76	0.30	0.46	0.

Land type weighted DTHETA = 0.00 0.32 FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
310	0.19	0.50	0.00	~~3.76~~ 4.38	0.46	0.0	47.29

ADJ XKSAT = $0.32\left(\frac{90-10}{90}+1\right) = 0.60$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 311

= 0.73 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.30	39.0	0.237

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.30 mi Av.Slope= 30.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.78 mi

Lag = 91.03 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
PeA	35.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
LcA	31.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Lb	16.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	(
GgA	14.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Gt	3.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	(
AbA	1.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Weight.Av	100.0 %			----	----	0.00	3.75	0.30	0.44	(

Land type weighted DTHETA = 0.00

0.29

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
311	0.73	0.50	0.00	~~3.75~~ 4.58	0.44	0.0	91.03

ADJ XKSAT = $0.29\left(\frac{90-10}{90}+1\right) = 0.55$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 311A

= 0.31 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.00	29.0	0.186

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.00 mi Av.Slope= 29.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.40 mi

Lag = 64.34 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	74.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Gt	22.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	(
PeA	4.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
Weight.Av	100.0 %			----	----	0.00	4.09	0.23	0.42	(

Land type weighted DTHETA = 0.00

0.17
FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
311A	0.31	0.50	0.00	~~4.09~~ 5.76	0.42	0.0	64.34

ADJ XKSAT = $0.17\left(\frac{90-10}{90}+1\right) = 0.32$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 312

. = 0.66 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.09	31.0	0.204

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.09 mi Av.Slope= 28.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.65 mi

Lag = 80.43 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
LcA	48.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	25.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Gt	15.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	
PeB	7.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
PeA	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
GgB	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.49	
Weight.Av	100.0 %			----	----	0.00	3.60	0.25	0.44	

Land type weighted DTHETA = 0.00

0.21
FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
312	0.66	0.50	0.00	~~3.60~~ 5.30	0.44	0.0	80.43

ADJ XKSAT = $0.21\left(\frac{90-10}{90}+1\right) = 0.40$

LOSS PARAMETERS FOR SUBBASIN: 313

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
LCA	0.413	95.8	0.25	0
LB	0.009	2.1	0.40	0
GGA	0.009	2.1	0.25	0

TOTAL = 0.431 Sq.Miles XKSAT = 0.25 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
0.431	RES.	100.	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
	AGRI		WET	90	0	0.50	0.12	Hi	

0.431 = Total Area Avg. = 50 20% 0.120

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 = 20
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 20

LOSS PARAMETERS FOR SUBBASIN: 314

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
LCA	0.403	96.2	0.25	0
LB	0.008	1.9	0.40	0
GGA	0.008	1.9	0.25	0

TOTAL = 0.375 Sq.Miles XKSAT = 0.26 %Rock = 0

DTHETA

Dry = 0.35
Normal = 0.25
Wet = 0.00

PSIF = ~~4.70~~ 4.80

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
0.147	RES.	35.1	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
[illegible].272	AGRI	64.9	WET	90	0	0.50	0.12	Hi	0.09
0.375 = Total Area			Avg. =	42	8%	0.280			

PERCENT OF SUBBASIN
DRY = 45.0 %
NORMAL = 40.0 %
WET = 15.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.35

IMPERVIOUS AREA:
URBAN @ 100 % effective = 8
ROCK OUTCROP @ 50 % 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.
314	0.419	1.03	0.41	0.09	18.5	0.37	0.09	4.80	0.44	7	53

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 315

= 0.47 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	25.0	0.256

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 21.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.65 mi

Lag = 87.41 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	97.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Gr	2.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	(
GgA	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Weight.Av	100.0 %			----	----	0.00	3.56	0.25	0.47	(

Land type weighted DTHETA = 0.00

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
315	0.47	0.50	0.00	~~3.56~~ 4.90	0.47	0.0	87.41

The xksat value did not change per FCDMC GIS.

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 316

= 0.82 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	27.0	0.237

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 23.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.63 mi

Lag = 84.06 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	55.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
PeB	22.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Gt	17.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	(
LcB	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.49	(
Weight.Av	100.0 %			----	----	0.00	3.57	~~0.26~~	0.42	(

Land type weighted DTHETA = 0.00 0.20

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD MC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
316	0.82	0.50	0.00	~~3.57~~ 5.40	~~0.42~~	0.0	84.06

Adj. Xksat = $0.20\left(\frac{90-10}{90}+1\right) = 0.38$

KMH

12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 317

= 0.57 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	20.0	0.276

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 17.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.58 mi

Lag = 85.83 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	76.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
GgA	21.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
PeA	3.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
Weight.Av	100.0 %			----	----	0.00	3.52	~~0.25~~	0.47	(

Land type weighted DTHETA = 0.00 0.26

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
317	0.57	0.50	0.00	~~3.52~~ 4.82	~~0.47~~	0.0	85.83

Adj. xksat = $0.26\left(\frac{90-10}{90}+1\right) = 0.49$

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 318

= 0.62 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	18.0	0.279

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 16.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.62 mi

Lag = 48.70 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
RES	60 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
AGR	40 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.27	12.0	66.0	1.63	0.066	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	58.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.41	(
GgA	33.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.41	(
Vf	5.0 %	Vecont	Clay	0.18	0.08	0.00	----	0.04	0.07	(
RbA	2.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
PeA	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
Pa	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Weight.Av	100.0 %			----	0.24	0.00	3.66	~~0.24~~	0.39	(

Land type weighted DTHETA = 0.14 0.22

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GWS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
318	0.62	0.27	0.14	~~3.66~~ 5.20	~~0.39~~	12.0	48.70

Adj. xksat = 0.22 ((66-10)/90 + 1) = 0.36

KMH

12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 319

S-GRAPH PARAMETERS

= 0.54 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	19.0	0.272

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 17.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 40.15 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET/ condi:
RES	70 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
AGR	30 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.23	14.0	62.0	1.58	0.057	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	66.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.40	(
LcA	34.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.40	(
Weight.Av	100.0 %			----	0.25	0.00	3.50	0.25	0.40	(

Land type weighted DTHETA = 0.18

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
319	0.54	0.23	0.18	~~3.50~~ 4.90	0.40	14.0	40.15

The xksat value did not change per FCDMC GIS.

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 320

S-GRAPH PARAMETERS

= 0.64 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.45	14.0	0.467

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.45 mi Av.Slope= 9.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.58 mi

Lag = 34.18 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
RES	50 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
DRL	45 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
COM	5 %	Commercial	0.06	90.0	10.0	1.00	0.03	Dry
Weight.Av	100 %		0.22	14.5	34.5	1.27	0.039	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	33.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.32	(
GgA	19.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.32	(
Vh	13.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.35	(
LcB	11.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.33	(
Ma	8.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
RpE	6.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Ge	5.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.37	(
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
AbB	2.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Vg	1.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.36	(
Weight.Av	100.0 %			0.35	0.26	----	4.27	~~0.39~~	0.48	(

Land type weighted DTHETA = 0.30 0.28

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
320	0.64	0.22	0.30	~~4.27~~ 4.66	~~0.48~~	14.5	34.18

$$\text{Adj. } xksat = 0.28\left(\frac{34.5-10}{90}+1\right) = 0.36$$

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 321

S-GRAPH PARAMETERS

= 0.66 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.89	41.0	0.131

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.89 mi Av.Slope= 46.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 30.0 % of (L)= 0.27 mi

Lag = 20.14 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Cp	69.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	(
AbA	13.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
AdA	12.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Pa	4.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
LcA	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.28	(
Lb	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	(
Weight.Av	100.0 %			0.35	----	----	4.24	0.39	0.39	(

Land type weighted DTHETA = 0.35 0.40

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
321	0.66	0.35	0.35	~~4.24~~ 3.95	0.39	0.0	20.14

$$\text{ADJ XKSAT} = 0.40\left(\frac{20-10}{90}+1\right) = 0.44$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 322

a = 0.34 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	22.0	0.223

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 21.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.36 mi

Lag = 66.29 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
Cp	44.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
AbA	19.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	17.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Lb	12.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
LcA	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
PeA	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Weight.Av	100.0 %			----	----	0.00	4.13	0.37	0.41	

Land type weighted DTHETA = 0.00 0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
322	0.34	0.50	0.00	~~4.13~~ 4.00	0.41	0.0	66.29

ADJ XKSAT = $0.39\left(\frac{90-10}{90}+1\right) = 0.74$

JJ

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 323

= 0.15 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.56	6.0	0.171

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.56 mi Av.Slope= 10.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.28 mi

Lag = 29.05 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	80 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
AGR	20 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.38	0.0	34.0	1.27	0.064	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Cp	58.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0.
LcA	27.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.32	0.
Lb	15.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.34	0.
Weight.Av	100.0 %			0.35	----	0.00	3.95	0.33	0.36	0.

Land type weighted DTHETA = 0.28 0.35

INPUT VALUES FOR < MOUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
323	0.15	0.38	0.28	~~3.95~~ 4.20	0.36	0.0	29.05

$$\text{ADJ XKSAT} = 0.35\left(\frac{34-10}{90}+1\right) = 0.44$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 324

S-GRAPH PARAMETERS

= 0.36 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.86	33.0	0.139

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.86 mi Av.Slope= 38.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.52 mi

Lag = 63.46 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
Cp	40.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
Lb	31.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
LcA	20.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	1.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Weight.Av	100.0 %			----	----	0.00	3.90	0.32	0.44	

Land type weighted DTHETA = 0.00 0.36

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDmc GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
324	0.36	0.50	0.00	~~3.90~~ 4.15	0.44	0.0	63.46

ADJ XKSAT = $0.36\left(\frac{90-10}{90}+1\right) = 0.68$

VJ

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 325

S-GRAPH PARAMETERS

a = 0.49 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.30	44.0	0.223

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.30 mi Av.Slope= 33.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.78 mi

Lag = 88.97 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
Cp	55.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
AbA	26.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Lb	10.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
LcA	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	4.12	0.37	0.41	

Land type weighted DTHETA = 0.00 0.37

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
325	0.49	0.50	0.00	~~4.12~~ 4.10	0.41	0.0	88.97

ADJ XKSAT = $0.37\left(\frac{90-10}{90}+1\right) = 0.70$

VV

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 325A

S-GRAPH PARAMETERS

= 0.61 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	42.0	0.198

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 35.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.59 mi

Lag = 76.39 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field).	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Lb	61.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0.
Cp	23.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0.
AbA	5.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
LcA	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Weight.Av	100.0 %			----	----	0.00	3.84	0.31	0.47	0

Land type weighted DTHETA = 0.00 0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
325A	0.61	0.50	0.00	~~3.84~~ 4.00	0.47	0.0	76.39

ADJ XKSAT = $0.39\left(\frac{90-10}{90}+1\right) = 0.74$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 326

= 0.54 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	41.0	0.185

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 36.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 73.03 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	44.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
GgA	30.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Cp	26.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0
Weight.Av	100.0 %			----	----	0.00	3.69	0.29	0.45	0

Land type weighted DTHETA = 0.00 0.28

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
326	0.54	0.50	0.00	~~3.69~~ 4.66	0.45	0.0	73.03

ADJ XKSAT = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

√√

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 327

S-GRAPH PARAMETERS

A = 0.53 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.09	42.0	0.176

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.09 mi Av.Slope= 38.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.55 mi

Lag = 70.84 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
LcA	60.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	40.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	

Land type weighted DTHETA = 0.00 0.25

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
327	0.53	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	70.84

ADJ XKSAT = $0.25\left(\frac{90-10}{90}+1\right) = 0.47$

✓✓

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 328

= 0.76 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	33.0	0.223

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 28.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.59 mi

Lag = 68.31 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	75 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	25 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.46	0.0	72.5	1.70	0.103	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	50.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.42	0.
GgA	42.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.42	0.
PeB	8.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Weight.Av	100.0 %			0.35	----	0.00	3.56	0.26	0.42	0.

Land type weighted DTHETA = 0.09 0.26

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
328	0.76	0.46	0.09	~~3.56~~ 4.82	0.42	0.0	68.31

$$ADJ\ XKSAT = 0.26\left(\frac{72.5-10}{90}+1\right) = 0.44$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 329

= 0.63 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	40.0	0.187

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 35.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.50 mi

Lag = 58.45 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	75 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	10 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
RES	15 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.43	3.0	77.0	1.75	0.100	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcB	36.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.45	(
LcA	33.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.44	(
GgA	17.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.44	(
PeB	14.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Weight.Av	100.0 %			0.35	0.25	0.00	3.62	0.27	0.44	(

Land type weighted DTHETA = 0.07 0.27

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
329	0.63	0.43	0.07	~~3.62~~ 4.74	0.44	3.0	58.45

ADJ XKSAT = $0.27\left(\frac{77-10}{90}+1\right) = 0.47$

LOSS PARAMETERS FOR SUBBASIN: 330

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
LCA	0.395	66.9	0.25	0
GGA	0.124	21.0	0.25	0
PEA	0.047	8.0	0.37	0
CP	0.018	3.1	0.40	0
MA	0.006	1.0	0.40	0

TOTAL = 0.590 Sq.Miles XKSAT = 0.27 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
?66	RES.	45.0	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
0.325	AGRI	55.0	WET	90	0	0.50	0.12	Hi	0.09
0.591 = Total Area			Avg. =	74	9%	0.330			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.11

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.46

IMPERVIOUS AREA: URBAN @ 100 % effective = 9
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 9

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 331

= 0.75 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.27	38.0	0.232

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.27 mi Av.Slope= 29.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.64 mi

Lag = 77.22 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	90 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.46	2.0	86.0	1.85	0.111	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	47.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.46	
LcA	19.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.46	
LcB	13.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.48	
GgB	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.48	
Gt	4.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	
Bs	3.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
PeA	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
PeB	1.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Aa	1.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.54	
Weight.Av	100.0 %			----	0.25	0.00	3.55	0.26	0.46	

Land type weighted DTHETA = 0.02

0.24
FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
331	0.75	0.46	0.02	~~3.55~~ 5.00	0.46	2.0	77.22

ADJ XKSAT = $0.24\left(\frac{86-10}{90}+1\right) = 0.44$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 332

= 0.56 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.33	33.0	0.267

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.33 mi Av.Slope= 24.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.67 mi

Lag = 82.88 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	90 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.46	2.0	86.0	1.85	0.111	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	65.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.46	0
PeA	17.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
GgA	11.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.46	0
PeB	3.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
LcB	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.48	0
GxA	2.0 %	Gunsight	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Weight.Av	100.0 %			----	0.25	0.00	3.66	0.28	0.44	0

Land type weighted DTHETA = 0.03

0.27
FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
332	0.56	0.46	0.03	~~3.66~~ 4.72	0.44	2.0	82.88

ADJ XKSAT = $0.27\left(\frac{86-10}{90}+1\right) = 0.50$

LOSS PARAMETERS FOR SUBBASIN: 333

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
LCA	0.580	100.	0.25	0

TOTAL = 0.580 Sq.Miles XKSAT = 0.25 %Rock = 0

DTHETA

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

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	20	0	0.35	0.05	Low	
0.348	RES.	60.0	NORMAL	50	20	0.12	0.03	Low	0.05
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
232	AGRI	40.0	WET	90	0	0.50	0.12	Hi	0.10
0.580 = Total Area			Avg. =	68	12%	0.270			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.15

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.41

IMPERVIOUS AREA: URBAN @ 100 % effective = 12
ROCK OUTCROP @ 50 % effective = 0

% EFFECTIVE IMP. = 12

LOSS PARAMETERS FOR SUBBASIN: 334

Soil Survey Used Central County

XKSAT

Map Unit	AREA Sq.Miles	% Area	XKSAT	% Rock Outcrop
SOILS	0.620	100.	0.47	0

TOTAL = 0.620 Sq.Miles XKSAT = 0.47 %Rock = 0

DTHETA

Dry = 0.35 PSIF = 3.70
Normal = 0.26
Wet = 0.00

LAND USE

AREA Sq.Miles	LAND USE Type	% Area	DTHETA condition	%Veg. cover	RTIMP%	IA in.	Kn	Kb Type	Kb
	Desert		DRY	25	0	0.35	0.03	Low	
	OPEN		DRY	10	0	0.10	0.02	Min	
	V.L.D.R		NORMAL	30	5	0.30	0.05	Low	
	L.D.R.		NORMAL	50	15	0.30	0.05	Low	
	M.D.R.		NORMAL	50	30	0.25	0.05	Low	
	M.F.R.		NORMAL	50	45	0.25	0.05	Low	
	Ind		NORMAL	60	55	0.15	0.03	Min	
	Comm		NORMAL	75	80	0.10	0.02	Min	
	Park		NORMAL	90	0	0.20	0.10	Hi	
0.620	RowCrop	100.	NORMAL	90	0	0.50	0.12	Hi	0.09

0.620 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.26

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.89

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

% EFFECTIVE IMP. = 0

LOSS PARAMETERS FOR SUBBASIN: 335

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	277.000	100.	0.17	0

TOTAL = 277.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
277.000	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.09

277.00 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

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.
335	0.433	0.91	0.33	0.12	46.7	0.50	0.00	5.70	0.32	0	53

LOSS PARAMETERS FOR SUBBASIN: 335A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	43.300	100.	0.22	0

TOTAL = 43.300 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
43.300	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.11

43.300 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

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.
335A	0.068	0.26	0.10	0.12	30.8	0.50	0.00	5.10	0.42	0	23

LOSS PARAMETERS FOR SUBBASIN: 336

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	869.000	100.	0.24	0

TOTAL = 869.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
123.000	Comm	14.1	DRY	10	90	0.06	0.03	Min	0.03
	Golf		NORMAL	50	0	0.50	0.03	Min	
746.000	AGRI	85.8	WET	90	0	0.50	0.12	Hi	0.08

869.00 = Total Area Avg. = 89 13% 0.440

PERCENT OF SUBBASIN DRY = 14.0 %
NORMAL = 0.0 %
WET = 86.0 %

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.05

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.45

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.
336	1.358	2.28	1.37	0.11	20.6	0.44	0.05	4.90	0.45	13	133

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 337

S-GRAPH PARAMETERS

a = 0.49 sq.mi

ath in (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.00	10.0	0.316

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.00 mi Av.Slope= 10.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.40 mi

Lag = 24.29 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
RES	50 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
DRL	35 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
COM	15 %	Commercial	0.06	90.0	10.0	1.00	0.03	Dry
Weight.Av	100 %		0.19	23.5	33.5	1.26	0.037	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	33.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.32	0
LcA	27.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.32	0
Ge	26.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.37	0
Va	8.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0
Gt	4.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.18	0
AbA	2.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Weight.Av	100.0 %			0.35	0.25	----	3.60	~~0.27~~	0.33	0

Land type weighted DTHETA = 0.30 0.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
337	0.49	0.19	0.30	~~3.60~~ 4.90	~~0.33~~	23.5	24.29

Adj. xksat = 0.25 $\left(\frac{33.5-10}{90}+1\right)$ = 0.32

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 338

S-GRAPH PARAMETERS

a = 0.31 sq.mi

ith inc. mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.83	17.0	0.183

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.83 mi Av.Slope= 20.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 25.0 % of (L)= 0.21 mi

Lag = 46.99 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60) n

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit.
AGR	90 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	10 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.49	0.0	83.0	1.81	0.113	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
AbA	23.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	= 0.39	0.
Cp	18.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0.
Vh	15.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.92	0.
GgA	15.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.45	0.
Ld	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.47	0.
Ge	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.53	0.
Ma	5.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Lb	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.49	0.
RpE	3.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Vg	1.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.94	0.
Weight.Av	100.0 %			0.35	----	0.00	4.17	~~0.45~~	0.67	0.

Land type weighted DTHETA = 0.03 0.34

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
338	0.31	0.49	0.03	~~4.17~~ 4.28	~~0.67~~	0.0	46.99

Adj. xksat = 0.34 $\left(\frac{83-10}{90}+1\right)$ = 0.62

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 338A

S-GRAPH PARAMETERS

a = 0.77 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.27	23.0	0.298

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.27 mi Av.Slope= 18.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.57 mi

Lag = 31.99 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
RES	50 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
DRL	45 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
AGR	5 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.24	10.0	38.5	1.32	0.043	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Vg	24.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.41	0
AbA	19.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
LcA	13.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.33	0
Ma	7.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
PeA	6.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
Br	6.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	0
RpE	5.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Lb	5.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.36	0
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.33	0
Cb	4.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.48	0
Vh	3.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.40	0
Aa	3.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.38	0
Ld	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.34	0
Weight.Av	100.0 %			0.35	0.26	0.00	3.88	~~0.58~~	0.70	0

Land type weighted DTHETA = 0.29 0.41

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
338A	0.77	0.24	0.29	~~3.88~~ 3.91	~~0.70~~	10.0	31.99

Adj. xksat = $0.41\left(\frac{38.5-10}{90}+1\right) = 0.54$

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 339

= 1 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.41	60.0	0.216

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.41 mi Av.Slope= 42.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.71 mi

Lag = 84.54 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbA	30.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Cp	25.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0
LcA	14.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
PeA	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
Lb	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0
Ma	8.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Pa	5.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Weight.Av	100.0 %			----	----	0.00	4.08	0.36	0.41	0

Land type weighted DTHETA = 0.00 0.37

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
339	1.00	0.50	0.00	~~4.08~~ 4.10	0.41	0.0	84.54

ADJ XKSAT = $0.37\left(\frac{90-10}{90}+1\right) = 0.70$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 340

S-GRAPH PARAMETERS

A_d = 0.48 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	49.0	0.169

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 43.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 70.59 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET. condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Pa	25.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Lb	25.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
AbA	24.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
PeA	8.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Ma	7.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Cp	6.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
LcA	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	4.06	0.36	0.42	

Land type weighted DTHETA = 0.00 0.39

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
340	0.48	0.50	0.00	~~4.06~~ 4.00	0.42	0.0	70.59

ADJ XKSAT = $0.39\left(\frac{90-10}{90}+1\right) = 0.74$

VV

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 341

S-GRAPH PARAMETERS

= 0.79 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	46.0	0.204

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 37.1 ft/mi

Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.62 mi

Lag = 78.70 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Lb	63.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	C
PeA	17.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	C
GgA	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	C
Cp	6.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	C
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	C
Weight.Av	100.0 %			----	----	0.00	3.77	0.30	0.48	C

Land type weighted DTHETA = 0.00 0.38

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
341	0.79	0.50	0.00	~~3.77~~ 4.05	0.48	0.0	78.70

ADJ XKSAT = 0.38 ($\frac{90-10}{90}$ +1) = 0.72

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 342

= 0.39 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.00	41.0	0.156

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.00 mi Av.Slope= 41.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.40 mi

Lag = 60.24 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
PeA	79.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
AbA	10.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Lb	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	
GgA	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	4.13	0.37	0.39	

Land type weighted DTHETA = 0.00 0.33

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
342	0.39	0.50	0.00	~~4.13~~ 4.32	0.39	0.0	60.24

ADJ XKSAT = $0.33\left(\frac{90-10}{90}+1\right) = 0.62$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 342A

S-GRAPH PARAMETERS

= 0.38 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	43.0	0.195

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 36.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.71 mi

Lag = 81.50 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
LcA	44.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
GgA	36.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
PeA	20.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0.
Weight.Av	100.0 %			----	----	0.00	3.64	0.28	0.45	0.

Land type weighted DTHETA = 0.00 0.27

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
342A	0.38	0.50	0.00	~~3.64~~ 4.74	0.45	0.0	81.50

ADJ XKSAT = 0.27 ($\frac{90-10}{90}$ +1) = 0.51

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 343

S-GRAPH PARAMETERS

a = 0.51 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.27	40.0	0.226

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.27 mi Av.Slope= 31.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 48.0 % of (L)= 0.61 mi

Lag = 81.40 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi-
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	38.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
LcA	36.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
PeA	26.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Weight.Av	100.0 %			----	----	0.00	3.68	0.28	0.45	

Land type weighted DTHETA = 0.00 0.28

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
343	0.51	0.50	0.00	~~3.68~~ 4.66	0.45	0.0	81.40

ADJ XKSAT = 0.28((90-10)/90 +1) = 0.53

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 344

S-GRAPH PARAMETERS

a = 0.61 sq.mi

.ow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.30	36.0	0.247

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.30 mi Av.Slope= 27.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.78 mi

Lag = 92.43 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
GgA	72.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
LcA	23.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
PeB	5.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Weight.Av	100.0 %			----	----	0.00	3.54	0.26	0.47	

Land type weighted DTHETA = 0.00 0.26

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
344	0.61	0.50	0.00	~~3.54~~ 4.82	0.47	0.0	92.43

ADJ XKSAT = $0.26\left(\frac{90-10}{90}+1\right) = 0.49$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 345

= 0.43 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	42.0	0.198

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 35.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.53 mi

Lag = 73.39 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	61.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
PeB	27.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
GgB	12.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.26	0.49	(
Weight.Av	100.0 %			----	----	0.00	3.71	0.29	0.45	(

Land type weighted DTHETA = 0.00 0.28

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
345	0.43	0.50	0.00	~~3.71~~ 4.82	0.45	0.0	73.39

ADJ XKSAT = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 346

= 0.51 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	49.0	0.169

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 43.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.56 mi

Lag = 56.18 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	65 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	35 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.45	0.0	65.5	1.62	0.095	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	41.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.40	0
PeA	11.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
Ge	11.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.47	0
PeB	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
AbA	8.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
LcA	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.40	0
PsA	6.0 %	Pinal	Loam	0.35	0.25	0.00	----	0.25	0.40	0
LcB	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.42	0
Bs	1.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			0.35	----	0.00	3.74	0.30	0.41	0

Land type weighted DTHETA = 0.12 0.29

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCD MC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
346	0.51	0.45	0.12	~~3.74~~ 4.58	0.41	0.0	56.18

ADJ XKSAT = $0.29\left(\frac{65.5-10}{90}+1\right) = 0.47$

VV

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 346A

S-GRAPH PARAMETERS

A = 0.16 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	32.0	0.185

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 31.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.57 mi

Lag = 73.30 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	65.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Cp	21.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
Aa	8.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	
LcA	6.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.67	0.28	0.46	

Land type weighted DTHETA = 0.00 0.28

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
346A	0.16	0.50	0.00	~~3.67~~ 4.66	0.46	0.0	73.30

ADJ XKSAT = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 346B

= 0.27 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.21	37.0	0.219

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.21 mi Av.Slope= 30.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 65.0 % of (L)= 0.79 mi

Lag = 88.54 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	37.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Aa	22.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0
PeA	12.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
AbA	12.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
LcA	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Cp	4.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0
Pa	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Gh	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	3.83	0.31	0.46	

Land type weighted DTHETA = 0.00 0.29

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
346B	0.27	0.50	0.00	~~3.83~~ 4.58	0.46	0.0	88.54

$$\text{ADJ XKSAT} = 0.29\left(\frac{90-10}{90}+1\right) = 0.55$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 346C

= 0.12 sq.mi

S-GRAPH PARAMETERS

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.48	12.0	0.096

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.48 mi Av.Slope= 25.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.19 mi

Lag = 37.88 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	50.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Aa	35.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0
Gh	9.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Bs	6.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0
Weight.Av	100.0 %			----	----	0.00	3.64	0.28	0.50	0

Land type weighted DTHETA = 0.00 0.26

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
346C	0.12	0.50	0.00	~~3.64~~ 4.82	0.50	0.0	37.88

ADJ XKSAT = $0.26\left(\frac{90-10}{90}+1\right) = 0.49$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 347

S-GRAPH PARAMETERS

A = 1.02 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.24	36.0	0.230

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.24 mi Av.Slope= 29.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.62 mi

Lag = 76.27 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
AGR	90 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Norma
Weight.Av	100 %		0.46	2.0	86.0	1.85	0.111	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	56.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.46	
Cp	16.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	11.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Ta	9.0 %	Toltec	Loam	0.35	0.25	0.00	----	0.25	0.46	
LcA	4.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.46	
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Br	2.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	
Weight.Av	100.0 %			----	0.25	0.00	3.76	0.30	0.44	

Land type weighted DTHETA = 0.03 0.30

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
347	1.02	0.46	0.03	~~3.76~~ 4.50	0.44	2.0	76.27

ADJ XKSAT = $0.30\left(\frac{86-10}{90}+1\right) = 0.55$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 348

Area = 0.34 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.98	46.0	0.143

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.98 mi Av.Slope= 46.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.39 mi

Lag = 57.82 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
LcA	53.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	(
GgA	14.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Cp	14.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	(
PeB	11.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
PeA	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
Gr	2.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	(
Ge	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Weight.Av	100.0 %			----	----	0.00	3.70	0.29	0.45	

Land type weighted DTHETA = 0.00 0.28

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
348	0.34	0.50	0.00	~~3.70~~ 4.66	0.45	0.0	57.82

ADJ XKSAT = $0.28\left(\frac{90-10}{90}+1\right) = 0.53$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 348A

S-GRAPH PARAMETERS

Area = 0.22 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.51	13.0	0.101

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.51 mi Av.Slope= 25.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.26 mi

Lag = 43.02 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockc crops
LcA	67.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	15.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
PeA	9.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
RbA	8.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
LcB	1.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.26	0.49	
Weight.Av	100.0 %			----	----	0.00	3.62	0.27	0.46	

Land type weighted DTHETA = 0.00 0.27

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
348A	0.22	0.50	0.00	~~3.62~~ 4.74	0.46	0.0	43.02

ADJ XKSAT = $0.27\left(\frac{90-10}{90}+1\right) = 0.51$

LOSS PARAMETERS FOR SUBBASIN: 348B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
MP	498.400	100.	0.26	0

TOTAL = 498.400 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
42.200	Desert	8.5	DRY	20	0	0.35	0.05	Low	0.06
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
456.200	AGRI	91.5	WET	90	0	0.50	0.12	Hi	0.08
498.40 = Total Area			Avg. =	84	0%	0.490			

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.03

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

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.
348B	0.779	1.65	0.74	0.11	26.7	0.49	0.03	4.70	0.47	0	95

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 349

S-GRAPH PARAMETERS

Area = 0.93 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	35.0	0.200

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 31.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.50 mi

Lag = 72.30 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET. condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
LcA	37.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	
GgA	21.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
AbA	20.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	
Ma	12.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Cp	8.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	
PeA	2.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	
Weight.Av	100.0 %			----	----	0.00	3.82	0.31	0.44	

Land type weighted DTHETA = 0.00 0.31

INPUT VALUES FOR < MOUHP 2 >PROGRAM FCD MC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
349	0.93	0.50	0.00	~~3.82~~ 4.44	0.44	0.0	72.30

ADJ XKSAT = $0.31\left(\frac{90-10}{90}+1\right) = 0.58$

VV

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 377B

S-GRAPH PARAMETERS

= 0.12 sq.mi

Length inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.15	5.0	0.552

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.15 mi Av.Slope= 4.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 70.0 % of (L)= 0.81 mi

Lag = 107.88 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	80 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
RES	20 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.42	4.0	82.0	1.80	0.102	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	100.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	*0.45	0.
Weight.Av	100.0 %			----	0.25	0.00	3.50	0.25	0.45	0.

Land type weighted DTHETA = 0.05 0.25

INPUT VALUES FOR < MOUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
377B	0.12	0.42	0.05	~~3.50~~ 4.90	0.45	4.0	107.88

ADJ XKSAT = $0.25\left(\frac{82-10}{90}+1\right) = 0.45$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 378

S-GRAPH PARAMETERS

= 0.78 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	20.0	0.378

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 14.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.64 mi

Lag = 100.75 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou: crops %
Bs	20.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
An	20.0 %	Avonda	Clay Loam	0.27	0.17	0.00	----	0.07	0.13	0.
Vh	12.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	0.
GgA	11.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
CF	10.0 %	Carrizo	Loamy Sand	0.35	0.28	0.00	----	0.92	1.74	0.
Cn	6.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Ao	5.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Br	4.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	0.
Vg	3.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	2.02	0.
Cb	3.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	2.12	0.
Aa	3.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
Ma	1.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Gr	1.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	0.
Gh	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	4.16	0.46	0.77	0.

Land type weighted DTHETA = 0.00

0.19

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
378	0.78	0.50	0.00	~~4.16~~ 5.52	0.77	0.0	100.75

ADJ XKSAT = $0.19\left(\frac{90-10}{90}+1\right) = 0.36$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 377

S-GRAPH PARAMETERS

= 0.09 sq.mi

ath .mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.32	5.0	0.081

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.32 mi Av.Slope= 15.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.16 mi

Lag = 33.13 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	61.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ao	33.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Gt	3.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Cn	3.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	5.76	0.18	0.33	0.

Land type weighted DTHETA = 0.00 0.15

per FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
377	0.09	0.50	0.00	~~5.76~~ 6.00	0.33	0.0	33.13

ADJ XKSAT = $0.15\left(\frac{90-10}{90}+1\right) = 0.28$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 380

S-GRAPH PARAMETERS

= 0.2 sq.mi

Path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.74	7.0	0.241

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.74 mi Av.Slope= 9.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.26 mi

Lag = 60.19 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Gt	37.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Ao	27.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
GgA	18.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Cn	16.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Gd	2.0 %	Gadsden	Clay	0.16	0.06	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	7.20	0.12	0.22	0.

Land type weighted DTHETA = 0.00 0.05 per FCDM

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
380	0.20	0.50	0.00	~~7.20~~ 8.70	0.22	0.0	60.19

Adj. XKSAT = $0.05\left(\frac{90-10}{90}+1\right) = 0.09$

G.R. 12/29/00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 381

= 0.21 sq.mi

S-GRAPH PARAMETERS

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.57	2.0	0.304

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.57 mi Av.Slope= 3.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.26 mi

Lag = 65.56 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Ao	42.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
GgA	36.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Cn	22.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	7.15	0.12	0.23	0.

Land type weighted DTHETA = 0.00 0.07 per FCDMC

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
381	0.21	0.50	0.00	~~7.15~~ 8.00	0.23	0.0	65.56

Adj. XKSAT = $0.07\left(\frac{90-10}{90}+1\right) = 0.13$

CR
12/24/00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 381A

= 0.1 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.38	2.0	0.166

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.38 mi Av.Slope= 5.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.15 mi

Lag = 42.65 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	42.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Cn	34.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0
Gh	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ao	11.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0
Weight.Av	100.0 %			----	----	0.00	6.57	0.15	0.29	0

Land type weighted DTHETA = 0.00 0.06

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
381A	0.10	0.50	0.00	~~6.57~~ 8.40	0.29	0.0	42.65

ADJ XKSAT = $0.06\left(\frac{90-10}{90}+1\right) = 0.11$

√√

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 381B

= 0.07 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.56	6.0	0.171

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.56 mi Av.Slope= 10.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.31 mi

Lag = 56.47 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops %
Ao	55.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
GgA	45.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	6.68	0.15	0.27	0.

Land type weighted DTHETA = 0.00

0.10

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
381B	0.07	0.50	0.00	~~6.68~~ 7.00	0.27	0.0	56.47

ADJ XKSAT = 0.10 ((90-10)/90 +1) = 0.19

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 382

S-GRAPH PARAMETERS

= 0.71 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.03	13.0	0.290

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.03 mi Av.Slope= 12.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.46 mi

Lag = 80.60 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Ao	62.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
GgA	25.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Gt	8.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Cn	5.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	7.29	0.11	0.21	0.

Land type weighted DTHETA = 0.00 0.07

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
382	0.71	0.50	0.00	~~7.29~~ 8.00	0.21	0.0	80.60

ADJ XKSAT = $0.07\left(\frac{90-10}{90}+1\right) = 0.13$

✓✓

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 383

S-GRAPH PARAMETERS

= 0.18 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.65	5.0	0.234

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.65 mi Av.Slope= 7.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.33 mi

Lag = 64.96 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops %
Ao	55.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0
GgA	45.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Weight.Av	100.0 %			----	----	0.00	6.68	0.15	0.27	0

Land type weighted DTHETA = 0.00

0.09 per FCDMC

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
383	0.18	0.50	0.00	~~6.68~~ 7.30	0.27	0.0	64.96

Adj XKSAT = $0.09\left(\frac{90-10}{90}+1\right) = 0.17$

GR 12/29/00

WHITE TANKS/AGUA FRIA ADMS

UBBASIN # : 383A

S-GRAPH PARAMETERS

= 0.16 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.77	6.0	0.276

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.77 mi Av.Slope= 7.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.39 mi

Lag = 73.70 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	53.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Cn	26.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Ao	18.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Gh	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	6.41	0.16	0.29	0

Land type weighted DTHETA = 0.00 0.07

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
383A	0.16	0.50	0.00	~~6.41~~ 8.00	0.29	0.0	73.70

ADJ XKSAT = $0.07\left(\frac{90-10}{90}+1\right) = 0.13$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 384

= 0.29 sq.mi

S-GRAPH PARAMETERS

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.74	8.0	0.225

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.74 mi Av.Slope= 10.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 52.0 % of (L)= 0.38 mi

Lag = 63.09 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	90 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
RES	10 %	Residential	0.12	20.0	50.0	1.45	0.03	Normal
Weight.Av	100 %		0.46	2.0	86.0	1.85	0.111	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Ao	63.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Gt	29.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
GgA	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.46	0.
Weight.Av	100.0 %			----	0.19	0.00	7.54	0.10	0.18	0.

Land type weighted DTHETA = 0.02 0.05

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
384	0.29	0.46	0.02	~~7.54~~ 8.70	0.18	2.0	63.09

ADJ XKSAT = $0.05\left(\frac{86-10}{90}+1\right) = 0.09$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 385

A = 0.39 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.97	7.0	0.361

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.97 mi Av.Slope= 7.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.39 mi

Lag = 81.88 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Ao	54.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	
Gt	44.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	
GgA	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	7.53	0.10	0.19	

Land type weighted DTHETA = 0.00 0.04

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
385	0.39	0.50	0.00	~~7.53~~ 9.50	0.19	0.0	81.88

ADJ XKSAT = 0.04 ($\frac{90-10}{90}$ +1) = 0.08

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 386

S-GRAPH PARAMETERS

= 0.35 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.94	6.0	0.372

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.94 mi Av.Slope= 6.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.47 mi

Lag = 89.08 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	64.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Ao	16.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0
Cn	11.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0
Gd	9.0 %	Gadsden	Clay	0.16	0.06	0.00	----	0.02	0.04	0
Weight.Av	100.0 %			----	----	0.00	5.87	0.17	0.33	0

Land type weighted DTHETA = 0.00 0.1 per FCDMC

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
386	0.35	0.50	0.00	~~5.87~~ 7.00	0.33	0.0	89.08

Adj XKSAT = $0.1\left(\frac{90-10}{90}+1\right)=0.189$

GR 12/29/00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 387

S-GRAPH PARAMETERS

= 0.25 sq.mi

ath inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.86	9.0	0.266

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.86 mi Av.Slope= 10.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.34 mi

Lag = 69.63 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	38.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ao	25.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Gt	15.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Gd	13.0 %	Gadsden	Clay	0.16	0.06	0.00	----	0.02	0.04	0.
Cn	9.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	6.86	0.14	0.26	0.

Land type weighted DTHETA = 0.00

0.06 per FIDMC

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
387	0.25	0.50	0.00	~~6.86~~ 8.40	0.26	0.0	69.63

Adj XKSAT = $0.06\left(\frac{90-10}{90}+1\right) = 0.11$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 350

S-GRAPH PARAMETERS

. = 0.19 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	12.0	0.342

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 10.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 52.0 % of (L)= 0.58 mi

Lag = 93.61 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	91.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Ma	9.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	(
Weight.Av	100.0 %			----	----	0.00	3.57	0.26	0.47	

Land type weighted DTHETA = 0.00 0.26

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
350	0.19	0.50	0.00	~~3.57~~ 4.82	0.47	0.0	93.61

ADJ XKSAT = $0.26\left(\frac{90-10}{90}+1\right) = 0.49$

VV

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 351

= 0.76 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.00	35.0	0.169

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.00 mi Av.Slope= 35.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.40 mi

Lag = 62.08 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	47.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	C
PeA	23.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	C
AbA	21.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	C
LcA	8.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.25	0.47	C
Ma	1.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C
Weight.Av	100.0 %			----	----	0.00	3.82	0.31	0.43	C

Land type weighted DTHETA = 0.00 0,30

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
351	0.76	0.50	0.00	~~3.82~~ 4.50	0.43	0.0	62.08

ADJ XKSAT= $0.3\left(\frac{90-10}{90}+1\right) = 0.57$

VJ

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 352

a = 0.18 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	6.0	0.185

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.59 mi Av.Slope= 10.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.29 mi

Lag = 57.23 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
GgA	92.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Ma	8.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	
Weight.Av	100.0 %			----	----	0.00	3.56	0.26	0.47	

Land type weighted DTHETA = 0.00 0.26

INPUT VALUES FOR < MOUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
352	0.18	0.50	0.00	~~3.56~~ 4.82	0.47	0.0	57.23

ADJ XKSAT= $0.26\left(\frac{90-10}{90}+1\right) = 0.49$

VJ

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 352A

= 0.13 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.83	5.0	0.338

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.83 mi Av.Slope= 6.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.33 mi

Lag = 75.27 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	48.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
AbA	24.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	22.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Ao	6.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0
Weight.Av	100.0 %			----	----	0.00	3.79	0.31	0.42	0

Land type weighted DTHETA = 0.00 0.25

FCDmc GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
352A	0.13	0.50	0.00	~~3.79~~ 4.90	0.42	0.0	75.27

ADJ XKSAT = $0.25\left(\frac{90-10}{90}+1\right) = 0.47$

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WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 353

S-GRAPH PARAMETERS

= 0.22 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.74	25.0	0.127

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.74 mi Av.Slope= 33.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.44 mi

Lag = 58.00 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	62.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
AbA	31.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0
Ma	7.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0
Weight.Av	100.0 %			----	----	0.00	3.79	0.30	0.44	0

Land type weighted DTHETA = 0.00 0,29

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
353	0.22	0.50	0.00	~~3.79~~ 4.58	0.44	0.0	58.00

ADJ XKSAT = 0.29 $\left(\frac{90-10}{90}+1\right)$ = 0,55

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 354

S-GRAPH PARAMETERS

= 0.31 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.65	22.0	0.112

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.65 mi Av.Slope= 33.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.26 mi

Lag = 45.03 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	80.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
PeA	20.0 %	Perryville	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	0
Weight.Av	100.0 %			----	----	0.00	3.64	0.28	0.45	0

Land type weighted DTHETA = 0.00 0.26

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
354	0.31	0.50	0.00	~~3.64~~ 4.82	0.45	0.0	45.03

ADJ. XKSAT = 0.26 ($\frac{90-10}{90}$ +1) = 0.49

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 355

S-GRAPH PARAMETERS

Area = 0.1 sq.mi

w path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.65	3.0	0.303

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.65 mi Av.Slope= 4.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.26 mi

Lag = 65.76 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
Ao	57.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	
GgA	43.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	6.75	0.14	0.27	

Land type weighted DTHETA = 0.00 0.08

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
355	0.10	0.50	0.00	~~6.75~~ 7.60	0.27	0.0	65.76

ADJ XKSAT = 0.08 ($\frac{90-10}{90}$ +1) = 0.15

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 355A

S-GRAPH PARAMETERS

= 0.04 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.35	2.0	0.146

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.35 mi Av.Slope= 5.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.12 mi

Lag = 37.49 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	89.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Gt	11.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	
Weight.Av	100.0 %			----	----	0.00	3.88	0.24	0.45	

Land type weighted DTHETA = 0.00 0.19

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC G15

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
355A	0.04	0.50	0.00	~~3.88~~ 5.52	0.45	0.0	37.49

ADJ XKSAT = 0.19 ($\frac{90-10}{90}$ +1) = 0.36

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WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 356

S-GRAPH PARAMETERS

[illegible] = 0.35 sq.mi

[illegible] path [illegible]. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.68	14.0	0.150

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.68 mi Av.Slope= 20.6 ft/mi

Av.slope =(SUM(Li)/I)^2

Lca = 30.0 % of (L)= 0.20 mi

Lag = 45.92 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET condi
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rocko crops
GgA	100.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	

Land type weighted DTHETA = 0.00 0.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
356	0.35	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	45.92

ADJ XKSAT = 0.25 ((90-10)/90 +1) = 0.47

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 357

aa = 0.14 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	15.0	0.117

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.59 mi Av.Slope= 25.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 53.0 % of (L)= 0.31 mi

Lag = 49.16 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHE cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satu
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
GgA	96.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Gh	4.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Weight.Av	100.0 %			----	----	0.00	3.50	0.25	0.47	

Land type weighted DTHETA = 0.00 0.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
357	0.14	0.50	0.00	~~3.50~~ 4.90	0.47	0.0	49.16

ADJ XKSAT = 0.25 (90-10/90 + 1) = 0.47

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WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 358

S-GRAPH PARAMETERS

= 0.19 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.86	5.0	0.357

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.86 mi Av.Slope= 5.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.43 mi

Lag = 84.75 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	83.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Ao	17.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	(
Weight.Av	100.0 %			----	----	0.00	4.50	0.22	0.41	(

Land type weighted DTHETA = 0.00 0.17

FCDmc GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
358	0.19	0.50	0.00	~~4.50~~ 5.76	0.41	0.0	84.75

ADJ XKSAT = $0.17\left(\frac{90-10}{90}+1\right) = 0.32$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 359

S-GRAPH PARAMETERS

a = 0.1 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.55	12.0	0.118

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.55 mi Av.Slope= 21.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.22 mi

Lag = 43.11 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHE cond
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rock crop
GgA	83.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Gh	13.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	
Bs	4.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	
Weight.Av	100.0 %			----	----	0.00	3.54	0.26	0.47	

Land type weighted DTHETA = 0.00 0.25

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC G-15

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
359	0.10	0.50	0.00	~~3.54~~ 4.90	0.47	0.0	43.11

ADJ XKSAT = $0.25\left(\frac{90-10}{90}+1\right) = 0.47$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 360

= 0.25 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.36	16.0	0.397

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.36 mi Av.Slope= 11.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 30.0 % of (L)= 0.41 mi

Lag = 73.87 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	75 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
DRL	25 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.46	0.0	72.5	1.70	0.103	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Gh	51.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.42	0
Ao	24.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.10	0
Gt	16.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.24	0
GgA	7.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.42	0
Ge	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.49	0
Weight.Av	100.0 %			0.33	----	0.00	5.43	0.19	0.32	0

Land type weighted DTHETA = 0.08 0.12

INPUT VALUES FOR < MCUHP 2 >PROGRAM

Fcomc GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
360	0.25	0.46	0.08	~~5.43~~ 6.60	0.32	0.0	73.87

ADJ XKSAT = $0.12\left(\frac{72.5-10}{90}+1\right) = 0.20$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 361

S-GRAPH PARAMETERS

= 0.21 sq.mi

ath inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.00	16.0	0.250

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.00 mi Av.Slope= 16.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.60 mi

Lag = 84.03 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Ge	34.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
Ao	22.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Gt	14.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Gh	14.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Cn	8.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
GgA	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Weight.Av	100.0 %			----	----	0.00	5.10	0.20	0.35	0.

Land type weighted DTHETA = 0.00 0.12

INPUT VALUES FOR < MCUHP 2 >PROGRAM PER FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
361	0.21	0.50	0.00	~~5.10~~ 6.60	0.35	0.0	84.03

ADJ XKSAT = $0.12\left(\frac{90-10}{90}+1\right) = 0.23$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 362

S-GRAPH PARAMETERS

= 0.42 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.74	8.0	0.225

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.74 mi Av.Slope= 10.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.30 mi

Lag = 61.73 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	49.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Gr	30.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	0.
Gh	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ge	10.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
Cn	1.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	4.38	0.22	0.42	0.

Land type weighted DTHETA = 0.00 0.22

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
362	0.42	0.50	0.00	~~4.38~~ 5.20	0.42	0.0	61.73

$$\text{ADJ XKSAT} = 0.22\left(\frac{90-10}{90}+1\right) = 0.42$$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 363

= 0.63 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	16.0	0.296

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.12 mi Av.Slope= 14.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 55.0 % of (L)= 0.62 mi

Lag = 90.54 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	87.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Gr	8.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	(
Gh	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Aa	2.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Ge	1.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Weight.Av	100.0 %			----	----	0.00	3.71	0.24	0.46	(

Land type weighted DTHETA = 0.00

0.25
FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
363	0.63	0.50	0.00	~~3.71~~ 4.90	0.46	0.0	90.54

ADJ XKSAT = $0.25\left(\frac{90-10}{90}+1\right) = 0.47$

LOSS PARAMETERS FOR SUBBASIN: 364

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	314.000	100.	0.23	0

TOTAL = 314.000 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
	Desert		DRY	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
314.000	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.09

314.00 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

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.
364	0.491	1.00	0.45	0.12	12.0	0.50	0.00	5.00	0.43	0	80

LOSS PARAMETERS FOR SUBBASIN: 364A

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	65.000	100.	0.25	0

TOTAL = 65.000 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	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
65.000	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.10

65.000 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

SUBBASIN XKSAT ADJUSTED FOR VEG. = 0.47

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.
364A	0.102	0.58	0.27	0.12	17.2	0.50	0.00	4.80	0.47	0	50

LOSS PARAMETERS FOR SUBBASIN: 364B

Soil Survey Used Aguila/Carefree

XKSAT

Map Unit	AREA Acres	% Area	XKSAT	% Rock Outcrop
mp	146.000	100.	0.23	0

TOTAL = 146.000 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
	Desert		DRY	20	0	0.35	0.05	Low	
	RES.		NORMAL	50	20	0.12	0.03	Low	
	Comm		DRY	10	90	0.06	0.03	Min	
	Golf		NORMAL	50	0	0.50	0.03	Min	
146.000	AGRI	100.	WET	90	0	0.50	0.12	Hi	0.10

146.00 = Total Area Avg. = 90 0% 0.500

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

SUBBASIN DTHETA WEIGHTED BY LAND USE = 0.00

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.
364B	0.228	0.87	0.43	0.12	9.2	0.50	0.00	5.00	0.43	0	78

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 365

= 0.38 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.86	35.0	0.135

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.86 mi Av.Slope= 40.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.43 mi

Lag = 58.55 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHET/ condi:
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
AbB	23.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Cp	17.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	(
GgA	15.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	(
Vh	11.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	(
Gr	10.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	(
AbA	7.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	(
Vg	5.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	2.02	(
Cb	4.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	2.12	(
Lb	2.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	(
Ge	2.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	(
Bs	2.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	(
RbA	1.0 %	Rillito	Sandy Loam	0.35	0.25	0.00	----	0.38	0.38	(
Br	1.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	(
Weight.Av	100.0 %			----	----	0.00	4.11	~~0.48~~	0.73	(

Land type weighted DTHETA = 0.00 0.36

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GLS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
365	0.38	0.50	0.00	~~4.11~~ 4.15	~~0.73~~	0.0	58.55

Adj. xksat = $0.36\left(\frac{90-16}{90}+1\right) = 0.68$

KMH
12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 366

S-GRAPH PARAMETERS

= 0.44 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.09	35.0	0.192

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.09 mi Av.Slope= 32.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.55 mi

Lag = 73.34 min Lag = 20*Kn*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	Kn	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
AbA	42.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Va	12.0 %	Valencia	Sandy Loam	0.35	0.25	0.00	----	0.37	0.37	0.
Cp	11.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0.
Lb	9.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.51	0.
Ge	9.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
Vg	8.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	2.02	0.
Bs	7.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Tu	1.0 %	Tucson	Loam	0.35	0.25	0.00	----	0.24	0.45	0.
Mo	1.0 %	Mohall	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Weight.Av	100.0 %			----	----	0.00	4.25	~~0.42~~	0.55	0.

Land type weighted DTHETA = 0.00

0.40

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
366	0.44	0.50	0.00	~~4.25~~ 3.95	~~0.55~~	0.0	73.34

Adj. xKsat = 0.40 $\left(\frac{90-10}{90} + 1\right)$ = 0.76

FMH

12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 367

S-GRAPH PARAMETERS

= 0.15 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.50	29.0	0.066

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.50 mi Av.Slope= 58.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.25 mi

Lag = 15.10 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Ge	26.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.32	0.
Bs	26.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
AbA	19.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Cb	11.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.24	0.
Lb	7.0 %	Laveen	Loam	0.35	0.25	0.00	----	0.27	0.30	0.
Cp	4.0 %	Coolidge	Sandy loam	0.35	0.25	0.00	----	0.39	0.39	0.
Aa	4.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.32	0.
GgA	3.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0.
Weight.Av	100.0 %			0.35	----	----	4.19	~~0.45~~	0.47	0.

Land type weighted DTHETA = 0.35 0.34

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FEDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
367	0.15	0.35	0.35	~~4.19~~ 4.28	0.47	0.0	15.10

Adj. xksat = $0.34\left(\frac{20-10}{90}+1\right) = 0.38$

KMH

12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 368

S-GRAPH PARAMETERS

= 0.83 sq.mi

Fl[illegible]ath inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.54	21.0	0.417

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.54 mi Av.Slope= 13.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.77 mi

Lag = 112.22 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	22.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ge	21.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
Gr	18.0 %	Glenbar	Silty Loam	0.39	0.25	0.00	----	0.15	0.28	0.
Vh	10.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	0.
Ma	8.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Aa	7.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.55	0.
Bs	5.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Br	4.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	0.
An	2.0 %	Avonda	Clay Loam	0.27	0.17	0.00	----	0.07	0.13	0.
Gt	1.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Bt	1.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.50	0.50	0.
AbB	1.0 %	Antho	Sandy Loam	0.35	0.25	0.00	----	0.39	0.39	0.
Weight.Av	100.0 %			----	----	0.00	4.07	~~0.36~~	0.60	0.

Land type weighted DTHETA = 0.00 0.27

INPUT VALUES FOR < MOUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
368	0.83	0.50	0.00	~~4.07~~ 4.74	~~0.60~~	0.0	112.22

Adj. XKsat = $0.27 * \left(\frac{90-10}{90} + 1\right) = 0.51$

KMH

12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 369

S-GRAPH PARAMETERS

= 0.15 sq.mi

Path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.68	11.0	0.169

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.68 mi Av.Slope= 16.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.34 mi

Lag = 24.32 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Vh	33.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	1.18	0.
Vg	31.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.19	0.
Br	9.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	0.
GgA	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.28	0.
CF	7.0 %	Carrizo	Loamy Sand	0.35	0.28	0.00	----	0.92	1.02	0.
Aa	5.0 %	Agualt	Loam	0.35	0.25	0.00	----	0.29	0.32	0.
Vk	4.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.03	1.14	0.
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Weight.Av	100.0 %			0.35	----	----	3.16	~~0.88~~	0.97	0.

Land type weighted DTHETA = 0.35 0.45

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
369	0.15	0.35	0.35	~~3.16~~	~~0.97~~	0.0	24.32

3.775

Adj. XKsat = $0.45\left(\frac{20-10}{90}+1\right) = 0.50$

KMH

12-28-00

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 370

= 0.07 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.74	11.0	0.192

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.74 mi Av.Slope= 14.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 60.0 % of (L)= 0.44 mi

Lag = 28.24 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
DRL	100 %	Desert range,Flat slopes	0.35	50%Rock-	20.0	1.11	0.05	Dry
Weight.Av	100 %		0.35	0.0	20.0	1.11	0.050	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Br	45.0 %	Brios	Sandy Loam	0.35	0.26	0.00	----	0.52	0.52	0.
Vg	27.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.07	1.19	0.
Cb	18.0 %	Carrizo	Loamy Sand	0.35	0.30	0.00	----	1.12	1.24	0.
Bs	10.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Weight.Av	100.0 %			0.35	----	----	3.42	~~0.77~~	0.82	0.

Land type weighted DTHETA = 0.35 0.74

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
370	0.07	0.35	0.35	~~3.42~~ 3.03	~~0.82~~	0.0	28.24

Adj. Xksat = $0.74\left(\frac{20-10}{90}+1\right) = 0.82$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 371

= 0.93 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.65	27.0	0.408

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.65 mi Av.Slope= 16.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.83 mi

Lag = 114.24 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	42.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ao	28.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Gt	26.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Cn	1.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	5.97	0.17	0.31	0.

Land type weighted DTHETA = 0.00 0.09

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
371	0.93	0.50	0.00	~~5.97~~ 7.30	0.31	0.0	114.24

ADJ XKSAT = $0.09\left(\frac{90-10}{90}+1\right) = 0.17$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 372

= 1.62 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.63	19.0	0.477

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.63 mi Av.Slope= 11.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.82 mi

Lag = 120.72 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ma	42.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C.
Ao	28.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	C.
GgA	26.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	C.
Ma	3.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	C.
Cn	1.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	C.
Weight.Av	100.0 %			----	----	0.00	3.56	0.26	0.33	C.

Land type weighted DTHETA = 0.00 0.09

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
372	1.62	0.50	0.00	~~3.56~~	0.33	0.0	120.72

ADJ XKSAT = $\frac{7.30}{0.09}\left(\frac{90-10}{90}+1\right) = 0.17$

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 373

= 0.43 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.68	13.0	0.156

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.68 mi Av.Slope= 19.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.34 mi

Lag = 56.54 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) r

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
GgA	67.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ao	30.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Gt	3.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Weight.Av	100.0 %			----	----	0.00	5.37	0.19	0.36	0.

Land type weighted DTHETA = 0.00 0.13

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
373	0.43	0.50	0.00	~~5.37~~ 6.40	0.36	0.0	56.54

ADJ XKSAT = 0.13 ($\frac{90-10}{90}$ +1) = 0.25

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 374

= 0.76 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	9.0	0.427

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 7.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 50.0 % of (L)= 0.59 mi

Lag = 102.36 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Ao	45.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Gt	25.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
GgA	20.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Gh	8.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Cn	2.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	6.92	0.13	0.25	0.

Land type weighted DTHETA = 0.00 0.07

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
374	0.76	0.50	0.00	~~6.92~~ 8.00	0.25	0.0	102.36

ADJ XKSAT = 0.07 ((90-10)/90 +1) = 0.13

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 375

S-GRAPH PARAMETERS

= 0.41 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.18	10.0	0.405

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.18 mi Av.Slope= 8.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.53 mi

Lag = 96.39 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60) m

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
Ao	60.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
GgA	32.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Gh	5.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Cn	3.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0.
Weight.Av	100.0 %			----	----	0.00	6.98	0.13	0.24	0.

Land type weighted DTHETA = 0.00 0.08

INPUT VALUES FOR < MCUHP 2 >PROGRAM

FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
375	0.41	0.50	0.00	~~6.98~~ 7.60	0.24	0.0	96.39

ADJ XKSAT = 0.08 ((90-10)/90 +1) = 0.15

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 376

S-GRAPH PARAMETERS

= 0.42 sq.mi

path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.89	10.0	0.266

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 0.89 mi Av.Slope= 11.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 40.0 % of (L)= 0.36 mi

Lag = 70.51 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops
Ao	56.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0
GgA	36.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0
Gt	7.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0
Cn	1.0 %	Cashion	Clay	0.17	0.07	0.00	----	0.02	0.04	0
Weight.Av	100.0 %			----	----	0.00	6.90	0.13	0.25	0

Land type weighted DTHETA = 0.00 0.08

FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
376	0.42	0.50	0.00	~~6.90~~ 7.60	0.25	0.0	70.51

ADJ XKSAT = 0.08 $\left(\frac{90-10}{90}+1\right)$ = 0.15

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 379

S-GRAPH PARAMETERS

= 0.46 sq.mi

path (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	7.0	0.640

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.42 mi Av.Slope= 4.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 35.0 % of (L)= 0.50 mi

Lag = 111.79 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockou crops %
GgA	85.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Gh	12.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ao	3.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
Weight.Av	100.0 %			----	----	0.00	3.68	0.24	0.46	0.

Land type weighted DTHETA = 0.00 0.23

INPUT VALUES FOR < MCUHP 2 >PROGRAM FCDMC GIS

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
379	0.46	0.50	0.00	~~3.68~~ 5.10	0.46	0.0	111.79

ADJ XKSAT = $0.23\left(\frac{90-10}{90}+1\right) = 0.43$

VV

WHITE TANKS/AGUA FRIA ADMS

SUBBASIN # : 377A

S-GRAPH PARAMETERS

= 0.27 sq.mi

ath (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.00	20.0	0.224

I=SUM(Ii)=SUM((Li^3/Hi)^.5)

L = 1.00 mi Av.Slope= 20.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 45.0 % of (L)= 0.45 mi

Lag = 72.21 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)*60)

Land Symbol	% Area	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	RTIMP %	Av. Veget cover %	Ck	$\overline{Kn}$	DTHETA condit.
AGR	100 %	Agricultural (tilled/irrig.field)	0.50	50%Rock-	90.0	1.89	0.12	Satur.
Weight.Av	100 %		0.50	0.0	90.0	1.89	0.120	

RTIMP is taken 50% of Rockoutcrops for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

Ck = 1.0 for sand &sandy loam, = Weigted average Ck for others.....fig 4.1

Average values

Map Unit	% OF Area	Soil Series	Textural class (major componets)	DTHETA (dry)	DTHETA (normal)	DTHETA (satur.)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	Rockout crops %
GgA	44.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Bs	24.0 %	Brios	Sandy Loam	0.35	0.25	0.00	----	0.46	0.46	0.
Ma	7.0 %	Maripo	Sandy Loam	0.35	0.25	0.00	----	0.40	0.40	0.
Gt	6.0 %	Glenbar	Silty Loam	0.38	0.24	0.00	----	0.14	0.26	0.
Gh	6.0 %	Gilman	Loam	0.35	0.25	0.00	----	0.25	0.47	0.
Ao	5.0 %	Avondale	Clay Loam	0.26	0.16	0.00	----	0.06	0.11	0.
An	5.0 %	Avonda	Clay Loam	0.27	0.17	0.00	----	0.07	0.13	0.
Vh	3.0 %	Vint	Loamy Sand	0.35	0.29	0.00	----	1.06	2.00	0.
Weight.Av	100.0 %			----	----	0.00	3.82	0.31	0.46	0.

Land type weighted DTHETA = 0.00 0.23

PER FCDMC GIS

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
377A	0.27	0.50	0.00	~~3.82~~ 5.10	0.46	0.0	72.21

ADJ KKSAT = 0.23 ($\frac{90-10}{90}$ +1) = 0.43

```
ID DDM MCUHP2 White tanks No. 3
ID
I      5                    300
IO     3
KK
KM BASIN 1
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      3.4  Lca=      1.4   S=  829.4  Kn= .050  LAG=  35.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.94
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    4.00     .52   10.00
UI  182.    327.    743.    975.   1188.   1505.   2189.   1955.   1537.   1242.
UI  988.    748.    415.    308.    229.    182.     63.     56.     56.     56.
UI   56.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

In 2.0 [illegible] % Imperv

```
ID DDM MCUHP2 White tanks No. 3
ID
I     5                    300
IC    3
KK
KM BASIN 2
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      3.4  Lca=      1.7   S=  162.4  Kn= .050  LAG=  53.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.82
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .18     .35    4.55     .37   12.00
UI  115.    115.    259.    443.    557.    643.    728.    849.   1014.   1348.
UI 1418.   1145.    985.    864.    735.    634.    545.    404.    268.    202.
UI  189.    143.    115.    102.     35.     35.     35.     35.     35.     35.
UI   35.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
ID DDM MCUHP2 White tanks No. 3
ID
I     5                    300
IC    3
KK
KM BASIN 3                                                    30.1
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=      .7   S=   72.5  Kn= .050  LAG=  30.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .81
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .35    4.45     .38     .00
UI   90.    226.    427.    550.    718.   1081.    912.    702.    537.    401.
UI  208.    151.     97.     59.     28.     28.     28.     28.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
IT     5                    300
IO     3
KK
KM BASIN 3A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .5   S=   34.5  Kn= .050  LAG=  28.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .29
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .35    4.30     .42     .00
UI   34.     90.    165.    213.    289.    411.    312.    240.    181.    121.
UI   60.     47.     32.     10.     10.     10.     10.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

29.04

```
ID DDM MCUHP2 White tanks No. 3
IT
IN     5                    300
IO     3
KK
KM BASIN 4
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.1  Lca=       .7   S=  300.0  Kn= .050  LAG=  21.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .30
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    4.35     .44    9.00
UI   47.    191.    286.    443.    513.    346.    237.    115.     67.     36.
UI   14.     14.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
I     5                    300
IO    3
KK
KM BASIN 5                                                    22.2
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .7   S=  391.0  Kn= .050  LAG=  22.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .72
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    4.30     .45    9.00
UI  109.    433.    653.    981.   1241.    852.    594.    323.    177.    104.
UI   33.     33.     33.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
IP
I     5                    300
IO    3
KK
KM BASIN 6
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.0  Lca=       .5   S= 1360.0  Kn= .050  LAG=  14.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .45
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    3.95     .53   10.00
UI  206.    627.   1145.    834.    421.    154.     53.     33.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
I     5                    300
IO    3
KK
KM BASIN 7                                                          14.82
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.0  Lca=       .5   S= 1155.3  Kn= .050  LAG=  14.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .31
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    3.95     .53   10.00
UI  124.    383.    708.    610.    347.    132.     54.     21.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
I     5                    300
IC    3
KK
KM BASIN 8
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.4  Lca=       .9   S=  932.2  Kn= .050  LAG=  26.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .81
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    3.95     .53   10.00
UI  103.    314.    536.    704.   1058.   1138.    821.    608.    420.    207.
UI  147.     95.     31.     31.     31.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
I     5                    300
IO    3
KK
KM BASIN 9
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.2  Lca=      1.2   S=  654.5  Kn= .050  LAG=  30.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.40
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    4.00     .52   10.00
UI  155.    380.    725.    933.   1213.   1828.   1593.   1225.    939.    707.
UI  389.    261.    178.    116.     47.     47.     47.     47.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
IP
IT     5                    300
IO     3
KK
KM BASIN 10
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      3.9  Lca=      1.7   S=  151.9  Kn= .050  LAG=  57.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  2.02
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .16     .35    4.55     .36    4.00
UI  119.    119.    219.    428.    547.    632.    709.    813.    930.   1153.
UI 1500.   1391.   1155.   1006.    893.    765.    668.    577.    473.    323.
UI  210.    201.    191.    119.    119.     84.     36.     36.     36.     36.
UI   36.     36.     36.     36.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
I     5                    300
IO    3
KK
KM BASIN 11                                  1.25
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.5  Lca=      1.3   S=  338.1  Kn= .050  LAG=  36.7
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.56
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .18     .37    5.20     .27    7.00
UI  143.    245.    572.    756.    914.   1143.   1651.   1622.   1253.   1025.
UI  821.    642.    392.    248.    210.    143.     85.     44.     44.     44.
UI   44.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
I      5                    300
IC     3
KK
KM BASIN 12
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.7  Lca=      1.2   S=  196.3  Kn= .050  LAG=  41.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.38
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .16     .35    4.80     .31    3.00
UI  111.    129.    394.    536.    636.    759.    932.   1314.   1276.   1007.
UI  850.    696.    573.    444.    263.    191.    169.    111.     91.     34.
UI   34.     34.     34.     34.     34.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
IT     5                    300
IO     3
KK
KM BASIN 13
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.2  Lca=       .8   S=  109.9  Kn= .050  LAG=  36.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.30
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .35    4.55     .35     .00
UI  120.    210.    484.    639.    774.    972.   1415.   1334.   1039.    847.
UI  674.    527.    304.    206.    167.    120.     60.     37.     37.     37.
UI   37.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
T     5                    300
IO    3
KK
KM BASIN 14
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.3  Lca=      1.1   S=  714.5  Kn= .050  LAG=  29.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.47
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    4.30     .45    9.00
UI  166.    421.    789.   1018.   1340.   1997.   1636.   1264.    961.    700.
UI  363.    275.    166.     93.     51.     51.     51.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
IT     5                    300
IO     3
KK
KM BASIN 15
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.0  Lca=      1.2   S=  401.3  Kn= .050  LAG=  32.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.26
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .18     .35    4.40     .41    7.00
UI  130.    282.    577.    747.    939.   1325.   1550.   1154.    918.    712.
UI  517.    276.    216.    137.     92.     40.     40.     40.     40.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
IT
IT     5                    300
IO     3
KK
KM BASIN 16                                                    33.15
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.9  Lca=       .9   S=  189.1  Kn= .050  LAG=  33.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.13
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .17     .35    4.65     .34   11.00
UI  115.    239.    502.    650.    811.   1121.   1392.   1050.    840.    656.
UI  500.    270.    194.    138.    102.     35.     35.     35.     35.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
IT     5                    300
IO     3
KK    17
KM  BASIN 17
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       1.3  Lca=        .7   S=   67.7  Kn= .050  LAG=  31.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.07
LG   .19     .35    4.10     .46     .00
UI  115.    273.    532.    685.    876.   1316.   1252.    953.    740.    568.
UI  348.    199.    154.    112.     35.     35.     35.     35.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White tanks No. 3
ID
IT     5                    300
IO     3
KK
KM BASIN WT3
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .8   S=   31.1  Kn= .050  LAG=  41.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .44
IN    15
KM RAINFALL DEPTH OF 4.00 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.000
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.65     .30     .00
UI   36.     43.    128.    174.    206.    247.    305.    432.    401.    318.
UI  268.    220.    180.    135.     79.     61.     51.     36.     25.     11.
UI   11.     11.     11.     11.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
IT     5                    300
IO     3
KK
KM BASIN 18
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .6   S=  920.0  Kn= .050  LAG=  18.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .81
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    4.20     .48   10.00
UI  211.    714.   1117.   1727.   1163.    730.    304.    173.     52.     46.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
I
I     5                    300
IO    3
KK
KM BASIN 19
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.1  Lca=      1.0   S=  353.9  Kn= .050  LAG=  31.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .79
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .19     .35    4.45     .41    9.00
UI   84.    194.    384.    495.    629.    930.    942.    709.    555.    428.
UI  283.    147.    121.     84.     33.     26.     26.     26.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
I
I      5                    300
IO     3
KK
KM BASIN 20
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.1  Lca=      1.0   S=  425.4  Kn= .050  LAG=  30.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.07
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .19     .35    4.90     .31    8.00
UI  119.    295.    561.    722.    941.   1418.   1209.    930.    712.    533.
UI  283.    200.    131.     82.     36.     36.     36.     36.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
I
IT      5                    300
IO      3
KK
KM BASIN 21
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.8  Lca=       .9   S=  182.7  Kn= .050  LAG=  31.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .79
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .19     .40    6.00     .20    7.00
UI   84.    191.    379.    489.    621.    910.    950.    712.    560.    431.
UI  293.    150.    124.     84.     38.     26.     26.     26.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
I
I     5                    300
IO    3
KK
KM BASIN 22A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .5   S=  135.6  Kn= .050  LAG=  22.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .50
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .39    5.80     .20    6.00
UI   74.    289.    439.    648.    861.    601.    422.    248.    126.     78.
UI   28.     23.     23.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
:D DDM MCUHP2 White Tanks # 4
:D
:T     5                    300
:O     3
:K
:M BASIN 22
:M  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
:M  L=      1.6  Lca=       .8   S=  426.6  Kn= .050  LAG=  25.0
:M  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
:BA   .57
:N    15
:M RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
:M AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
:PB 4.030
:M THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
:PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
:PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
:PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
:PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
:PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
:PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
:PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
:PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
:PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
:PC  .984    .987    .990    .993    .996    .999   1.000
:LG   .19     .35    4.80     .33    8.00
:UI   77.    258.    418.    563.    888.    743.    544.    393.    214.    129.
:UI   78.     33.     24.     24.      0.      0.      0.      0.      0.      0.
:UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
IT     5                    300
IO     3
KK
KM BASIN 23
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .4  Lca=        .2   S=   90.9  Kn= .050  LAG=  11.7
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .16
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .18     .35    3.95     .51   26.00
UI  108.    318.    471.    234.     72.     22.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
:D DDM MCUHP2 White Tanks # 4
:D
:     5                    300
:O    3
KK
KM BASIN 24
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       .9  Lca=       .4   S=   78.7  Kn= .050  LAG=  22.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .14
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.80     .28     .00
UI   21.     84.    127.    191.    241.    166.    115.     63.     34.     20.
UI    7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
IT
IN     5                    300
IO     3
KK
KM BASIN 25
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .7   S=   86.5  Kn= .050  LAG=  29.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .46
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .39    5.70     .21     .00
UI   53.    136.    253.    326.    435.    638.    505.    390.    295.    208.
UI  107.     81.     53.     23.     16.     16.     16.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
D DDM MCUHP2 White Tanks # 4
D
T     5                    300
O     3
K
M BASIN 26
M  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
M  L=      2.4  Lca=      1.2   S=  227.3  Kn= .050  LAG=  37.9
M  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.16
N    15
M RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
M AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
M THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .17     .33    7.30     .11    3.00
JI  103.    163.    401.    532.    639.    787.   1092.   1251.    956.    788.
JI  637.    510.    359.    200.    171.    117.     99.     32.     32.     32.
JI   32.     32.      0.      0.      0.      0.      0.      0.      0.      0.
JI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
Z
```

```
ID DDM MCUHP2 WT4-27
ID
IT     5                    300
IO     3
KK
KM BASIN 27
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.9  Lca=       .9   S=  164.9  Kn= .050  LAG=  33.5
KM  DESERT/RANGELAND S-GRAPH WAS USED FOR THE BASIN
BA  1.00
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .36    6.80     .13   21.00
UI  101.    187.    445.    661.    863.    948.    940.    830.    642.    495.
UI  385.    294.    221.    175.    135.    107.     71.     69.     38.     24.
UI   24.     24.     24.     24.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IO    3
KK
KM BASIN 28
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.7  Lca=       .9   S=   64.2  Kn= .050  LAG=  38.1
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .86
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .35    4.10     .46     .00
UI   76.    119.    295.    391.    469.    578.    795.    931.    712.    588.
UI  474.    382.    273.    154.    127.     90.     76.     25.     23.     23.
UI   23.     23.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IO    3
KK
KM BASIN 29
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .9  Lca=        .4    S=   55.6  Kn= .050  LAG=  23.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .22
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .35    3.95     .49     .00
UI   31.    113.    176.    245.    370.    276.    199.    135.     64.     42.
UI   23.     10.     10.     10.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 WT4-30
ID
IT     5                    300
IO     3
KK
KM BASIN 30
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.1  Lca=       .5   S=   60.9  Kn= .050  LAG=  26.3
KM  DESERT/RANGELAND S-GRAPH WAS USED FOR THE BASIN
BA   .28
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .35    3.95     .49   32.00
UI   36.    104.    215.    301.    340.    320.    243.    175.    125.     89.
UI   64.     46.     33.     25.     15.      9.      9.      9.      9.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
ID     5                    300
IO     3
KK
KM BASIN 31
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.8  Lca=       .9   S=   56.7  Kn= .050  LAG=  39.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .71
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .19     .35    4.00     .47     .00
UI   60.     83.    223.    299.    358.    434.    565.    751.    612.    500.
UI  412.    335.    268.    171.    105.     97.     60.     52.     18.     18.
UI   18.     18.     18.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

```
ID DDM MCUHP2 WT#4-32
ID
IT     5                    300
IO     3
KK
KM BASIN 32
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.5  Lca=      1.2   S=  528.4  Kn= .050  LAG=  33.2
KM  DESERT/RANGELAND S-GRAPH WAS USED FOR THE BASIN
BA  1.29
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    4.35     .44   10.00
UI  131.    247.    587.    872.   1128.   1236.   1219.   1063.    821.    631.
UI  487.    375.    277.    222.    168.    134.     90.     90.     40.     32.
UI   32.     32.     32.     32.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
ID     5                    300
IO     3
KK
KM BASIN 33
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .8   S=  845.7  Kn= .050  LAG=  22.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .65
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    3.95     .53   10.00
UI   99.    391.    590.    886.   1120.    769.    536.    291.    160.     94.
UI   30.     30.     30.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
II
IT     5                    300
IO     3
KK
KM BASIN 34
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.5  Lca=       .7   S=  675.7  Kn= .050  LAG=  21.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .36
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    3.95     .53   10.00
UI   57.    230.    344.    531.    615.    415.    284.    139.     81.     43.
UI   17.     17.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
IT     5                    300
IO     3
KK
KM BASIN 35
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.5  Lca=       .6   S=  614.3  Kn= .050  LAG=  20.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .39
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .20     .35    3.95     .53   10.00
UI   72.    273.    411.    675.    629.    427.    269.    119.     73.     27.
UI   20.     20.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
IP
IT     5                    300
IO     3
KK
KM BASIN 36
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=  178.0  Kn= .050  LAG=  23.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .24
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .16     .35    4.30     .42    1.00
UI   35.    128.    198.    280.    410.    297.    212.    139.     65.     43.
UI   22.     11.     11.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
IT      5                    300
IO      3
KK
KM BASIN 37
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.3  Lca=      1.0   S=  224.6  Kn= .050  LAG=  35.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA    .95
IN     15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .19     .35    4.40     .42    9.00
JI    90.   167.    374.    489.    599.    766.   1106.    941.    747.    597.
JI   474.   343.    189.    151.    102.     80.     28.     28.     28.     28.
JI    28.     0.      0.      0.      0.      0.      0.      0.      0.      0.
JI     0.     0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
I
I     5                    300
IO    3
KK
KM BASIN 38
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .6   S=  155.0  Kn= .050  LAG=  24.7
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .76
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .17     .35    4.30     .43    4.00
UI  104.    355.    570.    773.   1212.    982.    718.    511.    267.    167.
UI  104.     35.     32.     32.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
IT      5                    300
IO      3
KK
KM BASIN 39
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.0  Lca=      1.0   S=   75.6  Kn= .050  LAG=  40.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .77
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .15     .35    4.20     .44     .00
UI   63.     81.    231.    312.    371.    448.    561.    787.    684.    550.
UI  461.    376.    308.    215.    124.    106.     79.     63.     30.     19.
UI   19.     19.     19.     19.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 WT4-40
ID
IT     5                    300
IO     3
KK
KM BASIN 40
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.5  Lca=       .6   S=  264.5  Kn= .050  LAG=  24.0
KM  DESERT/RANGELAND S-GRAPH WAS USED FOR THE BASIN
BA   .52
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .18     .35    4.00     .50   11.00
UI   73.    249.    484.    652.    688.    578.    401.    281.    193.    135.
UI   93.     64.     50.     21.     18.     18.     18.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IO    3
KK
KM BASIN 41A1
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .2  Lca=        .1   S=   90.5  Kn= .050  LAG=   7.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .02
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .39    5.80     .18     .00
UI   34.     86.     29.      5.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
IT     5                    300
IO     3
KK
KM BASIN 41A2
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .2  Lca=        .1   S=   87.0  Kn= .050  LAG=   7.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .03
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.25     .39     .00
UI   44.    122.     54.     10.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
I
I      5                    300
IO     3
KK
KM BASIN 41A3
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .3  Lca=        .1   S=   84.6  Kn= .050  LAG=   8.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .03
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    3.95     .44     .00
UI   37.    112.     65.     14.      4.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
I
I     5                    300
IC    3
KK
KM BASIN 41A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       .3  Lca=       .2   S=   91.2  Kn= .050  LAG=  10.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .05
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    3.95     .44     .00
UI   44.    138.    136.     50.     13.      5.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
IT
IO     5                    300
IC     3
KK
KM BASIN 41-1
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .6  Lca=        .3   S=   74.6  Kn= .050  LAG=  16.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .15
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    3.95     .44     .00
UI   46.    150.    249.    324.    201.    108.     45.     20.      9.      9.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
I
I     5                    300
IC    3
KK
KM BASIN 41-2
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .7  Lca=        .3   S=   81.1  Kn= .050  LAG=  16.7
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .10
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    3.95     .44     .00
UI   31.    101.    169.    216.    133.     70.     30.     13.      6.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IC    3
KK
KM BASIN 41
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .8   S=   81.5  Kn= .050  LAG=  34.7
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .58
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .21     .35    4.15     .44     .00
UI   56.    108.    238.    309.    382.    496.    699.    562.    450.    357.
UI  282.    192.    102.     90.     56.     38.     17.     17.     17.     17.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IC    3
KK
KM BASIN 42
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.1  Lca=      1.0   S=   96.2  Kn= .050  LAG=  40.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  1.18
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .21     .35    4.70     .31     .00
UI   98.    129.    359.    484.    576.    697.    880.   1224.   1040.    839.
UI  700.    571.    465.    321.    180.    162.    114.     98.     38.     30.
UI   30.     30.     30.     30.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
Z
```

```
ID DDM MCUHP2 White Tanks # 4
IT
     5                    300
IO     3
KK
KM BASIN 43-1
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       .4  Lca=       .2   S=   50.0  Kn= .050  LAG=  12.1
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .04
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    3.95     .44     .00
UI   25.     74.    117.     63.     21.      7.      3.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
IT
IT     5                    300
IO     3
KK
KM BASIN 43-2
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .3  Lca=        .2   S=   60.0  Kn= .050  LAG=  10.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .01
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    3.95     .44     .00
UI    9.     28.     27.     10.      2.      1.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
IT
IO     5                        300
IO     3
KK
KM BASIN 43-3
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .2  Lca=        .1    S=    75.0  Kn= .050  LAG=    8.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .05
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    3.95     .44     .00
UI   70.    200.     99.     20.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I      5                    300
IO     3
KK
KM BASIN 43-4
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .2  Lca=        .1   S=   63.6  Kn= .050  LAG=   8.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .03
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.25     .39     .00
UI   43.    121.     55.     11.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
IT     5                    300
IO     3
KK
KM BASIN 43-5
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .2  Lca=        .1   S=   54.5  Kn= .050  LAG=   8.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .02
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.60     .31     .00
UI   27.     78.     39.      8.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IO    3
KK
KM BASIN 43-6
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       .2  Lca=       .1   S=   63.2  Kn= .050  LAG=   7.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .02
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.45     .34     .00
UI   34.     86.     29.      5.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
IT
     5                        300
IO     3
KK
KM BASIN 43-7
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .2  Lca=        .1   S=   75.0  Kn= .050  LAG=   6.1
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .02
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.60     .31     .00
UI   49.     90.     14.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
IT
IN     5                    300
IO     3
KK
KM BASIN 43-8
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .1  Lca=        .1    S=   76.9  Kn= .050  LAG=   5.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .01
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.60     .31     .00
UI   34.     39.     4.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.     0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IO    3
KK
KM BASIN 43
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       .2  Lca=       .1   S=   94.1  Kn= .050  LAG=   6.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .01
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.35     .37     .00
UI   24.     45.      8.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IC    3
KK
KM BASIN 44
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .8  Lca=        .5   S=   59.2  Kn= .050  LAG=  22.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .22
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.40     .36     .00
UI   33.    132.    200.    300.    379.    260.    181.     99.     54.     32.
UI   10.     10.     10.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
I     5                    300
IO    3
KK
KM BASIN 45-1
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .6  Lca=        .2   S=   84.7  Kn= .050  LAG=  14.7
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .08
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .21     .35    4.45     .37     .00
UI   33.    101.    188.    155.     87.     32.     13.      6.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
ID
IT     5                    300
IO     3
KK
KM BASIN 45
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .1  Lca=        .8   S= 1110.0  Kn= .050  LAG=   7.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .38
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .17     .35    4.70     .31     .00
UI  647.   1636.    554.     86.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 WT4-46-1
ID
IT     5                    300
IO     3
KK
KM BASIN 46-1
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .5   S=   61.9  Kn= .050  LAG=  27.1
KM  DESERT/RANGELAND S-GRAPH WAS USED FOR THE BASIN
BA   .15
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .19     .35    4.00     .47     .00
UI   19.     51.    108.    152.    175.    169.    134.     97.     71.     51.
UI   37.     27.     20.     13.     11.      5.      5.      5.      5.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 WT4-46
ID
IT     5                    300
IO     3
KK
KM BASIN 46
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.4  Lca=      1.1   S=   59.3  Kn= .050  LAG=  47.9
KM  DESERT/RANGELAND S-GRAPH WAS USED FOR THE BASIN
BA   .85
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .19     .35    4.15     .44     .00
UI   60.     60.    151.    258.    355.    439.    514.    556.    573.    554.
UI  514.    430.    355.    299.    249.    208.    173.    142.    118.    101.
UI   88.     63.     62.     41.     41.     41.     19.     15.     15.     15.
UI   15.     15.     15.     15.     15.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 White Tanks # 4
IT
     5                    300
IO
     3
KK
KM BASIN WT4
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .9  Lca=        .5   S=   54.9  Kn= .050  LAG=  24.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .77
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.20     .40     .00
UI  107.    378.    598.    822.   1269.    977.    711.    497.    239.    156.
UI   94.     33.     33.     33.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

20.	83.	90.	32.
25.	101.	95.	26.
30.	117.	100.	19.
[illegible]	139.	105.	15.
[illegible]	172.	110.	6.
45.	235.	115.	6.
50.	211.	120.	6.
55.	172.	125.	6.
60.	147.	130.	6.
65.	123.	135.	6.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 100

Area= .26, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.58 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 46.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 100

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

2

20.	72.	90.	15.
25.	85.	95.	9.
30.	102.	100.	5.
[illegible]5.	127.	105.	5.
[illegible]0.	179.	110.	5.
45.	163.	115.	5.
50.	130.	120.	5.
55.	109.	125.	0.
60.	90.	130.	0.
65.	73.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 100A

Area= .18
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.58 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 41.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 100

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

PHASE 1
MCUHP 2 DATA
Feb 26, 1991

20.	165.
25.	258.
30.	205.
[illegible]	150.
[illegible]	106.
45.	54.
50.	34.
55.	22.
60.	7.
65.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 101

Area= .16
Rainfall distribution is 6-hour
IA= .35 DTHETA= .32 PSIF= 3.61 XKSAT= .26RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 100

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	190.	90.	44.
25.	228.	95.	40.
30.	270.	100.	15.
[illegible]	327.	105.	12.
[illegible]	453.	110.	12.
45.	484.	115.	12.
50.	378.	120.	12.
55.	319.	125.	12.
60.	263.	130.	0.
65.	218.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 102A

Area= .51
Rainfall distribution is 6-hour
IA= .40 DTHETA= .20 PSIF= 6.05 XKSAT= .21RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 42.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 100

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUBBASIN 2A-101
ID
IT     5                    300
IO     3
KK
KM BASIN 101
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .7  Lca=        .4   S=   21.6  Kn= .050  LAG=  24.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .16
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .37    5.20     .23     .00
UI   22.     76.    122.    166.    259.    205.    150.    106.     54.     34.
UI   21.      7.      7.      7.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-102A
ID
IT     5                    300
IO     3
KK
KM BASIN 102A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.0  Lca=       .4   S=   20.0  Kn= .071  LAG=  40.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .51
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .40     .25    5.00     .31     .00
UI   42.     53.    152.    205.    244.    294.    368.    517.    453.    364.
UI  305.    249.    204.    144.     83.     70.     53.     42.     21.     13.
UI   13.     13.     13.     13.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-104
ID
IT     5                    300
IO     3
KK
KM BASIN 104
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .6  Lca=        .3   S=   16.2  Kn= .050  LAG=  22.1
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .15
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .39    5.70     .19     .00
UI   23.     91.    137.    207.    259.    177.    123.     65.     36.     21.
UI    7.      7.      7.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-105
ID
IT     5                    300
IO     3
KK
KM BASIN 105
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .8  Lca=        .3   S=   30.8  Kn= .050  LAG=  21.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .21
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .38    5.60     .20     .00
UI   33.    132.    198.    303.    363.    246.    169.     85.     49.     27.
UI   10.     10.     10.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-106
ID
IT     5                    300
IO     3
KK
KM BASIN 106
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .8   S=   18.9  Kn= .050  LAG=  41.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .77
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .38    5.60     .20     .00
UI   62.     73.    220.    300.    357.    426.    524.    739.    709.    561.
UI  473.    388.    318.    245.    145.    107.     93.     62.     49.     19.
UI   19.     19.     19.     19.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-111
ID
IT     5                    300
IO     3
KK
KM BASIN 111
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .7  Lca=        .4   S=   17.6  Kn= .030  LAG=  16.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .26
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .25     .25    5.40     .26   25.00
UI   87.    280.    482.    563.    338.    161.     73.     26.     17.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-111A
ID
IT     5                    300
IO     3
KK
KM BASIN 111A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       1.5  Lca=        .9   S=   34.0  Kn= .030  LAG=  24.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .61
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .23     .26    5.30     .27   18.00
UI   83.    283.    455.    616.    968.    792.    580.    414.    220.    136.
UI   83.     31.     25.     25.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-112
ID
IT     5                    300
IO     3
KK
KM BASIN 112
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .8   S=   22.0  Kn= .030  LAG=  26.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .63
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .32     .25    5.10     .30   21.00
UI   80.    249.    422.    557.    846.    879.    635.    468.    319.    156.
UI  111.     70.     25.     25.     25.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-113A
ID
IT     5                    300
IO     3
KK
KM BASIN 113A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.4  Lca=       .8   S=   26.9  Kn= .030  LAG=  24.1
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .50
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .25     .25    5.80     .21   30.00
UI   70.    248.    391.    540.    829.    632.    460.    319.    152.    100.
UI   59.     21.     21.     21.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Loop 303, Sun City Grand (revised)
ID
I     5                    300
IO    3
KK
KM BASIN 114
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      3.5  Lca=      1.9   S=   19.3  Kn= .033  LAG=  55.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  2.47
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .29     .25    5.70     .23   26.00
UI  150.    150.    305.    550.    710.    817.    921.   1063.   1228.   1601.
UI 1921.   1626.   1371.   1209.   1047.    907.    774.    660.    482.    304.
UI  259.    247.    172.    150.    127.     46.     46.     46.     46.     46.
UI   46.     46.     46.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Loop 303, Sun City Grand (revised)
ID
I      5                    300
IO     3
KK
KM BASIN 115
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      3.2  Lca=      1.5   S=   13.9  Kn= .033  LAG=  51.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA  2.39
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .28     .25    5.40     .26   27.00
UI  156.    156.    375.    620.    769.    884.   1016.   1182.   1464.   1956.
UI 1788.   1466.   1273.   1098.    940.    795.    661.    468.    275.    262.
UI  234.    156.    156.     66.     48.     48.     48.     48.     48.     48.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
Z
```

```
ID DDM MCUHP2 Loop 303, Village
ID
I     5                    300
I     3
KK
KM BASIN 116
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.4  Lca=       .8   S=   14.1  Kn= .030  LAG=  27.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .66
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .28     .25    4.90     .33   28.00
UI   80.    227.    406.    527.    750.    948.    693.    525.    387.    215.
UI  135.     88.     49.     25.     25.     25.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Loop 303, Village
ID
I      5                    300
IC     3
KK
KM BASIN 117
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.0  Lca=      1.0   S=   20.6  Kn= .043  LAG=  45.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .92
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .31     .25    5.60     .23   26.00
UI   68.     68.    223.    307.    373.    433.    516.    675.    861.    722.
UI  596.    509.    423.    353.    283.    174.    120.    112.     74.     68.
UI   31.     21.     21.     21.     21.     21.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Loop 303, Village
ID
I     5                    300
IO    3
KK
KM BASIN 118
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.0  Lca=       .4   S=   20.6  Kn= .027  LAG=  16.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .16
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .10     .25    4.90     .41   80.00
UI   55.    174.    304.    339.    202.     93.     43.     14.     10.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

20.	28.	90.	48.	160.	3.
25.	35.	95.	41.	165.	3.
[illegible]	41.	100.	36.	170.	3.
[illegible]	47.	105.	27.	175.	3.
40.	52.	110.	18.	180.	3.
45.	60.	115.	14.	185.	0.
50.	68.	120.	13.	190.	0.
55.	87.	125.	12.		
60.	104.	130.	8.		
65.	94.	135.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 118

Area= .15
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.11 XKSAT= .37RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 61.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	6.
215.	6.
[illegible]	6.
[illegible]	6.
230.	6.
235.	6.
240.	6.
245.	6.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 119A

Area= .47
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.91 XKSAT= .20RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 82.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  210.          11.
  215.          11.
  [illegible]0. 11.
  [illegible]5. 11.
  230.          11.
  235.          11.
  240.          11.
  245.           0.
  250.           0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 119
-----------------------------------------------------------------------
Area=    .86
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 5.56  XKSAT=  .31RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  81.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  220.          6.
  225.          6.
  [illegible]30. 6.
  [illegible]5. 6.
  [illegible]40. 6.
  245.          6.
  250.          6.
  255.          6.
  260.          0.
  265.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 120
-----------------------------------------------------------------------
Area=    .54
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 7.23  XKSAT=  .19RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  86.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
ID DDM MCUHP2 SUBBASIN 2A-122A
ID
IT     5                    300
IO     3
KK
KM BASIN 122A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .8   S=   23.5  Kn= .030  LAG=  25.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .38
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .24     .21    6.40     .19   35.00
UI   50.    159.    264.    351.    546.    519.    378.    277.    180.     86.
UI   62.     35.     15.     15.     15.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

1981

20.	89.	90.	166.	160.	8.
25.	109.	95.	147.	165.	8.
30.	129.	100.	129.	170.	8.
[illegible]	146.	105.	109.	175.	8.
[illegible]	161.	110.	80.	180.	8.
45.	183.	115.	52.	185.	8.
50.	205.	120.	46.	190.	8.
55.	248.	125.	43.	195.	0.
60.	317.	130.	37.	200.	0.
65.	331.	135.	26.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 121A

Area= .50
Rainfall distribution is 6-hour
IA= .46 DTHETA= .09 PSIF= 4.03 XKSAT= .57RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	90.	90.	165.	160.	8.
25.	110.	95.	145.	165.	8.
30.	130.	100.	127.	170.	8.
[illegible]	147.	105.	107.	175.	8.
40.	163.	110.	77.	180.	8.
45.	185.	115.	49.	185.	8.
50.	209.	120.	46.	190.	0.
55.	253.	125.	44.	195.	0.
60.	325.	130.	35.		
65.	328.	135.	26.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 121

Area= .50
Rainfall distribution is 6-hour
IA= .46 DTHETA= .09 PSIF= 4.03 XKSAT= .57RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUBBASIN 2A-122B
ID
IT     5                    300
IO     3
KK
KM BASIN 122B
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .8   S=   23.2  Kn= .029  LAG=  25.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .51
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .24     .25    5.30     .29   35.00
UI   68.    227.    369.    496.    781.    672.    492.    356.    202.    115.
UI   73.     34.     21.     21.     21.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
  230.            10.
  235.            10.
  [illegible]     10.
  [illegible]     10.
  250.            10.
  255.            10.
  260.            10.
  265.            10.
  270.            10.
  275.            10.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 122
-----------------------------------------------------------------------
Area=    .89
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 5.83  XKSAT=  .32RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  92.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   65.          222.      135.          36.      205.          6.
 UNIT HYDROGRAPH FOR BASIN:  123

  [illegible]ME    DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
 (min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

  210.            6.
  215.            6.
  220.            0.
  225.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 123
-----------------------------------------------------------------------
Area=    .44
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 6.21  XKSAT=  .30RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  72.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

230.	6.
235.	6.
[illegible]	6.
[illegible]	6.
250.	6.
255.	6.
260.	6.
265.	6.
270.	6.
275.	6.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 124

Area= .57
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.41 XKSAT= .29RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 94.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	432.	90.	59.
25.	517.	95.	26.
[illegible]0.	629.	100.	26.
[illegible]5.	845.	105.	26.
40.	1065.	110.	26.
45.	850.	115.	26.
50.	700.	120.	0.
55.	569.	125.	0.
60.	463.		
65.	367.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 125

Area= 1.00
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 4.58 XKSAT= .24RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 39.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303, Village
ID
I     5                    300
IO    3
KK
KM BASIN 126
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.8  Lca=      1.0   S=   19.3  Kn= .038  LAG=  38.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .95
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .30     .25    5.10     .27   25.00
UI   83.    127.    319.    424.    507.    623.    846.   1029.    793.    655.
UI  529.    428.    317.    181.    140.    107.     83.     38.     25.     25.
UI   25.     25.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
Z
```

```
.          11.
.          11.
/.         11.
5.         11.
0.         11.
,5.        11.
50.        11.
65.        11.
.70.       11.
275.       11.
-----------------------------------------------------------------------
      VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                INPUT DATA FOR SUB-BASIN: 126
-----------------------------------------------------------------------
Area=    .95
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.79  XKSAT=  .39RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  92.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   5.          90.
  10.         276.
  15.         510.
  20.         430.
  25.         243.
  30.          91.
  35.          37.
  40.          15.
  45.           0.
  50.           0.
-----------------------------------------------------------------------
      VOLUME OF CALCULATED HYDROGRAPH (Inches)=   .99
-----------------------------------------------------------------------
                INPUT DATA FOR SUB-BASIN: 127
-----------------------------------------------------------------------
Area=    .22
Rainfall distribution is 6-hour
IA= .12  DTHETA= .18  PSIF= 7.17  XKSAT=  .15RTIMP= 20.0
Phoenix Valley S-graph was selected.
Lag Time =  14.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

				7.
			160.	7.
		136.	165.	7.
	73.	90.	119.	170.	7.
	90.	95.	105.	175.	7.
	106.	100.	89.	180.	7.
	120.	105.	64.	185.	7.
	133.	110.	41.	190.	0.
	151.	115.	38.	195.	0.
	170.	120.	36.	200.	
	206.	125.	29.		
	264.	130.	22.		
	270.	135.			

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 128

Area= .41
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

				0.
			160.	
		71.		
	90.	50.		
	116.	95.	47.	
20.	143.	100.	36.	
25.	164.	105.	28.	
30.	189.	110.	23.	
35.	222.	115.	9.	
40.	287.	120.	9.	
45.	360.	125.	9.	
50.	312.	130.	9.	
55.	259.	135.		
60.	226.			
65.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 129

Area= .43
Rainfall distribution is 6-hour
IA= .42 DTHETA= .05 PSIF= 4.24 XKSAT= .48RTIMP= 4.0
Phoenix Valley S-graph was selected.
Lag Time = 50.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	11.
235.	11.
240.	11.
245.	11.
250.	11.
255.	11.
260.	11.
265.	11.
270.	11.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 130

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.01 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 90.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 131A

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.47 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 131

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 131

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.47 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

Enter hydrograph time step (minutes):
5

UNIT HYDROGRAPH FOR BASIN: 132

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
0.	0.				
5.	0.				
10.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .00

INPUT DATA FOR SUB-BASIN: 132

Area= .41
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.15 XKSAT= .57RTIMP= .0
Lag Time = 71.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-133
ID
IT     5                    300
IO     3
KK
KM BASIN 133
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.1  Lca=       .6   S=   30.4  Kn= .097  LAG=  61.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .50
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .44     .25    4.65     .48    8.00
UI   27.     27.     39.     95.    118.    139.    156.    174.    201.    229.
UI  295.    352.    309.    261.    231.    207.    178.    158.    137.    116.
UI   86.     56.     48.     45.     37.     27.     27.     15.      8.      8.
UI    8.      8.      8.      8.      8.      8.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 133

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.62 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 134

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-135
ID
IT     5                    300
IO     3
KK
KM BASIN 135
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=   27.1  Kn= .076  LAG=  50.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .49
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .38     .25    4.65     .45   15.00
UI   32.     32.     81.    132.    162.    187.    215.    252.    324.    410.
UI  356.    296.    258.    219.    187.    159.    126.     81.     57.     53.
UI   41.     32.     27.     10.     10.     10.     10.     10.     10.     10.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

210.	6.
215.	6.
220.	6.
225.	6.
230.	6.
235.	6.
240.	6.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 135

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 80.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	6.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 136

Area= .46
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 230.          6.      300.          0.
 235.          6.      305.          0.
 240.          6.
 [illegible]   6.
 [illegible]   6.
 255.          6.
 260.          6.
 265.          6.
 270.          6.
 275.          6.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 137
-----------------------------------------------------------------------
Area=    .54
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.62  XKSAT=  .36RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  99.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 230.         11.
 235.         11.
 240.         11.
 [illegible]  11.
 [illegible]  11.
 255.         11.
 260.         11.
 265.         11.
 270.         11.
 275.         11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 138
-----------------------------------------------------------------------
Area=   1.00
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.81  XKSAT=  .38RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  93.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
ID DDM MCUHP2 SUPER-BASIN 2D-2F
ID
IT     5                    300
IO     3
KK
KM BASIN 139
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.0  Lca=       .5   S=   17.0  Kn= .039  LAG=  24.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .47
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .27     .24    6.20     .19   26.00
UI   65.    224.    357.    488.    760.    602.    440.    311.    158.    100.
UI   63.     20.     20.     20.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

PSIF - 0% Impervious w/ curve no. ?
there old value ? no change except XKSAT

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	6.				
[illegible]	6.				
220.	6.				
225.	6.				
230.	6.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 139

Area= .47
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.73 XKSAT= .32RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	53.	90.	22.
25.	65.	95.	21.
[illegible]	75.	100.	16.
[illegible]	88.	105.	13.
[illegible]	104.	110.	9.
45.	142.	115.	4.
50.	155.	120.	4.
55.	123.	125.	4.
60.	105.	130.	4.
65.	90.	135.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 140

Area= .18
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.47 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 48.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
   20.          302.
   25.          213.
   30.          138.
   35.           62.
   40.           34.
   45.           13.
   50.            8.
   55.            8.
   60.            0.
   65.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 141A
-----------------------------------------------------------------------
Area=     .14
Rainfall distribution is 6-hour
IA= .35  DTHETA= .35  PSIF= 4.08  XKSAT=  .52RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  18.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          310.       90.          16.
   25.          403.       95.           0.
   30.          607.      100.           0.
   35.          538.
   40.          413.
   45.          317.
   50.          239.
   55.          135.
   60.           88.
   65.           61.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 141
-----------------------------------------------------------------------
Area=     .47
Rainfall distribution is 6-hour
IA= .35  DTHETA= .34  PSIF= 4.07  XKSAT=  .52RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  30.6 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
  65.          258.      135.          42.      205.          7.
UNIT HYDROGRAPH FOR BASIN:  142

 ME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
 n.)     (cfs)        (min.)     (cfs)       (min.)     (cfs)

 210.          7.
 215.          7.
 220.          0.
 225.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 142
-----------------------------------------------------------------------
Area=    .51
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.18  XKSAT=  .47RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  72.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  65.          248.      135.          41.      205.          7.
UNIT HYDROGRAPH FOR BASIN:  143

 ME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
 n.)     (cfs)        (min.)     (cfs)       (min.)     (cfs)

 210.          7.
 215.          7.
 220.          0.
 225.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 143
-----------------------------------------------------------------------
Area=    .50
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.00  XKSAT=  .41RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  73.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

65. 253. 135. 42. 205. 7.

UNIT HYDROGRAPH FOR BASIN: 144

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 144

Area= .51
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.65 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	6.				
230.	6.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 145A

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.78 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 78.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 145

Area= .48
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.78 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	11.				
220.	11.				
225.	11.				
[illegible]	11.				
[illegible]	11.				
240.	11.				
245.	11.				
250.	11.				
255.	0.				
260.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 146

Area= .90
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.51 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  65.          249.       135.          41.       205.          7.
UNIT HYDROGRAPH FOR BASIN:  147

TIME      DISCHARGE      TIME      DISCHARGE      TIME      DISCHARGE
(min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

 210.          7.
 215.          7.
 220.          0.
 225.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 147
-----------------------------------------------------------------------
Area=     .50
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.59  XKSAT=  .47RTIMP=    .0
Phoenix Valley S-graph was selected.
Lag Time =  73.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 UNIT HYDROGRAPH FOR BASIN:  148

TIME      DISCHARGE      TIME      DISCHARGE      TIME      DISCHARGE
(min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

 210.          7.
 215.          7.
 220.          7.
 225.          0.
 230.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 148
-----------------------------------------------------------------------
Area=     .48
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.77  XKSAT=  .44RTIMP=    .0
Phoenix Valley S-graph was selected.
Lag Time =  74.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	6.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 149

Area= .48
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.81 XKSAT= .49RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	50.	90.	64.	160.	4.
25.	65.	95.	47.	165.	4.
30.	74.	100.	32.	170.	0.
35.	84.	105.	24.	175.	0.
40.	96.	110.	23.		
45.	110.	115.	18.		
50.	144.	120.	14.		
55.	175.	125.	14.		
60.	154.	130.	5.		
65.	129.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 150

Area= .23
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	53.	90.	72.	160.	4.
25.	67.	95.	60.	165.	4.
30.	78.	100.	41.	170.	4.
35.	87.	105.	26.	175.	0.
40.	100.	110.	25.	180.	0.
45.	114.	115.	24.		
50.	140.	120.	15.		
55.	184.	125.	15.		
60.	173.	130.	11.		
65.	143.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 151

Area= .25
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.79 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 57.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	54.	90.	124.	160.	5.
25.	69.	95.	110.	165.	5.
30.	83.	100.	97.	170.	5.
35.	94.	105.	86.	175.	5.
40.	103.	110.	74.	180.	5.
45.	114.	115.	56.	185.	5.
50.	129.	120.	39.	190.	5.
55.	147.	125.	31.	195.	5.
60.	187.	130.	29.	200.	5.
65.	221.	135.	29.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 152

Area= .35
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.16 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 67.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	2.
235.	2.
240.	2.
[illegible]5.	2.
[illegible]0.	2.
255.	2.
260.	2.
265.	2.
270.	2.
275.	2.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 153

Area= .20, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 95.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	53.	90.	21.
25.	64.	95.	19.
30.	74.	100.	12.
[illegible]5.	87.	105.	12.
[illegible]0.	106.	110.	5.
45.	146.	115.	4.
50.	142.	120.	4.
55.	114.	125.	4.
60.	98.	130.	4.
65.	82.	135.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 154

Area= .17
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.53 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 47.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	56.	90.	73.	160.	5.
25.	72.	95.	57.	165.	5.
30.	83.	100.	39.	170.	0.
35.	93.	105.	27.	175.	0.
40.	107.	110.	26.		
45.	122.	115.	23.		
50.	156.	120.	15.		
55.	195.	125.	15.		
60.	177.	130.	8.		
65.	147.	135.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 155

Area= .26
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.71 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

15.	434.
20.	664.
25.	443.
30.	275.
35.	114.
40.	65.
45.	18.
50.	18.
55.	0.
60.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 156A

Area= .31
Rainfall distribution is 6-hour
IA= .12 DTHETA= .25 PSIF= 4.28 XKSAT= .53RTIMP= 20.0
Phoenix Valley S-graph was selected.
Lag Time = 17.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	64.	90.	85.	160.	5.
25.	82.	95.	69.	165.	5.
30.	94.	100.	47.	170.	5.
35.	106.	105.	31.	175.	0.
40.	121.	110.	30.	180.	0.
45.	139.	115.	28.		
50.	173.	120.	18.		
55.	223.	125.	18.		
60.	206.	130.	12.		
65.	171.	135.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 156

Area= .30
Rainfall distribution is 6-hour
IA= .35 DTHETA= .09 PSIF= 3.95 XKSAT= .38RTIMP= 8.0
Phoenix Valley S-graph was selected.
Lag Time = 57.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	278.	90.	109.
25.	339.	95.	97.
30.	392.	100.	64.
35.	463.	105.	63.
40.	568.	110.	20.
45.	781.	115.	20.
50.	736.	120.	20.
55.	593.	125.	20.
60.	510.	130.	20.
65.	427.	135.	20.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 157

Area= .89
Rainfall distribution is 6-hour
IA= .28 DTHETA= .00 PSIF= 3.71 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 46.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUPER-BASIN 2D-2F
ID
IT     5                    300
IO     3
KK
KM BASIN 157
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .6   S=   26.8  Kn= .084  LAG=  59.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .89
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .40     .25    5.20     .36   12.00
UI   50.     50.     78.    175.    219.    257.    289.    326.    373.    435.
UI  560.    646.    535.    458.    407.    359.    312.    272.    238.    189.
UI  133.     89.     84.     82.     51.     50.     43.     15.     15.     15.
UI   15.     15.     15.     15.     15.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER-BASIN 2D-2F
ID
IT     5                    300
IO     3
KK
KM BASIN 158
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.4  Lca=       .7   S=   20.7  Kn= .034  LAG=  27.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .97
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .27     .26    4.20     .48   25.00
UI  120.    350.    615.    802.   1158.   1393.   1004.    753.    547.    280.
UI  196.    120.     54.     37.     37.     37.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

UNIT HYDROGRAPH FOR BASIN: 158

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	13.				
215.	13.				
220.	13.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 158

Area= .97
Rainfall distribution is 6-hour
IA= .39 DTHETA= .08 PSIF= 3.97 XKSAT= .91RTIMP= 6.0
Phoenix Valley S-graph was selected.
Lag Time = 74.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	407.	90.	0.
25.	539.	95.	0.
30.	797.		
35.	641.		
40.	495.		
45.	375.		
50.	269.		
55.	139.		
60.	105.		
65.	66.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 159

Area= .58
Rainfall distribution is 6-hour
IA= .35 DTHETA= .34 PSIF= 3.81 XKSAT= .65RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 29.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	238.	90.	13.
25.	301.	95.	13.
30.	435.	100.	0.
5.	474.	105.	0.
0.	354.		
45.	279.		
50.	216.		
55.	150.		
60.	79.		
65.	64.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 160

Area= .39
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 3.98 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 32.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	195.	125.	43.	195.	7.
60.	236.	130.	42.	200.	7.
65.	297.	135.	40.	205.	7.

T HYDROGRAPH FOR BASIN: 161

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 161

Area= .50
Rainfall distribution is 6-hour
IA= .49 DTHETA= .03 PSIF= 4.09 XKSAT= .77RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	114.	90.	7.
25.	137.	95.	7.
30.	169.	100.	7.
35.	233.	105.	7.
40.	270.	110.	7.
45.	206.	115.	0.
50.	170.	120.	0.
55.	138.		
60.	110.		
65.	78.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 162

Area= .25, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.96 XKSAT= .59RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 38.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 162

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	64.	90.	4.
25.	77.	95.	4.
30.	94.	100.	4.
35.	130.	105.	4.
40.	151.	110.	4.
45.	116.	115.	0.
50.	95.	120.	0.
55.	77.		
60.	62.		
65.	44.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 162

Area= .14
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.62 XKSAT= 1.21RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 38.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	296.	125.	65.	195.	11.
60.	361.	130.	63.	200.	11.
65.	456.	135.	60.	205.	11.

T HYDROGRAPH FOR BASIN: 163

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 163

Area= .75
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.70 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 68.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 164A

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 164A

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.59 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 74.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 164

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 164

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.59 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 220.          11.
 225.          11.
 230.          11.
 [illegible].  11.
 [illegible].  11.
 245.          11.
 250.          11.
 255.          11.
 260.           0.
 265.           0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 165
-----------------------------------------------------------------------
Area=    .90
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.72  XKSAT=  .43RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  86.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 230.          11.
 235.          11.
 [illegible].  11.
 [illegible].  11.
 [illegible].  11.
 255.          11.
 260.          11.
 265.          11.
 270.          11.
 275.          11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 166
-----------------------------------------------------------------------
Area=    .98
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.64  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  95.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
  230.          10.
  235.          10.
  240.          10.
  245.          10.
  250.          10.
  255.          10.
  260.          10.
  265.          10.
  270.          10.
  275.          10.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 167
-----------------------------------------------------------------------
Area=    .97
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.56  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  95.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 (min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

  210.          7.
  215.          7.
  220.          7.
  225.          7.
  230.          7.
  235.          7.
  240.          0.
  245.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 168
-----------------------------------------------------------------------
Area=    .51
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.01  XKSAT=  .38RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  80.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

210.	7.
215.	7.
220.	7.
225.	7.
230.	7.
235.	7.
240.	7.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 169

Area= .51
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.30 XKSAT= .27RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 80.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	77.	90.	49.	160.	0.
25.	95.	95.	34.		
30.	110.	100.	32.		
35.	126.	105.	25.		
40.	148.	110.	19.		
45.	189.	115.	17.		
50.	242.	120.	6.		
55.	212.	125.	6.		
60.	175.	130.	6.		
65.	153.	135.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 170

Area= .29
Rainfall distribution is 6-hour
IA= .41 DTHETA= .04 PSIF= 7.38 XKSAT= .19RTIMP= 5.0
Phoenix Valley S-graph was selected.
Lag Time = 51.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	46.	90.	52.	160.	4.
25.	58.	95.	37.	165.	0.
30.	67.	100.	22.	170.	0.
35.	76.	105.	21.		
40.	88.	110.	20.		
45.	102.	115.	12.		
50.	133.	120.	12.		
55.	158.	125.	8.		
60.	130.	130.	4.		
65.	110.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 173A

Area= .20
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.03 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 54.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	42.	90.	58.	160.	4.
25.	53.	95.	49.	165.	4.
30.	61.	100.	35.	170.	4.
35.	69.	105.	22.	175.	0.
40.	78.	110.	20.	180.	0.
45.	90.	115.	19.		
50.	109.	120.	13.		
55.	143.	125.	12.		
60.	141.	130.	11.		
65.	116.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 173B

Area= .20
Rainfall distribution is 6-hour
IA= .46 DTHETA= .11 PSIF= 3.20 XKSAT= 1.40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 57.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	7.	300.	0.
235.	7.	305.	0.
240.	7.		
245.	7.		
250.	7.		
255.	7.		
260.	7.		
265.	7.		
270.	7.		
275.	7.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 171

Area= .70
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.97 XKSAT= .32RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 99.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	39.	90.	15.
25.	47.	95.	11.
30.	55.	100.	9.
35.	66.	105.	6.
40.	82.	110.	3.
45.	112.	115.	3.
50.	96.	120.	3.
55.	79.	125.	3.
60.	68.	130.	3.
65.	56.	135.	3.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 172

Area= .12
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.91 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 45.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	121.	125.	27.	195.	5.
60.	146.	130.	26.	200.	5.
65.	184.	135.	25.	205.	5.

T HYDROGRAPH FOR BASIN: 173

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 173

Area= .31
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.25 XKSAT= .69RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	474.
25.	735.
30.	574.
35.	418.
40.	294.
45.	145.
50.	94.
55.	57.
60.	19.
65.	19.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 174

Area= .45
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 3.90 XKSAT= .33RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
   20.          215.        90.          13.
   25.          258.        95.          13.
   30.          317.       100.          13.
   35.          439.       105.          13.
   40.          507.       110.          13.
   45.          388.       115.           0.
   50.          320.       120.           0.
   55.          258.
   60.          207.
   65.          147.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 175A
-----------------------------------------------------------------------
Area=    .47
Rainfall distribution is 6-hour
IA= .35  DTHETA= .33  PSIF= 3.80  XKSAT=  .65RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  38.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          279.
   25.          440.
   30.          364.
   35.          267.
   40.          192.
   45.          103.
   50.           63.
   55.           38.
   60.           15.
   65.           12.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 175
-----------------------------------------------------------------------
Area=    .28
Rainfall distribution is 6-hour
IA= .35  DTHETA= .33  PSIF= 3.87  XKSAT=  .33RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  24.9 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	362.	90.	20.
25.	449.	95.	20.
30.	588.	100.	20.
[illegible]	817.	105.	0.
[illegible]	642.	110.	0.
45.	515.		
50.	407.		
55.	319.		
60.	208.		
65.	115.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 176

Area= .67
Rainfall distribution is 6-hour
IA= .35 DTHETA= .34 PSIF= 4.03 XKSAT= .35RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 34.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 162

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	7.
225.	7.
230.	7.
235.	7.
240.	7.
245.	7.
250.	7.
255.	7.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 176A

Area= .62
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.09 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	329.	90.	19.
25.	398.	95.	19.
30.	500.	100.	19.
35.	727.	105.	19.
40.	688.	110.	0.
45.	536.	115.	0.
50.	437.		
55.	348.		
60.	272.		
65.	158.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 176

Area= .67
Rainfall distribution is 6-hour
IA= .36 DTHETA= .37 PSIF= 4.03 XKSAT= .36RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 36.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 177A

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOID

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 177A

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.99 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 177

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 177

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.99 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 74.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 178

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 178

Area= .44
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.75 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 74.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	6.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 179

Area= .46
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.02 XKSAT= .32RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  230.            11.
  235.            11.
  240.            11.
  245.            11.
  250.            11.
  255.            11.
  260.            11.
  265.            11.
  270.            11.
  275.            11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 180
-----------------------------------------------------------------------
Area=     .99
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.94  XKSAT=  .37RTIMP=    .0
Phoenix Valley S-graph was selected.
Lag Time =  95.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  210.            5.
  215.            5.
  220.            5.
  225.            5.
  230.            5.
  235.            5.
  240.            5.
  245.            0.
  250.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 181A
-----------------------------------------------------------------------
Area=     .39
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.77  XKSAT=  .45RTIMP=    .0
Phoenix Valley S-graph was selected.
Lag Time =  80.4 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	65.	90.	124.	160.	6.
25.	79.	95.	111.	165.	6.
30.	93.	100.	97.	170.	6.
35.	106.	105.	83.	175.	6.
40.	117.	110.	63.	180.	6.
45.	132.	115.	44.	185.	6.
50.	148.	120.	34.	190.	6.
55.	177.	125.	32.	195.	0.
60.	224.	130.	31.	200.	0.
65.	248.	135.	19.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 181

Area= .37
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.78 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 64.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	56.	90.	60.	160.	5.
25.	71.	95.	40.	165.	0.
30.	83.	100.	26.	170.	0.
35.	93.	105.	25.		
40.	108.	110.	22.		
45.	127.	115.	15.		
50.	167.	120.	15.		
55.	190.	125.	7.		
60.	154.	130.	5.		
65.	131.	135.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 182

Area= .24
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.89 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 54.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	109.	90.	6.
25.	134.	95.	6.
30.	172.	100.	6.
35.	247.	105.	6.
40.	206.	110.	0.
45.	164.	115.	0.
50.	131.		
55.	104.		
60.	74.		
65.	40.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 183

Area= .21, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.98 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 35.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	10.
215.	10.
220.	10.
225.	10.
230.	10.
235.	10.
240.	10.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 184

Area= .79
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	9.				
215.	9.				
220.	9.				
225.	9.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 185

Area= .69
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.10 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.				
235.	4.				
240.	4.				
245.	4.				
250.	4.				
255.	4.				
260.	4.				
265.	4.				
270.	4.				
275.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 186

Area= .33
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.52 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 90.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
0.	0.				
3.	66.				
106.	147.				
159.	37.				
212.	5.				
265.	0.				
318.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 187

Area= .35
Rainfall distribution is 6-hour
IA= .46 DTHETA= .10 PSIF= 4.02 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.4 min., Hydrograph Time Step= 53min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	274.				
25.	326.				
30.	221.				
35.	152.				
40.	76.				
45.	44.				
50.	24.				
55.	9.				
60.	9.				
65.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 188

Area= .19
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 4.11 XKSAT= .51RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 21.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	298.	90.	16.
25.	372.	95.	16.
30.	516.	100.	0.
35.	631.	105.	0.
40.	471.		
45.	376.		
50.	293.		
55.	219.		
60.	118.		
65.	88.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 189

Area= .51
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.17 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 33.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	141.	90.	297.	160.	13.
25.	176.	95.	264.	165.	13.
30.	209.	100.	232.	170.	13.
35.	238.	105.	207.	175.	13.
40.	261.	110.	167.	180.	13.
45.	292.	115.	124.	185.	13.
50.	331.	120.	77.	190.	13.
55.	381.	125.	76.	195.	13.
60.	482.	130.	72.	200.	0.
65.	570.	135.	59.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 190

Area= .86
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.18 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 66.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	12.
225.	12.
230.	12.
235.	12.
240.	12.
245.	12.
250.	12.
255.	12.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 191

Area= .99
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 192A

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 192A

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.18 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-192A
ID
IT     5                    300
IO     3
KK
KM BASIN 192A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.1  Lca=      .6   S=   31.3  Kn= .098  LAG=  61.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .49
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .45     .07    4.30     .60    5.00
UI   27.     27.     38.     94.    116.    137.    153.    171.    197.    224.
UI  289.    345.    306.    259.    229.    205.    177.    157.    136.    116.
UI   86.     57.     48.     44.     38.     27.     27.     17.      8.      8.
UI    8.      8.      8.      8.      8.      8.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

UNIT HYDROGRAPH FOR BASIN: 192

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 192

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.18 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	11.				
225.	11.				
230.	11.				
235.	11.				
240.	11.				
245.	11.				
250.	11.				
255.	11.				
260.	0.				
265.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 193

Area= .91
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.76 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-194
ID
IT     5                    300
IO     3
KK
KM BASIN 194
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.8  Lca=       .9   S=   19.5  Kn= .120  LAG= 116.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .74
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .50     .25    4.80     .47     .00
UI   21.     21.     21.     21.     21.     54.     71.     82.     93.    102.
UI  109.    117.    123.    130.    139.    150.    161.    169.    189.    214.
UI  249.    276.    276.    246.    223.    206.    192.    180.    171.    160.
UI  148.    138.    129.    121.    111.    104.     99.     83.     70.     62.
UI   45.     38.     38.     36.     35.     35.     29.     21.     21.     21.
UI   21.     20.      7.      7.      7.      7.      7.      7.      7.      7.
UI    7.      7.      7.      7.      7.      7.      7.      7.      7.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUBBASIN 2A-122A
ID
IT     5                    300
IO     3
KK
KM BASIN 122A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .8   S=   23.5  Kn= .030  LAG=  25.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .38
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .24     .21    6.40     .19   35.00
UI   50.    159.    264.    351.    546.    519.    378.    277.    180.     86.
UI   62.     35.     15.     15.     15.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

1021

20.	89.	90.	166.	160.	8.
25.	109.	95.	147.	165.	8.
30.	129.	100.	129.	170.	8.
[illegible]	146.	105.	109.	175.	8.
[illegible]	161.	110.	80.	180.	8.
45.	183.	115.	52.	185.	8.
50.	205.	120.	46.	190.	8.
55.	248.	125.	43.	195.	0.
60.	317.	130.	37.	200.	0.
65.	331.	135.	26.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 121A

Area= .50
Rainfall distribution is 6-hour
IA= .46 DTHETA= .09 PSIF= 4.03 XKSAT= .57RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	90.	90.	165.	160.	8.
25.	110.	95.	145.	165.	8.
30.	130.	100.	127.	170.	8.
[illegible]	147.	105.	107.	175.	8.
40.	163.	110.	77.	180.	8.
45.	185.	115.	49.	185.	8.
50.	209.	120.	46.	190.	0.
55.	253.	125.	44.	195.	0.
60.	325.	130.	35.		
65.	328.	135.	26.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 121

Area= .50
Rainfall distribution is 6-hour
IA= .46 DTHETA= .09 PSIF= 4.03 XKSAT= .57RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUBBASIN 2A-122B
ID
IT     5                    300
IO     3
KK
KM BASIN 122B
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .8   S=   23.2  Kn= .029  LAG=  25.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .51
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .24     .25    5.30     .29   35.00
UI   68.    227.    369.    496.    781.    672.    492.    356.    202.    115.
UI   73.     34.     21.     21.     21.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
 230.            10.
 225.            10.
                 10.
                 10.
 250.            10.
 255.            10.
 260.            10.
 265.            10.
 270.            10.
 275.            10.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 122
-----------------------------------------------------------------------
Area=    .89
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 5.83  XKSAT=  .32RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  92.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   65.          222.      135.          36.      205.          6.
 T HYDROGRAPH FOR BASIN:  123

 ME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
(min.)    (cfs)       (min.)     (cfs)       (min.)     (cfs)

  210.          6.
  215.          6.
  220.          0.
  225.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 123
-----------------------------------------------------------------------
Area=    .44
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 6.21  XKSAT=  .30RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  72.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

230.	6.
235.	6.
[illegible]	6.
[illegible]	6.
250.	6.
255.	6.
260.	6.
265.	6.
270.	6.
275.	6.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 124

Area= .57
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.41 XKSAT= .29RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 94.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	432.	90.	59.
25.	517.	95.	26.
[illegible]0.	629.	100.	26.
[illegible]5.	845.	105.	26.
40.	1065.	110.	26.
45.	850.	115.	26.
50.	700.	120.	0.
55.	569.	125.	0.
60.	463.		
65.	367.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 125

Area= 1.00
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 4.58 XKSAT= .24RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 39.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303, Village
I
I     5                    300
IO    3
KK
KM BASIN 126
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.8  Lca=      1.0   S=   19.3  Kn= .038  LAG=  38.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .95
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .30     .25    5.10     .27   25.00
UI   83.    127.    319.    424.    507.    623.    846.   1029.    793.    655.
UI  529.    428.    317.    181.    140.    107.     83.     38.     25.     25.
UI   25.     25.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
7
```

```
          11.
          11.
          11.
          11.
          11.
          11.
          11.
          11.
          11.
          11.
```

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 126

rea= .95
ainfall distribution is 6-hour
A= .50 DTHETA= .00 PSIF= 4.79 XKSAT= .39RTIMP= .0
hoenix Valley S-graph was selected.
Lag Time = 92.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
          90.
   5.    276.
  10.    510.
  15.    430.
  20.    243.
  25.     91.
  30.     37.
  35.     15.
  40.      0.
  45.      0.
  50.
```

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN 127

Area= .22
Rainfall distribution is 6-hour
IA= .12 DTHETA= .18 PSIF= 7.17 XKSAT= .15RTIMP= 20.0
Phoenix Valley S-graph was selected.
Lag Time = 14.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

		136.	160.	7.
73.	90.	119.	165.	7.
90.	95.	105.	170.	7.
106.	100.	89.	175.	7.
120.	105.	64.	180.	7.
133.	110.	41.	185.	7.
151.	115.	38.	190.	0.
170.	120.	36.	195.	0.
206.	125.	29.	200.	
264.	130.	22.		
270.	135.			

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 128

ea= .41
infall distribution is 6-hour
= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .47RTIMP= .0
oenix Valley S-graph was selected.
ag Time = 63.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

			71.	160.	0.
20.	116.	90.	50.		
25.	143.	95.	47.		
30.	164.	100.	36.		
35.	189.	105.	28.		
40.	222.	110.	23.		
45.	287.	115.	9.		
50.	360.	120.	9.		
55.	312.	125.	9.		
60.	259.	130.	9.		
65.	226.	135.			

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 129

Area= .43
Rainfall distribution is 6-hour
IA= .42 DTHETA= .05 PSIF= 4.24 XKSAT= .48RTIMP= 4.0
Phoenix Valley S-graph was selected.
Lag Time = 50.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	11.
235.	11.
240.	11.
[illegible]5.	11.
[illegible]0.	11.
255.	11.
260.	11.
265.	11.
270.	11.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 130

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.01 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 90.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]0.	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 131A

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.47 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 131

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 131

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.47 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

Enter hydrograph time step (minutes):

T HYDROGRAPH FOR BASIN: 132

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
0.	0.				
5.	0.				
10.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .00

INPUT DATA FOR SUB-BASIN: 132

Area= .41
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.15 XKSAT= .57RTIMP= .0
Lag Time = 71.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-133
ID
IT     5                    300
IO     3
KK
KM BASIN 133
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.1  Lca=       .6   S=   30.4  Kn= .097  LAG=  61.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .50
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .44     .25    4.65     .48    8.00
UI   27.     27.     39.     95.    118.    139.    156.    174.    201.    229.
UI  295.    352.    309.    261.    231.    207.    178.    158.    137.    116.
UI   86.     56.     48.     45.     37.     27.     27.     15.      8.      8.
UI    8.      8.      8.      8.      8.      8.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 133

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.62 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 134

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-135
ID
IT     5                    300
IO     3
KK
KM BASIN 135
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=   27.1  Kn= .076  LAG=  50.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .49
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .38     .25    4.65     .45   15.00
UI   32.     32.     81.    132.    162.    187.    215.    252.    324.    410.
UI  356.    296.    258.    219.    187.    159.    126.     81.     57.     53.
UI   41.     32.     27.     10.     10.     10.     10.     10.     10.     10.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

210.	6.
215.	6.
[illegible].	6.
[illegible].	6.
230.	6.
235.	6.
240.	6.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 135

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 80.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]0.	6.				
215.	6.				
220.	6.				
225.	6.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 136

Area= .46
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 230.          6.      300.          0.
 235.          6.      305.          0.
 240.          6.
[illegible]    6.
[illegible]    6.
 255.          6.
 260.          6.
 265.          6.
 270.          6.
 275.          6.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 137
-----------------------------------------------------------------------
Area=    .54
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.62  XKSAT=  .36RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  99.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 230.         11.
 235.         11.
 [illegible]  11.
 [illegible]  11.
 [illegible]  11.
 255.         11.
 260.         11.
 265.         11.
 270.         11.
 275.         11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 138
-----------------------------------------------------------------------
Area=   1.00
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.81  XKSAT=  .38RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  93.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
ID DDM MCUHP2 SUPER-BASIN 2D-2F
ID
IT     5                        300
IO     3
KK
KM BASIN 139
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       1.0  Lca=        .5   S=   17.0  Kn= .039  LAG=  24.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .47
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .27     .24    6.20     .19   26.00
UI   65.    224.    357.    488.    760.    602.    440.    311.    158.    100.
UI   63.     20.     20.     20.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

PSIF -
tweak ote
value ?

0% Impervious w/ curve no. ?
no change except XK SHT

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	6.				
[illegible]	6.				
220.	6.				
225.	6.				
230.	6.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 139

Area= .47
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.73 XKSAT= .32RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	53.	90.	22.
25.	65.	95.	21.
[illegible]	75.	100.	16.
[illegible]	88.	105.	13.
[illegible]	104.	110.	9.
45.	142.	115.	4.
50.	155.	120.	4.
55.	123.	125.	4.
60.	105.	130.	4.
65.	90.	135.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 140

Area= .18
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.47 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 48.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  20.          302.
  25.          213.
  30.          138.
  35.           62.
  40.           34.
  45.           13.
  50.            8.
  55.            8.
  60.            0.
  65.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 141A
-----------------------------------------------------------------------
Area=    .14
Rainfall distribution is 6-hour
IA= .35  DTHETA= .35  PSIF= 4.08  XKSAT=  .52RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  18.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  20.          310.       90.          16.
  25.          403.       95.           0.
  30.          607.      100.           0.
  35.          538.
  40.          413.
  45.          317.
  50.          239.
  55.          135.
  60.           88.
  65.           61.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 141
-----------------------------------------------------------------------
Area=    .47
Rainfall distribution is 6-hour
IA= .35  DTHETA= .34  PSIF= 4.07  XKSAT=  .52RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  30.6 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
  65.          258.      135.          42.      205.          7.
UNIT HYDROGRAPH FOR BASIN:  142

 TIME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
(min.)     (cfs)        (min.)     (cfs)       (min.)      (cfs)

  210.          7.
  215.          7.
  220.          0.
  225.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 142
-----------------------------------------------------------------------
Area=    .51
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.18  XKSAT=  .47RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  72.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  65.          248.      135.          41.      205.          7.
UNIT HYDROGRAPH FOR BASIN:  143

 TIME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
(min.)     (cfs)        (min.)     (cfs)       (min.)      (cfs)

  210.          7.
  215.          7.
  220.          0.
  225.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 143
-----------------------------------------------------------------------
Area=    .50
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.00  XKSAT=  .41RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  73.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
  65.          253.      135.          42.      205.          7.
UNIT HYDROGRAPH FOR BASIN:  144

 ME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
 .)       (cfs)       (min.)      (cfs)       (min.)      (cfs)

 210.          7.
 215.          7.
 220.          0.
 225.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 144
-----------------------------------------------------------------------
Area=    .51
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.65  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  73.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

  TIME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
 (min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

  0.          6.
  5.          6.
 220.         6.
 225.         6.
 230.         6.
 235.         0.
 240.         0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 145A
-----------------------------------------------------------------------
Area=    .49
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.78  XKSAT=  .42RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  78.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 145

Area= .48
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.78 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	11.				
220.	11.				
[illegible]5.	11.				
[illegible].	11.				
[illegible]5.	11.				
240.	11.				
245.	11.				
250.	11.				
255.	0.				
260.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 146

Area= .90
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.51 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  65.          249.      135.          41.      205.          7.
UNIT HYDROGRAPH FOR BASIN:  147

 TIME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
(min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

  210.          7.
  215.          7.
  220.          0.
  225.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 147
-----------------------------------------------------------------------
Area=    .50
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.59  XKSAT=  .47RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  73.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 UNIT HYDROGRAPH FOR BASIN:  148

 TIME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
(min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

  210.          7.
  215.          7.
  220.          7.
  225.          0.
  230.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 148
-----------------------------------------------------------------------
Area=    .48
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.77  XKSAT=  .44RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  74.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 112
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	6.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 149

Area= .48
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.81 XKSAT= .49RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	50.	90.	64.	160.	4.
25.	65.	95.	47.	165.	4.
30.	74.	100.	32.	170.	0.
35.	84.	105.	24.	175.	0.
40.	96.	110.	23.		
45.	110.	115.	18.		
50.	144.	120.	14.		
55.	175.	125.	14.		
60.	154.	130.	5.		
65.	129.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 150

Area= .23
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	53.	90.	72.	160.	4.
25.	67.	95.	60.	165.	4.
30.	78.	100.	41.	170.	4.
35.	87.	105.	26.	175.	0.
40.	100.	110.	25.	180.	0.
45.	114.	115.	24.		
50.	140.	120.	15.		
55.	184.	125.	15.		
60.	173.	130.	11.		
65.	143.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 151

Area= .25
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.79 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 57.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	54.	90.	124.	160.	5.
25.	69.	95.	110.	165.	5.
30.	83.	100.	97.	170.	5.
35.	94.	105.	86.	175.	5.
40.	103.	110.	74.	180.	5.
45.	114.	115.	56.	185.	5.
50.	129.	120.	39.	190.	5.
55.	147.	125.	31.	195.	5.
60.	187.	130.	29.	200.	5.
65.	221.	135.	29.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 152

Area= .35
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.16 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 67.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 112

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  230.            2.
  235.            2.
  240.            2.
  [illegible].    2.
  [illegible].    2.
  255.            2.
  260.            2.
  265.            2.
  270.            2.
  275.            2.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 153
-----------------------------------------------------------------------
Area=    .20, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.58  XKSAT=  .43RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  95.4 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

   20.          53.       90.          21.
   25.          64.       95.          19.
   30.          74.      100.          12.
   35.          87.      105.          12.
   40.         106.      110.           5.
   45.         146.      115.           4.
   50.         142.      120.           4.
   55.         114.      125.           4.
   60.          98.      130.           4.
   65.          82.      135.           4.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN 154
-----------------------------------------------------------------------
Area=    .17
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.53  XKSAT=  .39RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  47.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	56.	90.	73.	160.	5.
25.	72.	95.	57.	165.	5.
30.	83.	100.	39.	170.	0.
[illegible]	93.	105.	27.	175.	0.
[illegible]	107.	110.	26.		
45.	122.	115.	23.		
50.	156.	120.	15.		
55.	195.	125.	15.		
60.	177.	130.	8.		
65.	147.	135.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 155

Area= .26
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.71 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

15.	434.
20.	664.
25.	443.
30.	275.
35.	114.
40.	65.
45.	18.
50.	18.
55.	0.
60.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 156A

Area= .31
Rainfall distribution is 6-hour
IA= .12 DTHETA= .25 PSIF= 4.28 XKSAT= .53RTIMP= 20.0
Phoenix Valley S-graph was selected.
Lag Time = 17.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	64.	90.	85.	160.	5.
25.	82.	95.	69.	165.	5.
30.	94.	100.	47.	170.	5.
35.	106.	105.	31.	175.	0.
40.	121.	110.	30.	180.	0.
45.	139.	115.	28.		
50.	173.	120.	18.		
55.	223.	125.	18.		
60.	206.	130.	12.		
65.	171.	135.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 156

Area= .30
Rainfall distribution is 6-hour
IA= .35 DTHETA= .09 PSIF= 3.95 XKSAT= .38RTIMP= 8.0
Phoenix Valley S-graph was selected.
Lag Time = 57.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	278.	90.	109.
25.	339.	95.	97.
30.	392.	100.	64.
35.	463.	105.	63.
40.	568.	110.	20.
45.	781.	115.	20.
50.	736.	120.	20.
55.	593.	125.	20.
60.	510.	130.	20.
65.	427.	135.	20.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 157

Area= .89
Rainfall distribution is 6-hour
IA= .28 DTHETA= .00 PSIF= 3.71 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 46.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUPER-BASIN 2D-2F
ID
IT     5                    300
IO     3
KK
KM BASIN 157
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .6   S=   26.8  Kn= .084  LAG=  59.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .89
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .40     .25    5.20     .36   12.00
UI   50.     50.     78.    175.    219.    257.    289.    326.    373.    435.
UI  560.    646.    535.    458.    407.    359.    312.    272.    238.    189.
UI  133.     89.     84.     82.     51.     50.     43.     15.     15.     15.
UI   15.     15.     15.     15.     15.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER-BASIN 2D-2F
ID
IT     5                    300
IO     3
KK
KM BASIN 158
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.4  Lca=       .7   S=   20.7  Kn= .034  LAG=  27.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .97
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .27     .26    4.20     .48   25.00
UI  120.    350.    615.    802.   1158.   1393.   1004.    753.    547.    280.
UI  196.    120.     54.     37.     37.     37.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

UNIT HYDROGRAPH FOR BASIN: 158

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	13.				
215.	13.				
220.	13.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 158

Area= .97
Rainfall distribution is 6-hour
IA= .39 DTHETA= .08 PSIF= 3.97 XKSAT= .91RTIMP= 6.0
Phoenix Valley S-graph was selected.
Lag Time = 74.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	407.	90.	0.
25.	539.	95.	0.
30.	797.		
35.	641.		
40.	495.		
45.	375.		
50.	269.		
55.	139.		
60.	105.		
65.	66.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 159

Area= .58
Rainfall distribution is 6-hour
IA= .35 DTHETA= .34 PSIF= 3.81 XKSAT= .65RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 29.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	238.	90.	13.
25.	301.	95.	13.
30.	435.	100.	0.
[illegible]	474.	105.	0.
[illegible]0.	354.		
45.	279.		
50.	216.		
55.	150.		
60.	79.		
65.	64.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 160

Area= .39
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 3.98 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 32.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	195.	125.	43.	195.	7.
60.	236.	130.	42.	200.	7.
[illegible]5.	297.	135.	40.	205.	7.

[illegible]T HYDROGRAPH FOR BASIN: 161

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 161

Area= .50
Rainfall distribution is 6-hour
IA= .49 DTHETA= .03 PSIF= 4.09 XKSAT= .77RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	114.	90.	7.
25.	137.	95.	7.
30.	169.	100.	7.
[illegible]	233.	105.	7.
[illegible]	270.	110.	7.
45.	206.	115.	0.
50.	170.	120.	0.
55.	138.		
60.	110.		
65.	78.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 162

Area= .25, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.96 XKSAT= .59RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 38.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 162

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	64.	90.	4.
25.	77.	95.	4.
30.	94.	100.	4.
35.	130.	105.	4.
40.	151.	110.	4.
45.	116.	115.	0.
50.	95.	120.	0.
55.	77.		
60.	62.		
65.	44.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 162

Area= .14
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.62 XKSAT= 1.21RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 38.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	296.	125.	65.	195.	11.
60.	361.	130.	63.	200.	11.
65.	456.	135.	60.	205.	11.

T HYDROGRAPH FOR BASIN: 163

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 163

Area= .75
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.70 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 68.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 164A

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 164A

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.59 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 74.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 164

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 164

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.59 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 220.          11.
 225.          11.
 [illegible]   11.
 [illegible]   11.
 [illegible]   11.
 245.          11.
 250.          11.
 255.          11.
 260.           0.
 265.           0.
-----------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------
                 INPUT DATA FOR SUB-BASIN: 165
-----------------------------------------------------------------
Area=    .90
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.72  XKSAT=  .43RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  86.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------
                HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 230.          11.
 235.          11.
 [illegible]   11.
 [illegible]   11.
 [illegible]   11.
 255.          11.
 260.          11.
 265.          11.
 270.          11.
 275.          11.
-----------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------
                 INPUT DATA FOR SUB-BASIN: 166
-----------------------------------------------------------------
Area=    .98
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.64  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  95.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------
                HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
 230.          10.
 235.          10.
 240.          10.
 245.          10.
 250.          10.
 255.          10.
 260.          10.
 265.          10.
 270.          10.
 275.          10.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 167
-----------------------------------------------------------------------
Area=    .97
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.56  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  95.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 (min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

 210.          7.
 215.          7.
 220.          7.
 225.          7.
 230.          7.
 235.          7.
 240.          0.
 245.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 168
-----------------------------------------------------------------------
Area=    .51
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.01  XKSAT=  .38RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  80.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
  210.            7.
  215.            7.
  [illegible].    7.
  [illegible].    7.
  230.            7.
  235.            7.
  240.            7.
  245.            0.
  250.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 169
-----------------------------------------------------------------------
Area=    .51
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 6.30  XKSAT=  .27RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  80.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          77.       90.          49.      160.          0.
   25.          95.       95.          34.
   30.         110.      100.          32.
   [illegible]. 126.      105.          25.
   [illegible]. 148.      110.          19.
   45.         189.      115.          17.
   50.         242.      120.           6.
   55.         212.      125.           6.
   60.         175.      130.           6.
   65.         153.      135.           6.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 170
-----------------------------------------------------------------------
Area=    .29
Rainfall distribution is 6-hour
IA= .41  DTHETA= .04  PSIF= 7.38  XKSAT=  .19RTIMP=  5.0
Phoenix Valley S-graph was selected.
Lag Time =  51.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	46.	90.	52.	160.	4.
25.	58.	95.	37.	165.	0.
30.	67.	100.	22.	170.	0.
35.	76.	105.	21.		
40.	88.	110.	20.		
45.	102.	115.	12.		
50.	133.	120.	12.		
55.	158.	125.	8.		
60.	130.	130.	4.		
65.	110.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 173A

Area= .20
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.03 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 54.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	42.	90.	58.	160.	4.
25.	53.	95.	49.	165.	4.
30.	61.	100.	35.	170.	4.
35.	69.	105.	22.	175.	0.
40.	78.	110.	20.	180.	0.
45.	90.	115.	19.		
50.	109.	120.	13.		
55.	143.	125.	12.		
60.	141.	130.	11.		
65.	116.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 173B

Area= .20
Rainfall distribution is 6-hour
IA= .46 DTHETA= .11 PSIF= 3.20 XKSAT= 1.40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 57.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 230.          7.      300.          0.
 235.          7.      305.          0.
 240.          7.
 [illegible]   7.
 [illegible]   7.
 255.          7.
 260.          7.
 265.          7.
 270.          7.
 275.          7.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 171
-----------------------------------------------------------------------
Area=    .70
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.97  XKSAT=  .32RTIMP=    .0
Phoenix Valley S-graph was selected.
Lag Time =  99.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                  HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  20.          39.       90.          15.
  25.          47.       95.          11.
  [illegible]  55.      100.           9.
  [illegible]  66.      105.           6.
  [illegible]  82.      110.           3.
  45.         112.      115.           3.
  50.          96.      120.           3.
  55.          79.      125.           3.
  60.          68.      130.           3.
  65.          56.      135.           3.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 172
-----------------------------------------------------------------------
Area=    .12
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.91  XKSAT=  .42RTIMP=    .0
Phoenix Valley S-graph was selected.
Lag Time =  45.9 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                  HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
 55.          121.      125.          27.      195.          5.
 60.          146.      130.          26.      200.          5.
 65.          184.      135.          25.      205.          5.
HYDROGRAPH FOR BASIN:  173

 TIME     DISCHARGE      TIME     DISCHARGE      TIME     DISCHARGE
(min.)      (cfs)       (min.)      (cfs)       (min.)      (cfs)

 210.          0.
 215.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 173
-----------------------------------------------------------------------
Area=    .31
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.25  XKSAT=  .69RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  69.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  20.          474.
  25.          735.
  30.          574.
  35.          418.
  40.          294.
  45.          145.
  50.           94.
  55.           57.
  60.           19.
  65.           19.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 174
-----------------------------------------------------------------------
Area=    .45
Rainfall distribution is 6-hour
IA= .35  DTHETA= .33  PSIF= 3.90  XKSAT=  .33RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  24.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	215.	90.	13.
25.	258.	95.	13.
30.	317.	100.	13.
35.	439.	105.	13.
40.	507.	110.	13.
45.	388.	115.	0.
50.	320.	120.	0.
55.	258.		
60.	207.		
65.	147.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 175A

Area= .47
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 3.80 XKSAT= .65RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 38.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	279.
25.	440.
30.	364.
35.	267.
40.	192.
45.	103.
50.	63.
55.	38.
60.	15.
65.	12.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 175

Area= .28
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 3.87 XKSAT= .33RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	362.	90.	20.
25.	449.	95.	20.
30.	588.	100.	20.
[illegible]	817.	105.	0.
[illegible]	642.	110.	0.
45.	515.		
50.	407.		
55.	319.		
60.	208.		
65.	115.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 176

Area= .67
Rainfall distribution is 6-hour
IA= .35 DTHETA= .34 PSIF= 4.03 XKSAT= .35RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 34.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 162

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	7.
225.	7.
230.	7.
235.	7.
240.	7.
245.	7.
250.	7.
255.	7.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 176A

Area= .62
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.09 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	329.	90.	19.
25.	398.	95.	19.
30.	500.	100.	19.
35.	727.	105.	19.
40.	688.	110.	0.
45.	536.	115.	0.
50.	437.		
55.	348.		
60.	272.		
65.	158.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 176

Area= .67
Rainfall distribution is 6-hour
IA= .36 DTHETA= .37 PSIF= 4.03 XKSAT= .36RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 36.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 177A

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOIP

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 177A

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.99 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 177

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 177

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.99 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 74.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 178

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 178

Area= .44
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.75 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 74.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	6.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 179

Area= .46
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.02 XKSAT= .32RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  230.            11.
  235.            11.
  240.            11.
  245.            11.
  250.            11.
  255.            11.
  260.            11.
  265.            11.
  270.            11.
  275.            11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 180
-----------------------------------------------------------------------
Area=    .99
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.94  XKSAT=  .37RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  95.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  210.            5.
  215.            5.
  220.            5.
  225.            5.
  230.            5.
  235.            5.
  240.            5.
  245.            0.
  250.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 181A
-----------------------------------------------------------------------
Area=    .39
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.77  XKSAT=  .45RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  80.4 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 153
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	65.	90.	124.	160.	6.
25.	79.	95.	111.	165.	6.
30.	93.	100.	97.	170.	6.
35.	106.	105.	83.	175.	6.
40.	117.	110.	63.	180.	6.
45.	132.	115.	44.	185.	6.
50.	148.	120.	34.	190.	6.
55.	177.	125.	32.	195.	0.
60.	224.	130.	31.	200.	0.
65.	248.	135.	19.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 181

Area= .37
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.78 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 64.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	56.	90.	60.	160.	5.
25.	71.	95.	40.	165.	0.
30.	83.	100.	26.	170.	0.
35.	93.	105.	25.		
40.	108.	110.	22.		
45.	127.	115.	15.		
50.	167.	120.	15.		
55.	190.	125.	7.		
60.	154.	130.	5.		
65.	131.	135.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 182

Area= .24
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.89 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 54.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 153

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  20.          109.        90.          6.
  25.          134.        95.          6.
  30.          172.       100.          6.
  [illegible]  247.       105.          6.
  [illegible]  206.       110.          0.
  45.          164.       115.          0.
  50.          131.
  55.          104.
  60.           74.
  65.           40.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 183
-----------------------------------------------------------------------
Area=    .21, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.98  XKSAT=  .42RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  35.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  210.          10.
  [illegible]   10.
  [illegible]   10.
  [illegible]   10.
  230.          10.
  235.          10.
  240.          10.
  245.           0.
  250.           0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 184
-----------------------------------------------------------------------
Area=    .79
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.50  XKSAT=  .36RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  81.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]0.	9.				
215.	9.				
220.	9.				
225.	9.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 185

Area= .69
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.10 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.				
235.	4.				
240.	4.				
[illegible]5.	4.				
[illegible]0.	4.				
255.	4.				
260.	4.				
265.	4.				
270.	4.				
275.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 186

Area= .33
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.52 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 90.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]0.	0.				
[illegible]3.	66.				
106.	147.				
159.	37.				
212.	5.				
265.	0.				
318.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 187

Area= .35
Rainfall distribution is 6-hour
IA= .46 DTHETA= .10 PSIF= 4.02 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.4 min., Hydrograph Time Step= 53min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	274.				
25.	326.				
30.	221.				
[illegible]5.	152.				
[illegible]0.	76.				
45.	44.				
50.	24.				
55.	9.				
60.	9.				
65.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 188

Area= .19
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 4.11 XKSAT= .51RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 21.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	298.	90.	16.
25.	372.	95.	16.
30.	516.	100.	0.
35.	631.	105.	0.
40.	471.		
45.	376.		
50.	293.		
55.	219.		
60.	118.		
65.	88.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 189

Area= .51
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.17 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 33.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	141.	90.	297.	160.	13.
25.	176.	95.	264.	165.	13.
30.	209.	100.	232.	170.	13.
35.	238.	105.	207.	175.	13.
40.	261.	110.	167.	180.	13.
45.	292.	115.	124.	185.	13.
50.	331.	120.	77.	190.	13.
55.	381.	125.	76.	195.	13.
60.	482.	130.	72.	200.	0.
65.	570.	135.	59.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 190

Area= .86
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.18 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 66.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	12.
225.	12.
230.	12.
235.	12.
240.	12.
245.	12.
250.	12.
255.	12.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 191

Area= .99
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 192A

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 192A

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.18 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-192A
ID
IT     5                    300
IO     3
KK
KM BASIN 192A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       1.1  Lca=        .6   S=   31.3  Kn= .098  LAG=  61.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .49
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .45     .07    4.30     .60    5.00
UI   27.     27.     38.     94.    116.    137.    153.    171.    197.    224.
UI  289.    345.    306.    259.    229.    205.    177.    157.    136.    116.
UI   86.     57.     48.     44.     38.     27.     27.     17.      8.      8.
UI    8.      8.      8.      8.      8.      8.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

UNIT HYDROGRAPH FOR BASIN: 192

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 192

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.18 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	11.				
225.	11.				
230.	11.				
235.	11.				
240.	11.				
245.	11.				
250.	11.				
255.	11.				
260.	0.				
265.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 193

Area= .91
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.76 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-194
ID
IT     5                        300
IO     3
KK
KM BASIN 194
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       1.8  Lca=        .9   S=   19.5  Kn= .120  LAG= 116.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .74
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .50     .25    4.80     .47     .00
UI   21.     21.     21.     21.     21.     54.     71.     82.     93.    102.
UI  109.    117.    123.    130.    139.    150.    161.    169.    189.    214.
UI  249.    276.    276.    246.    223.    206.    192.    180.    171.    160.
UI  148.    138.    129.    121.    111.    104.     99.     83.     70.     62.
UI   45.     38.     38.     36.     35.     35.     29.     21.     21.     21.
UI   21.     20.      7.      7.      7.      7.      7.      7.      7.      7.
UI    7.      7.      7.      7.      7.      7.      7.      7.      7.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUB-194A
ID
IT     5                    300
IO     3
KK
KM BASIN 194A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .5  Lca=        .3   S=   19.4  Kn= .050  LAG=  18.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .25
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .50     .25    4.80     .36     .00
UI   60.    208.    320.    517.    370.    240.    110.     59.     24.     14.
UI   14.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
  230.          10.      300.          0.
  235.          10.
  240.          10.
  245.          10.
  250.          10.
  255.          10.
  260.          10.
  265.          10.
  270.          10.
  275.          10.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 194
-----------------------------------------------------------------------
Area=    .99
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.75  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  97.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


  230.          13.      300.          5.
  235.           5.      305.          5.
  240.           5.      310.          0.
  245.           5.      315.          0.
  250.           5.
  255.           5.
  260.           5.
  265.           5.
  270.           5.
  275.           5.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 195
-----------------------------------------------------------------------
Area=    .49
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.51  XKSAT=  .44RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time = 102.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

UNIT HYDROGRAPH FOR BASIN: 196

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 196

Area= .47
Rainfall distribution is 6-hour
IA= .46 DTHETA= .03 PSIF= 3.74 XKSAT= .45RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 74.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	32.	300.	10.
235.	27.	305.	10.
240.	10.	310.	10.
245.	10.	315.	0.
250.	10.	320.	0.
255.	10.		
260.	10.		
265.	10.		
270.	10.		
275.	10.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 197

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 104.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	18.	300.	9.
235.	9.	305.	0.
240.	9.	310.	0.
245.	9.		
250.	9.		
255.	9.		
260.	9.		
265.	9.		
270.	9.		
275.	9.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 198

Area= .91
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.97 XKSAT= .38RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 101.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 199

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	2.				
215.	2.				
220.	2.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 199

Area= .11
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 SUB-198
ID
IT     5                    300
IO     3
KK
KM BASIN 198
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .6   S=   10.3  Kn= .091  LAG=  77.1
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .90
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .42     .09    4.80     .44   12.00
UI   39.     39.     39.     80.    137.    165.    189.    213.    229.    252.
UI  281.    308.    360.    441.    515.    461.    398.    356.    325.    298.
UI  264.    239.    215.    192.    169.    133.    103.     70.     69.     65.
UI   63.     39.     39.     39.     25.     12.     12.     12.     12.     12.
UI   12.     12.     12.     12.     12.     12.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
  230.          9.      300.          5.
  235.          5.      305.          0.
  240.          5.      310.          0.
  245.          5.
  250.          5.
  255.          5.
  260.          5.
  265.          5.
  270.          5.
  275.          5.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 202
-----------------------------------------------------------------------
Area=    .48
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.99  XKSAT=  .40RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time = 101.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.         131.
   25.         189.
   30.         135.
   35.          96.
   40.          62.
   45.          29.
   50.          19.
   55.           9.
   60.           5.
   65.           5.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=   .99
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 203
-----------------------------------------------------------------------
Area=    .11
Rainfall distribution is 6-hour
IA= .35  DTHETA= .38  PSIF= 5.29  XKSAT=  .21RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  23.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
   20.          396.
   25.          462.
   30.          312.
   35.          214.
   40.          105.
   45.           61.
   50.           33.
   55.           13.
   60.           13.
   65.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=    .99
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 204
-----------------------------------------------------------------------
Area=    .27
Rainfall distribution is 6-hour
IA= .35  DTHETA= .37  PSIF= 3.85  XKSAT=  .34RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  21.6 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


    0.            0.
    5.           40.
   10.          117.
   15.          176.
   20.           90.
   25.           28.
   30.            9.
   35.            5.
   40.            0.
   45.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 205
-----------------------------------------------------------------------
Area=    .06
Rainfall distribution is 6-hour
IA= .35  DTHETA= .36  PSIF= 3.50  XKSAT=  .28RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  11.8 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	74.	90.	59.	160.	0.
25.	92.	95.	36.	165.	0.
30.	105.	100.	32.		
35.	121.	105.	30.		
40.	140.	110.	19.		
45.	172.	115.	19.		
50.	230.	120.	11.		
55.	220.	125.	6.		
60.	179.	130.	6.		
65.	155.	135.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 200

Area= .29
Rainfall distribution is 6-hour
IA= .43 DTHETA= .18 PSIF= 3.70 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 52.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	233.	90.	0.
25.	304.	95.	0.
30.	457.		
35.	381.		
40.	294.		
45.	225.		
50.	166.		
55.	86.		
60.	64.		
65.	40.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 201

Area= .34
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.56 XKSAT= .29RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 30.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 183

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
   15.          159.
   20.          252.
   25.          175.
   30.          112.
   35.           49.
   40.           27.
   45.           10.
   50.            7.
   55.            0.
   60.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=   .99
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 206
-----------------------------------------------------------------------
Area=    .12
Rainfall distribution is 6-hour
IA= .35  DTHETA= .35  PSIF= 4.05  XKSAT=  .36RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  18.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 183
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

225.	12.
230.	12.
[illegible].	12.
[illegible].	12.
245.	12.
250.	12.
255.	12.
260.	12.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 207

Area= 1.00, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.99 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	314.	90.	16.
[illegible]5.	400.	95.	0.
[illegible].	593.	100.	0.
[illegible]5.	595.		
40.	448.		
45.	350.		
50.	270.		
55.	176.		
60.	93.		
65.	76.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 207A

Area= .50
Rainfall distribution is 6-hour
IA= .35 DTHETA= .34 PSIF= 4.03 XKSAT= .55RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 31.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	12.
215.	12.
[illegible].	12.
[illegible]	12.
230.	12.
235.	12.
240.	12.
245.	12.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 208

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.18 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 83.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 209

[illegible]E [illegible].)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 209

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.85 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 74.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	7.				
215.	7.				
220.	7.				
225.	7.				
230.	7.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 209A

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.27 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 78.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	6.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 210

Area= .46
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.84 XKSAT= .52RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 76.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
	6.				
215.	6.				
220.	6.				
225.	6.				
230.	6.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 211

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.69 XKSAT= .52RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 78.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	6.	300.	0.
235.	6.	305.	0.
[illegible]	6.		
[illegible]	6.		
250.	6.		
255.	6.		
260.	6.		
265.	6.		
270.	6.		
275.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 212

Area= .54
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .49RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 100.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	164.	90.	10.
25.	197.	95.	10.
	244.	100.	10.
	345.	105.	10.
40.	374.	110.	10.
45.	285.	115.	0.
50.	235.	120.	0.
55.	189.		
60.	151.		
65.	103.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 213

Area= .35
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.50 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 37.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	176.
25.	267.
	201.
	146.
40.	100.
45.	47.
50.	31.
55.	18.
60.	7.
65.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 214

Area= .16
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.16 XKSAT= .38RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	233.	90.	12.
25.	303.	95.	0.
	457.	100.	0.
	398.		
40.	306.		
45.	235.		
50.	177.		
55.	98.		
60.	65.		
65.	45.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 215

Area= .35
Rainfall distribution is 6-hour
IA= .35 DTHETA= .34 PSIF= 3.71 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 30.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	88.	90.	172.	160.	8.
25.	108.	95.	154.	165.	8.
30.	128.	100.	134.	170.	8.
35.	145.	105.	117.	175.	8.
40.	160.	110.	89.	180.	8.
45.	180.	115.	63.	185.	8.
50.	203.	120.	47.	190.	8.
55.	240.	125.	44.	195.	0.
60.	304.	130.	43.	200.	0.
65.	342.	135.	27.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 216

Area= .51, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .46 DTHETA= .09 PSIF= 4.21 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 65.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 216

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	271.	90.	14.
25.	341.	95.	14.
[illegible].	487.	100.	0.
[illegible].	551.	105.	0.
40.	410.		
45.	325.		
50.	252.		
55.	178.		
60.	95.		
65.	77.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 215A

Area= .45
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 3.94 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 32.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 217

[illegible]IME [illegible].)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 217

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.19 XKSAT= .38RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	12.
225.	12.
[illegible].	12.
[illegible]	12.
[illegible].	12.
245.	12.
250.	12.
255.	12.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 218

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.20 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	7.				
225.	7.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 219

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.21 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 76.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	7.				
215.	7.				
220.	7.				
225.	7.				
230.	7.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 220

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.13 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 78.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
[illegible]	6.				
[illegible]	6.				
220.	6.				
225.	6.				
230.	6.				
235.	6.				
240.	0.				
245.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 221

Area= .48
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.53 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 79.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.
235.	4.
	4.
	4.
250.	4.
255.	4.
260.	4.
265.	4.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 221A

Area= .31
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.66 XKSAT= .53RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 88.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	34.	300.	10.
235.	34.	305.	10.
	34.	310.	10.
	24.	315.	10.
250.	10.	320.	10.
255.	10.	325.	0.
260.	10.	330.	0.
265.	10.		
270.	10.		
275.	10.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 222

Area= 1.10
Rainfall distribution is 6-hour
IA= .31 DTHETA= .35 PSIF= 3.59 XKSAT= .29RTIMP= 15.0
Phoenix Valley S-graph was selected.
Lag Time = 108.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	643.	90.	37.
25.	786.	95.	37.
[illegible]	1003.	100.	37.
[illegible]	1453.	105.	37.
40.	1254.	110.	0.
45.	993.	115.	0.
50.	797.		
55.	634.		
60.	465.		
65.	257.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 223

Area= 1.26
Rainfall distribution is 6-hour
IA= .12 DTHETA= .33 PSIF= 5.09 XKSAT= .20RTIMP= 72.0
Phoenix Valley S-graph was selected.
Lag Time = 35.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	606.	90.	0.
25.	833.	95.	0.
[illegible]	1145.		
[illegible]	854.		
40.	655.		
45.	492.		
50.	310.		
55.	163.		
60.	121.		
65.	79.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 224

Area= .80
Rainfall distribution is 6-hour
IA= .35 DTHETA= .32 PSIF= 4.03 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 28.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	206.	90.	12.
25.	250.	95.	12.
[illegible]	311.	100.	12.
[illegible]	448.	105.	12.
40.	450.	110.	12.
45.	347.	115.	0.
50.	284.	120.	0.
55.	227.		
60.	179.		
65.	112.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 225

Area= .43
Rainfall distribution is 6-hour
IA= .30 DTHETA= .33 PSIF= 3.63 XKSAT= .31RTIMP= 4.0
Phoenix Valley S-graph was selected.
Lag Time = 36.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	827.	90.	0.
25.	1094.	95.	0.
0.	1619.		
.	1306.		
0.	1008.		
45.	765.		
50.	549.		
55.	283.		
60.	214.		
65.	134.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 226

Area= 1.18

Rainfall distribution is 6-hour

IA= .15 DTHETA= .26 PSIF= 3.53 XKSAT= .34RTIMP= 17.0

Phoenix Valley S-graph was selected.

Lag Time = 29.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
   20.          294.
   25.          397.
   30.          277.
   35.          195.
   40.          117.
   45.           58.
   50.           36.
   55.           14.
   60.           10.
   65.           10.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 227
-----------------------------------------------------------------------
Area=    .23, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .32  DTHETA= .34  PSIF= 3.77  XKSAT=  .33RTIMP=  3.0
Phoenix Valley S-graph was selected.
Lag Time =  22.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                  HEC-1 INPUT IS STORED IN FILE: 227
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

10.	86.
15.	150.
20.	170.
25.	102.
30.	47.
35.	22.
40.	7.
45.	5.
50.	0.
55.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 228A

Area= .08, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.23 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 16.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 228A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	224.	90.	0.
25.	319.		
	402.		
	293.		
40.	222.		
45.	164.		
50.	91.		
55.	57.		
60.	37.		
65.	20.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 228

Area= .28
Rainfall distribution is 6-hour
IA= .35 DTHETA= .36 PSIF= 3.58 XKSAT= .29RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 27.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	805.
25.	853.
	577.
	387.
40.	174.
45.	107.
50.	51.
55.	25.
60.	25.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 229

Area= .51
Rainfall distribution is 6-hour
IA= .33 DTHETA= .34 PSIF= 4.11 XKSAT= .37RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 21.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
   20.          31.       90.          0.
   25.          43.
   30.          57.
   35.          43.
   40.          33.
   45.          24.
   50.          15.
   55.           8.
   60.           6.
   65.           4.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN 230
-----------------------------------------------------------------------
Area=     .04
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.55  XKSAT=  .47RTIMP=    .0
Phoenix Valley S-graph was selected.
Lag Time =  28.4 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                  HEC-1 INPUT IS STORED IN FILE: 230A
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

15.	293.
20.	390.
25.	243.
30.	133.
35.	55.
40.	25.
45.	11.
50.	11.
55.	0.
60.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 230A

Area= .18, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.03 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 16.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 230A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	186.	90.	10.
25.	230.	95.	10.
[illegible]	299.	100.	10.
[illegible]	422.	105.	0.
40.	339.	110.	0.
45.	271.		
50.	215.		
55.	170.		
60.	115.		
65.	61.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 231

Area= .35
Rainfall distribution is 6-hour
IA= .37 DTHETA= .31 PSIF= 3.61 XKSAT= .79RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 34.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	565.	90.	30.
25.	713.	95.	30.
[illegible]	1028.	100.	0.
[illegible]	1134.	105.	0.
[illegible]	844.		
45.	667.		
50.	517.		
55.	361.		
60.	190.		
65.	154.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 232

Area= .93
Rainfall distribution is 6-hour
IA= .35 DTHETA= .33 PSIF= 4.08 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 32.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	267.	90.	15.
25.	331.	95.	15.
[illegible]	430.	100.	15.
[illegible]	604.	105.	0.
40.	483.	110.	0.
45.	386.		
50.	306.		
55.	242.		
60.	163.		
65.	86.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 233

Area= .50
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.22 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 34.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	7.
[illegible]	7.
[illegible]	7.
[illegible]	7.
230.	7.
235.	7.
240.	7.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 234

Area= .53
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.25 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	6.
215.	6.
[illegible]	6.
[illegible]	6.
230.	6.
235.	6.
240.	6.
245.	6.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 235

Area= .47
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.27 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 82.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	6.
[illegible]	6.
[illegible]	6.
[illegible]	6.
230.	6.
235.	6.
240.	6.
245.	6.

230.	12.
235.	12.
[illegible]	12.
[illegible]	12.
250.	12.
255.	12.
260.	12.
265.	12.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 236

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.88 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 89.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	6.
225.	6.
[illegible]	6.
[illegible]	6.
240.	6.
245.	6.
250.	6.
255.	6.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 237

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.61 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 85.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 210.          6.
 215.          6.
 220.          6.
 225.          6.
 230.          6.
 235.          6.
 240.          6.
 245.          0.
 250.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN 238
-----------------------------------------------------------------------
Area=    .50, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.52  XKSAT=  .47RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  80.9 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                  HEC-1 INPUT IS STORED IN FILE: 238
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
	6.				
215.	6.				
220.	6.				
225.	6.				
230.	6.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 239

Area= .48
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	151.	125.	41.	195.	6.
50.	180.	130.	34.	200.	6.
[illegible]	225.	135.	32.	205.	6.

HYDROGRAPH FOR BASIN: 240

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 240

Area= .40
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 70.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	682.	90.	50.
25.	817.	95.	41.
[illegible]	1005.	100.	41.
[illegible]	1376.	105.	41.
40.	1635.	110.	41.
45.	1253.	115.	0.
50.	1036.	120.	0.
55.	834.		
60.	673.		
65.	488.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 241

Area= 1.51
Rainfall distribution is 6-hour
IA= .38 DTHETA= .28 PSIF= 4.04 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 38.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	342.	90.	141.
25.	419.	95.	132.
[illegible]	482.	100.	92.
[illegible]	568.	105.	80.
40.	680.	110.	49.
45.	927.	115.	25.
50.	974.	120.	25.
55.	774.	125.	25.
60.	661.	130.	25.
65.	564.	135.	25.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 242

Area= 1.14
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.76 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 47.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 242
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .8  Lca=        .4   S=   24.0  Kn= .030  LAG=  15.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .82
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.70     .30     .00
UI  311.    965.   1768.   1656.    969.    387.    177.     55.     55.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 242A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       .4  Lca=       .2   S=   41.5  Kn= .030  LAG=   8.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .10
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.25     .41     .00
UI  130.    382.    206.     44.     12.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 242B
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .8  Lca=        .4   S=   45.2  Kn= .030  LAG=  13.6
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .30
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.80     .29     .00
UI  146.    441.    793.    541.    252.     97.     27.     23.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 243
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .5  Lca=        .3   S=   25.6  Kn= .030  LAG=  11.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .15
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.90     .28     .00
UI  107.    318.    441.    206.     62.     17.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 243A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .9  Lca=        .4   S=   82.7  Kn= .030  LAG=  13.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .18
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .25     .25    4.30     .45   30.00
UI   94.    279.    492.    315.    135.     52.     14.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 243B
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .5  Lca=        .3   S=   31.6  Kn= .065  LAG=  22.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .09
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .25    4.25     .56   18.00
UI   14.     55.     83.    126.    155.    106.     73.     38.     21.     12.
UI    4.      4.      4.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 244
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .8  Lca=        .4   S=   24.0  Kn= .118  LAG=  60.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .25
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .50     .25    4.65     .50     .00
UI   14.     14.     21.     49.     61.     72.     80.     91.    104.    120.
UI  155.    181.    151.    129.    115.    101.     88.     77.     67.     55.
UI   39.     25.     24.     23.     15.     14.     13.      4.      4.      4.
UI    4.      4.      4.      4.      4.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 244A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .8  Lca=        .3   S=   80.4  Kn= .030  LAG=  10.9
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .11
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .32     .32    4.70     .31    9.00
UI   86.    261.    317.    133.     39.     10.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Super Basin 12
ID
IT     5                    300
IO     3
KK
KM BASIN 245
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.0  Lca=       .5   S=   13.8  Kn= .090  LAG=  60.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .24
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .38     .25    5.10     .40   18.00
UI   13.     13.     20.     47.     58.     68.     76.     86.     98.    113.
UI  146.    173.    146.    125.    110.     98.     85.     75.     65.     54.
UI   39.     24.     23.     22.     16.     13.     13.      5.      4.      4.
UI    4.      4.      4.      4.      4.      4.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
KK 245A
KM BASIN 245A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .4  Lca=        .2   S=   17.5  Kn= .050  LAG=  16.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .09
LG   .35     .35    3.74     .51     .00
UI   31.     98.    171.    191.    114.     52.     24.      8.      6.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

210.	5.
215.	5.
	5.
	5.
230.	5.
235.	5.
240.	5.
245.	5.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 245

Area= .40
Rainfall distribution is 6-hour
IA= .47 DTHETA= .07 PSIF= 3.88 XKSAT= .89RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 82.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	316.	90.	55.
25.	378.	95.	19.
	458.	100.	19.
	595.	105.	19.
40.	794.	110.	19.
45.	648.	115.	19.
50.	529.	120.	0.
55.	436.	125.	0.
60.	355.		
65.	284.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 246

Area= .75
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.22 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 39.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
[illegible]	6.				
[illegible]	6.				
220.	6.				
225.	6.				
230.	6.				
235.	6.				
240.	0.				
245.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 247

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.21 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 79.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	11.
235.	11.
[illegible]	11.
[illegible]	11.
250.	11.
255.	11.
260.	11.
265.	11.
270.	11.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 248

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.22 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 90.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	11.
235.	11.
[illegible]1.	11.
[illegible]	11.
[illegible]	11.
255.	11.
260.	11.
265.	11.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 249

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.98 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 89.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
[illegible]	6.				
215.	6.				
220.	6.				
225.	6.				
230.	6.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 250

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.73 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 78.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	6.
220.	6.
[illegible]5.	6.
[illegible]	6.
235.	6.
240.	6.
245.	6.
250.	6.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 250A

Area= .51
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 207

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	6.
[illegible].	6.
[illegible].	6.
225.	6.
230.	6.
235.	6.
240.	6.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 251

Area= .50, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.53 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 80.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 210.          6.
 [illegible]   6.
 [illegible]   6.
 225.          6.
 230.          6.
 235.          6.
 240.          6.
 245.          0.
 250.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 252
-----------------------------------------------------------------------
Area=    .50
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 4.45  XKSAT=  .40RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  81.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 251
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


 210.         13.
 [illegible]  13.
 [illegible]  13.
 225.         13.
 230.         13.
 235.         13.
 240.         13.
 245.          0.
 250.          0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 253
-----------------------------------------------------------------------
Area=   1.00
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.82  XKSAT=  .43RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  81.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 251
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	179.	90.	0.
25.	239.	95.	0.
[illegible]0.	349.		
[illegible].	274.		
40.	211.		
45.	160.		
50.	111.		
55.	57.		
60.	43.		
65.	29.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 253A

Area= .25
Rainfall distribution is 6-hour
IA= .32 DTHETA= .33 PSIF= 4.04 XKSAT= .37RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 29.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	190.	90.	72.
25.	230.	95.	58.
[illegible]0.	267.	100.	43.
[illegible]5.	317.	105.	33.
40.	394.	110.	13.
45.	538.	115.	13.
50.	478.	120.	13.
55.	389.	125.	13.
60.	334.	130.	13.
65.	279.	135.	13.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 254

Area= .59
Rainfall distribution is 6-hour
IA= .40 DTHETA= .15 PSIF= 3.67 XKSAT= .35RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 46.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

10.	248.
15.	444.
[illegible].	456.
[illegible]	271.
30.	115.
35.	56.
40.	15.
45.	14.
50.	0.
55.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 254A

Area= .22
Rainfall distribution is 6-hour
IA= .12 DTHETA= .19 PSIF= 5.82 XKSAT= .21RTIMP= 20.0
Phoenix Valley S-graph was selected.
Lag Time = 15.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	1293.
25.	1621.
[illegible].	1109.
[illegible]	772.
40.	412.
45.	228.
50.	132.
55.	44.
60.	44.
65.	44.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 255

Area= .94
Rainfall distribution is 6-hour
IA= .15 DTHETA= .22 PSIF= 3.88 XKSAT= .29RTIMP= 12.0
Phoenix Valley S-graph was selected.
Lag Time = 22.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 256

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	6.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 256

Area= .43
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.84 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.				
235.	4.				
[illegible]	4.				
[illegible]	4.				
250.	4.				
255.	4.				
260.	4.				
265.	4.				
270.	4.				
275.	4.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 257

Area= .34
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.82 XKSAT= .24RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 96.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	198.	90.	11.
25.	243.	95.	11.
[illegible]	313.	100.	11.
[illegible]	449.	105.	0.
[illegible]	373.	110.	0.
45.	297.		
50.	237.		
55.	187.		
60.	133.		
65.	72.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 258

Area= .38
Rainfall distribution is 6-hour
IA= .37 DTHETA= .29 PSIF= 3.99 XKSAT= .58RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 35.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	119.
25.	187.
[illegible]	157.
[illegible]	115.
40.	83.
45.	45.
50.	27.
55.	16.
60.	7.
65.	5.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 258A

Area= .12
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.22 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 25.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	119.
[illegible]	187.
[illegible]	157.
[illegible]	115.
40.	83.
45.	45.
50.	27.
55.	16.

20.	328.
25.	330.
[illegible]	224.
[illegible]	146.
40.	65.
45.	40.
50.	18.
55.	10.
60.	10.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 250

Area= .20
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.93 XKSAT= .59RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 20.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	352.	90.	0.
25.	467.	95.	0.
[illegible]	689.		
[illegible]	552.		
40.	426.		
45.	323.		
50.	230.		
55.	119.		
60.	90.		
65.	57.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 260

Area= .50
Rainfall distribution is 6-hour
IA= .30 DTHETA= .33 PSIF= 4.13 XKSAT= .49RTIMP= 4.0
Phoenix Valley S-graph was selected.
Lag Time = 29.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	5.
215.	5.
[illegible]	5.
[illegible]	5.
230.	5.
235.	5.
240.	5.
245.	5.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 261

Area= .41
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.87 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 82.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	12.
225.	12.
[illegible]	12.
[illegible]	12.
240.	12.
245.	12.
250.	12.
255.	12.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 262

Area= 1.03
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.68 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
	7.				
215.	7.				
220.	7.				
225.	7.				
230.	7.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 263

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.78 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65. 254. 135. 41. 205. 7.

UNIT HYDROGRAPH FOR BASIN: 264

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 264

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.80 XKSAT= .52RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 72.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	2.
235.	2.
[illegible]	2.
[illegible]	2.
250.	2.
255.	2.
260.	2.
265.	2.
270.	2.
275.	2.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 265

Area= .22
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.83 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 95.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	13.				
215.	13.				
220.	13.				
225.	13.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 265A

Area= .95
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 76.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.
235.	4.
[illegible]	4.
[illegible]	4.
250.	4.
255.	4.
260.	4.
265.	4.
270.	4.
275.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 266

Area= .33
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 95.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

[illegible]0.	6.
[illegible].	6.
[illegible].	6.
225.	6.
230.	6.
235.	6.
240.	6.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 267

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.36 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	11.
230.	11.
[illegible].	11.
[illegible].	11.
245.	11.
250.	11.
255.	11.
260.	11.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 268

Area= .95
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.00 XKSAT= .38RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	253.	125.	64.	195.	10.
[illegible]0.	303.	130.	56.	200.	10.
[illegible].	380.	135.	52.	205.	10.

HYDROGRAPH FOR BASIN: 269

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 269

Area= .66
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.44 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	307.
25.	481.
[illegible]	387.
[illegible]	283.
40.	201.
45.	104.
50.	65.
55.	41.
60.	13.
65.	13.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 270

Area= .30
Rainfall distribution is 6-hour
IA= .16 DTHETA= .22 PSIF= 3.58 XKSAT= .38RTIMP= 18.0
Phoenix Valley S-graph was selected.
Lag Time = 24.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	7.
[illegible]	7.
[illegible]	7.
[illegible]	7.
245.	7.
250.	7.
255.	7.
260.	7.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 271

Area= .57
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.47 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	2.
235.	2.
240.	2.
245.	2.
250.	2.
255.	2.
260.	2.
265.	2.
270.	2.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 271A

Area= .16, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.93 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 91.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 271A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	29.	90.	48.	160.	3.
25.	35.	95.	41.	165.	3.
30.	42.	100.	35.	170.	3.
35.	47.	105.	26.	175.	3.
40.	52.	110.	17.	180.	3.
45.	60.	115.	14.	185.	0.
50.	68.	120.	14.	190.	0.
55.	88.	125.	11.		
60.	105.	130.	8.		
65.	93.	135.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 271B

Area= .15
Rainfall distribution is 6-hour
IA= .46 DTHETA= .11 PSIF= 3.61 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 61.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 271A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	297.
25.	296.
30.	201.
35.	131.
40.	58.
45.	36.
50.	15.
55.	9.
60.	9.
65.	0.

VOLUME OF CALGULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 271C

Area= .18
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.90 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 20.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 271A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
   20.          276.
   25.          345.
   30.          235.
   35.          164.
   40.           87.
   45.           48.
   50.           28.
   55.            9.
   60.            9.
   65.            9.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 272
-----------------------------------------------------------------------
Area=    .20
Rainfall distribution is 6-hour
IA= .35  DTHETA= .35  PSIF= 3.88  XKSAT=  .62RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  22.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 271A
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          373.       90.          20.
   25.          466.       95.          20.
   30.          643.      100.           0.
   35.          800.      105.           0.
   40.          605.
   45.          484.
   50.          378.
   55.          289.
   60.          156.
   65.          112.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 273
-----------------------------------------------------------------------
Area=    .65
Rainfall distribution is 6-hour
IA= .33  DTHETA= .34  PSIF= 4.25  XKSAT=  .40RTIMP=  2.0
Phoenix Valley S-graph was selected.
Lag Time =  33.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 271A
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

230.	21.	300.	6.
235.	20.	305.	6.
240.	6.	310.	6.
245.	6.	315.	0.
250.	6.	320.	0.
255.	6.		
260.	6.		
265.	6.		
270.	6.		
275.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 274

Area= .66
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.29 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 104.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 271A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	57.	90.	3.
25.	69.	95.	3.
30.	89.	100.	3.
35.	128.	105.	3.
40.	109.	110.	0.
45.	86.	115.	0.
50.	69.		
55.	55.		
60.	40.		
65.	22.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 275

Area= .11, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.84 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 35.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 275

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	101.	125.	23.	195.	4.
60.	122.	130.	22.	200.	4.
65.	153.	135.	21.	205.	4.

T HYDROGRAPH FOR BASIN: 276

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 276

Area= .26
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.08 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 275

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
.0.	12.				
.5.	12.				
220.	12.				
225.	12.				
230.	12.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 277

Area= .91
Rainfall distribution is 6-hour
IA= .43 DTHETA= .09 PSIF= 3.60 XKSAT= .42RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 77.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 275

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  230.          11.
  235.          11.
  240.          11.
  [illegible]   11.
  [illegible]   11.
  255.          11.
  260.          11.
  265.          11.
  270.          11.
  275.          11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 278
-----------------------------------------------------------------------
Area=   1.00
Rainfall distribution is 6-hour
IA= .42  DTHETA= .13  PSIF= 3.55  XKSAT=  .39RTIMP=  2.0
Phoenix Valley S-graph was selected.
Lag Time =  92.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 275
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          56.
   25.          84.
   30.          63.
   [illegible]  45.
   [illegible]  30.
   45.          14.
   50.           9.
   55.           5.
   60.           2.
   65.           2.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 279
-----------------------------------------------------------------------
Area=    .05
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.96  XKSAT=  .42RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  23.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 275
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
   20.          44.       90.          2.
   25.          55.       95.          0.
   30.          81.      100.          0.
   [illegible]  84.
   [illegible]  63.
   [illegible]  49.
   50.          38.
   55.          26.
   60.          13.
   65.          11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN 279A
-----------------------------------------------------------------------
Area=    .07
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.53  XKSAT=  .47RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  31.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 275
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          33.
   25.          50.
   30.          38.
   [illegible]  27.
   [illegible]  19.
   45.           9.
   50.           6.
   55.           3.
   60.           1.
   65.           1.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN 279B
-----------------------------------------------------------------------
Area=    .03
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.60  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  24.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 275
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	51.
25.	80.
[illegible]	64.
[illegible]	47.
[illegible]	33.
45.	17.
50.	11.
55.	7.
60.	2.
65.	2.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 279C

Area= .05, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .37RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	35.
25.	32.
[illegible]	22.
[illegible]	14.
40.	6.
45.	4.
50.	1.
55.	1.
60.	1.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 279D

Area= .02
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 20.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	7.
235.	7.
[illegible]	7.
[illegible]	7.
250.	7.
255.	7.
260.	7.
265.	7.
270.	7.
275.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 280

Area= .61
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.62 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 94.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	15.	90.	13.	160.	0.
25.	18.	95.	9.	165.	0.
[illegible]	21.	100.	7.		
[illegible]	24.	105.	6.		
40.	28.	110.	5.		
45.	34.	115.	4.		
50.	45.	120.	3.		
55.	47.	125.	1.		
60.	38.	130.	1.		
65.	32.	135.	1.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 280A

Area= .06
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.68 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 53.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	10.
235.	10.
	10.
	10.
250.	10.
255.	10.
260.	10.
265.	10.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 281

Area= .85
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 89.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	81.	90.	4.
25.	106.	95.	0.
	159.	100.	0.
	136.		
40.	104.		
45.	80.		
50.	60.		
55.	32.		
60.	22.		
65.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 282

Area= .12
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 30.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
[illegible]	2.				
[illegible]	2.				
220.	2.				
225.	2.				
230.	2.				
235.	2.				
240.	0.				
245.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 283

Area= .16
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.52 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 79.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	7.
[illegible]	7.
[illegible]	7.
225.	7.
230.	7.
235.	7.
240.	7.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 284

Area= .52
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	32.	90.	0.
25.	46.		
[illegible]	58.		
[illegible]	42.		
40.	32.		
45.	23.		
50.	12.		
55.	8.		
60.	5.		
65.	3.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 285

Area= .04
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 27.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	43.	90.	0.
25.	57.	95.	0.
[illegible]	84.		
[illegible]	66.		
40.	51.		
45.	38.		
50.	27.		
55.	14.		
60.	10.		
65.	7.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 285A

Area= .06
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 29.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	47.	90.	0.
25.	65.		
	86.		
	63.		
40.	48.		
45.	36.		
50.	21.		
55.	12.		
60.	9.		
65.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 285B

Area= .06
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 28.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
	9.				
	9.				
220.	9.				
225.	9.				
230.	9.				
235.	9.				
240.	0.				
245.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 286

Area= .70
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.06 XKSAT= .37RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 79.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	63.	90.	36.	160.	0.
25.	77.	95.	27.		
	89.	100.	25.		
	103.	105.	18.		
40.	121.	110.	15.		
45.	158.	115.	11.		
50.	194.	120.	5.		
55.	165.	125.	5.		
60.	138.	130.	5.		
65.	120.	135.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287

Area= .23
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.77 XKSAT= .38RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 50.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	68.	90.	102.	160.	6.
25.	86.	95.	90.	165.	6.
.	100.	100.	67.	170.	6.
.	112.	105.	47.	175.	6.
40.	127.	110.	34.	180.	0.
45.	145.	115.	32.	185.	0.
50.	172.	120.	29.		
55.	222.	125.	19.		
60.	246.	130.	19.		
65.	202.	135.	13.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287A

Area= .34
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.63 XKSAT= .18RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 59.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	46.	90.	3.
25.	55.	95.	3.
	68.	100.	3.
	95.	105.	3.
40.	108.	110.	3.
45.	82.	115.	0.
50.	68.	120.	0.
55.	55.		
60.	44.		
65.	31.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287B

Area= .10, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.82 XKSAT= .26RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 37.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287B

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	67.	90.	28.
25.	82.	95.	26.
[illegible]0.	94.	100.	21.
[illegible]	111.	105.	16.
40.	131.	110.	13.
45.	176.	115.	5.
50.	199.	120.	5.
55.	159.	125.	5.
60.	135.	130.	5.
65.	116.	135.	5.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287C

Area= .23, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 9.74 XKSAT= .09RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 48.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	67.	90.	28.
25.	82.	95.	27.
[illegible]0.	94.	100.	22.
[illegible]	110.	105.	16.
40.	130.	110.	14.
45.	174.	115.	5.
50.	200.	120.	5.
55.	159.	125.	5.
60.	135.	130.	5.
65.	117.	135.	5.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287D

Area= .23
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.26 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 48.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	400.
25.	629.
	559.
	409.
40.	297.
45.	178.
50.	95.
55.	63.
60.	32.
65.	17.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 303A

Area= .42
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.08 XKSAT= .36RTIMP= .1
Phoenix Valley S-graph was selected.
Lag Time = 25.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	724.	90.	37.
25.	938.	95.	0.
	1412.	100.	0.
.	1262.		
40.	968.		
45.	745.		
50.	562.		
55.	322.		
60.	205.		
65.	145.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 304

Area= 1.10
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.09 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 30.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65.	470.	135.	76.	205.	13.

UNIT HYDROGRAPH FOR BASIN: 305

	DISCHARGE	TIME	DISCHARGE	TIME	DISCHARGE
(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
210.	13.				
215.	13.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 305

Area= .92
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.25 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 72.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	80.	90.	169.	160.	8.
25.	100.	95.	150.	165.	8.
[illegible]	119.	100.	132.	170.	8.
[illegible]	136.	105.	118.	175.	8.
40.	149.	110.	94.	180.	8.
45.	167.	115.	70.	185.	8.
50.	189.	120.	44.	190.	8.
55.	218.	125.	43.	195.	8.
60.	275.	130.	41.	200.	0.
65.	325.	135.	33.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 306

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 66.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	78.	90.	18.
25.	94.	95.	17.
	111.	100.	6.
	135.	105.	5.
40.	188.	110.	5.
45.	199.	115.	5.
50.	155.	120.	5.
55.	131.	125.	5.
60.	108.	130.	0.
65.	89.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 307

Area= .21
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 42.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	69.	90.	90.	160.	6.
25.	89.	95.	69.	165.	6.
	102.	100.	47.	170.	0.
	115.	105.	34.	175.	0.
40.	132.	110.	32.		
45.	151.	115.	27.		
50.	194.	120.	19.		
55.	241.	125.	19.		
60.	217.	130.	10.		
65.	181.	135.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 308

Area= .32
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	13.
215.	13.
[illegible]	13.
[illegible]	13.
230.	13.
235.	13.
240.	13.
245.	13.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 309

Area= 1.07
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 83.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	59.	90.	23.
[illegible]	71.	95.	22.
[illegible]	82.	100.	14.
[illegible]	97.	105.	14.
40.	118.	110.	6.
45.	162.	115.	4.
50.	159.	120.	4.
55.	128.	125.	4.
60.	109.	130.	4.
65.	92.	135.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 310

Area= .19
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.76 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 47.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	8.
235.	8.
[illegible]	8.
[illegible]	8.
250.	8.
255.	8.
260.	8.
265.	8.
270.	8.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 311

Area= .73
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.75 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 91.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	55.	90.	104.	160.	5.
[illegible]	67.	95.	92.	165.	5.
[illegible]	79.	100.	80.	170.	5.
[illegible]	89.	105.	69.	175.	5.
40.	99.	110.	51.	180.	5.
45.	112.	115.	35.	185.	5.
50.	125.	120.	29.	190.	5.
55.	151.	125.	27.	195.	0.
60.	192.	130.	25.	200.	0.
65.	207.	135.	16.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 311A

Area= .31
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.09 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 64.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
          8.
          8.
          8.
          8.
          8.
          8.
          8.
          0.
          0.
-----------------------------------------------------------------
   VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------
            INPUT DATA FOR SUB-BASIN: 312
-----------------------------------------------------------------
   .66
11 distribution is 6-hour
0  DTHETA= .00  PSIF= 3.60  XKSAT=  .44RTIMP=   .0
x Valley S-graph was selected.
me =  80.4 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------
           HEC-1 INPUT IS STORED IN FILE: 292
-----------------------------------------------------------------
 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


          5.
          5.
          5.
          5.
          5.
          5.
          5.
          5.
          0.
          0.
-----------------------------------------------------------------
   VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------
            INPUT DATA FOR SUB-BASIN: 313
-----------------------------------------------------------------
   .43
11 distribution is 6-hour
0  DTHETA= .00  PSIF= 3.50  XKSAT=  .47RTIMP=   .0
x Valley S-graph was selected.
me =  85.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------
           HEC-1 INPUT IS STORED IN FILE: 292
-----------------------------------------------------------------
 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
ID DDM MCUHP2 Loop 303
ID
I     5                    300
IO    3
KK
KM BASIN 313
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=   20.3  Kn= .030  LAG=  21.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .43
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .12     .25    4.80     .36   20.00
UI   72.    284.    426.    676.    723.    489.    328.    149.     91.     44.
UI   21.     21.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Loop 303
ID
I[illegible]    5                    300
I[illegible]    3
KK
KM BASIN 314
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.0  Lca=       .4   S=   18.5  Kn= .088  LAG=  52.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .42
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .37     .09    4.80     .44    7.00
UI   27.     27.     63.    105.    132.    151.    173.    201.    245.    328.
UI  320.    260.    225.    196.    166.    142.    120.     87.     54.     46.
UI   44.     28.     27.     17.      8.      8.      8.      8.      8.      8.
UI    8.      0.      0.      0.      0.      0.      0.      0.      0.      0.
U[illegible]   0.      0.      0.      0.      0.      0.      0.      0.      0.
```

60.	176.	130.	35.	200.	6.
65.	219.	135.	34.	205.	6.

HYDROGRAPH FOR BASIN: 314

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 314

Area= .42
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	6.
230.	6.
[illegible]	6.
[illegible]	6.
245.	6.
250.	6.
255.	6.
260.	6.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 315

Area= .47
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	10.
220.	10.
[illegible]	10.
[illegible]	10.
235.	10.
240.	10.
245.	10.
250.	10.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN= 316

Area= .82
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	7.
225.	7.
[illegible]	7.
[illegible]	7.
240.	7.
245.	7.
250.	7.
255.	7.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN= 317

Area= .57
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.52 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 85.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	181.	90.	76.
25.	222.	95.	71.
[illegible]	254.	100.	58.
[illegible]	299.	105.	43.
40.	354.	110.	36.
45.	475.	115.	13.
50.	537.	120.	13.
55.	428.	125.	13.
60.	363.	130.	13.
65.	313.	135.	13.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 318

Area= .62
Rainfall distribution is 6-hour
IA= .27 DTHETA= .14 PSIF= 3.66 XKSAT= .39RTIMP= 12.0
Phoenix Valley S-graph was selected.
Lag Time = 48.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	225.	90.	44.
[illegible]	268.	95.	14.
[illegible]	324.	100.	14.
[illegible]	414.	105.	14.
40.	570.	110.	14.
45.	471.	115.	14.
50.	383.	120.	0.
55.	317.	125.	0.
60.	259.		
65.	208.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 319

Area= .54
Rainfall distribution is 6-hour
IA= .23 DTHETA= .18 PSIF= 3.50 XKSAT= .40RTIMP= 14.0
Phoenix Valley S-graph was selected.
Lag Time = 40.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	349.	90.	19.
25.	434.	95.	19.
[illegible]	575.	100.	19.
[illegible]	780.	105.	0.
40.	610.	110.	0.
45.	489.		
50.	386.		
55.	301.		
60.	191.		
65.	110.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 320

Area= .64
Rainfall distribution is 6-hour
IA= .22 DTHETA= .30 PSIF= 4.27 XKSAT= .48RTIMP= 14.5
Phoenix Valley S-graph was selected.
Lag Time = 34.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	1193.
[illegible]	1047.
[illegible]	707.
[illegible]	432.
40.	188.
45.	116.
50.	34.
55.	34.
60.	34.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 321

Area= .66
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.24 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 20.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	55.	90.	118.	160.	5.
25.	69.	95.	105.	165.	5.
	82.	100.	92.	170.	5.
	94.	105.	82.	175.	5.
40.	103.	110.	68.	180.	5.
45.	115.	115.	50.	185.	5.
50.	130.	120.	31.	190.	5.
55.	149.	125.	30.	195.	5.
60.	190.	130.	28.	200.	0.
65.	224.	135.	24.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 322

Area= .34
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.13 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 66.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	109.	90.	0.
25.	148.	95.	0.
	212.		
	163.		
40.	125.		
45.	94.		
50.	64.		
55.	32.		
60.	25.		
65.	17.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 323

Area= .15
Rainfall distribution is 6-hour
IA= .38 DTHETA= .28 PSIF= 3.95 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 29.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	65.	90.	119.	160.	6.
25.	80.	95.	105.	165.	6.
[illegible]	94.	100.	92.	170.	6.
[illegible]	106.	105.	77.	175.	6.
40.	118.	110.	55.	180.	6.
45.	134.	115.	34.	185.	6.
50.	151.	120.	33.	190.	0.
55.	183.	125.	31.	195.	0.
60.	235.	130.	25.		
65.	236.	135.	19.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 324

Area= .36
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.90 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	6.
235.	6.
[illegible]	6.
[illegible]	6.
250.	6.
255.	6.
260.	6.
265.	6.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 325

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.12 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 89.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	8.				
215.	8.				
220.	8.				
225.	8.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 325A

Area= .61
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.84 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 76.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65.	269.	135.	44.	205.	8.

UNIT HYDROGRAPH FOR BASIN: 326

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	8.				
215.	8.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 326

Area= .54
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.69 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	231.	130.	45.	200.	8.
65.	287.	135.	43.	205.	8.

HYDROGRAPH FOR BASIN: 327

Time (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	8.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 327

Area= .53
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 70.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	111.	90.	275.	160.	11.
25.	144.	95.	241.	165.	11.
	177.	100.	217.	170.	11.
	198.	105.	189.	175.	11.
40.	218.	110.	168.	180.	11.
45.	242.	115.	130.	185.	11.
50.	274.	120.	96.	190.	11.
55.	305.	125.	66.	195.	11.
60.	380.	130.	64.	200.	11.
65.	468.	135.	62.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 328

Area= .76
Rainfall distribution is 6-hour
IA= .46 DTHETA= .09 PSIF= 3.56 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 68.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	129.	90.	184.	160.	11.
25.	163.	95.	158.	165.	11.
[illegible]	190.	100.	117.	170.	11.
[illegible]	213.	105.	76.	175.	0.
40.	241.	110.	63.	180.	0.
45.	277.	115.	60.		
50.	334.	120.	47.		
55.	435.	125.	36.		
60.	449.	130.	36.		
65.	368.	135.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 329

Area= .63
Rainfall distribution is 6-hour
IA= .43 DTHETA= .07 PSIF= 3.62 XKSAT= .44RTIMP= 3.0
Phoenix Valley S-graph was selected.
Lag Time = 58.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	118.	90.	178.	160.	10.
[illegible]	148.	95.	157.	165.	10.
[illegible]	173.	100.	118.	170.	10.
[illegible]	194.	105.	83.	175.	10.
40.	219.	110.	59.	180.	0.
45.	251.	115.	56.	185.	0.
50.	295.	120.	52.		
55.	381.	125.	33.		
60.	427.	130.	33.		
65.	351.	135.	24.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 330

Area= .59
Rainfall distribution is 6-hour
IA= .39 DTHETA= .08 PSIF= 3.59 XKSAT= .43RTIMP= 6.0
Phoenix Valley S-graph was selected.
Lag Time = 59.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
IT     5                    300
IO     3
KK
KM BASIN 330
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=   34.8  Kn= .079  LAG=  50.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .59
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .33     .11    4.70     .46    9.00
UI   39.     39.    100.    161.    198.    228.    263.    308.    404.    496.
UI  425.    354.    308.    261.    223.    190.    144.     93.     69.     65.
UI   46.     39.     28.     12.     12.     12.     12.     12.     12.     12.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
	10.				
215.	10.				
220.	10.				
225.	10.				
230.	10.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 331

Area= .75
Rainfall distribution is 6-hour
IA= .46 DTHETA= .02 PSIF= 3.55 XKSAT= .46RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 77.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	7.
215.	7.
[illegible]	7.
[illegible]	7.
230.	7.
235.	7.
240.	7.
245.	7.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 332

Area= .56
Rainfall distribution is 6-hour
IA= .46 DTHETA= .03 PSIF= .37 XKSAT= .44RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 82.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
[illegible]    5                    300
IC     3
KK
KM BASIN 333
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.1  Lca=       .4   S=   20.5  Kn= .066  LAG=  41.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .58
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .27     .15    4.80     .41   12.00
UI   47.     58.    170.    231.    274.    329.    408.    576.    525.    419.
UI  352.    289.    235.    173.    101.     80.     65.     47.     30.     15.
UI   15.     15.     15.     15.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER BASIN 15 - 334
ID
IT     5                    300
IO     3
KK
KM BASIN 334
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .9  Lca=        .4   S=   21.6  Kn= .085  LAG=  46.3
KM  AGRICULTURAL S-GRAPH WAS USED FOR THIS BASIN
BA   .62
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .50     .26    3.70     .89     .00
UI   49.     52.    113.    222.    283.    358.    385.    415.    415.    364.
UI  362.    309.    276.    215.    174.    142.    132.     88.     76.     61.
UI   51.     45.     37.     28.     28.     26.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER BASIN 15 - 335
ID
IT     5                    300
IO     3
KK
KM BASIN 335
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .5  Lca=        .2   S=   29.6  Kn= .120  LAG=  39.6
KM  AGRICULTURAL S-GRAPH WAS USED FOR THIS BASIN
BA   .24
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .50     .25    3.95     .76     .00
UI   22.     31.     67.    127.    146.    176.    188.    185.    156.    159.
UI  122.    102.     76.     66.     48.     36.     28.     23.     20.     15.
UI   13.     13.      5.      3.      3.      3.      3.      3.      3.      3.
UI    3.      3.      3.      3.      3.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER BASIN 15 - 336
ID
IT     5                    300
IO     3
KK
KM BASIN 336
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.3  Lca=      1.4   S=   20.6  Kn= .106  LAG= 132.0
KM  AGRICULTURAL S-GRAPH WAS USED FOR THIS BASIN
BA  1.60
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .43     .26    3.60     .94   14.00
UI   45.     45.     45.     45.     45.     67.     94.     94.    145.    175.
UI  235.    244.    287.    235.    252.    313.    391.    287.    375.    375.
UI  375.    375.    375.    375.    375.    375.    338.    313.    313.    313.
UI  353.    326.    301.    235.    235.    244.    267.    231.    184.    171.
UI  171.    160.    134.    130.    125.    134.    144.    100.     85.     85.
UI   74.     72.     72.     65.     55.     55.     55.     55.     42.     41.
UI   41.     41.     41.     41.     28.     25.     25.     25.     25.     25.
UI   25.     25.     25.     24.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER BASIN 15 - 336A
ID
IT     5                    300
IO     3
KK
KM BASIN 336A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.1  Lca=      1.1   S=   20.7  Kn= .111  LAG= 122.0
KM  AGRICULTURAL S-GRAPH WAS USED FOR THIS BASIN
BA   .37
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .47     .25    4.25     .65    3.00
UI   11.     11.     11.     11.     11.     22.     23.     30.     39.     58.
UI   59.     73.     59.     65.     78.     93.     81.     94.     94.     94.
UI   94.     94.     94.     94.     85.     78.     78.     78.     88.     88.
UI   59.     59.     59.     66.     61.     46.     43.     43.     39.     34.
UI   32.     31.     36.     31.     21.     21.     19.     18.     18.     16.
UI   14.     14.     14.     13.     10.     10.     10.     10.     10.      7.
UI    6.      6.      6.      6.      6.      6.      6.      6.      3.      1.
UI    1.      1.      1.      1.      1.      1.      1.      1.      1.      1.
UI    1.      1.      1.      1.      1.      1.      1.      1.      1.      1.
UI    1.      1.      1.      1.      1.      1.      1.      1.      1.      1.
UI    1.      1.      1.      1.      1.      1.      1.      1.      1.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

20.	519.
25.	803.
[illegible]	624.
[illegible]	455.
40.	319.
45.	156.
50.	101.
55.	61.
60.	21.
65.	21.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 337

Area= .49
Rainfall distribution is 6-hour
IA= .19 DTHETA= .30 PSIF= 3.60 XKSAT= .33RTIMP= 23.5
Phoenix Valley S-graph was selected.
Lag Time = 24.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	97.	90.	38.
25.	118.	95.	34.
[illegible]	136.	100.	22.
[illegible]	161.	105.	22.
40.	197.	110.	7.
45.	270.	115.	7.
50.	257.	120.	7.
55.	207.	125.	7.
60.	178.	130.	7.
65.	149.	135.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 338

Area= .31
Rainfall distribution is 6-hour
IA= .49 DTHETA= .03 PSIF= 4.17 XKSAT= .67RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 47.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	472.	90.	25.
25.	597.	95.	25.
	868.	100.	0.
	933.	105.	0.
40.	697.		
45.	549.		
50.	424.		
55.	292.		
60.	152.		
65.	125.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 338A

Area= .77
Rainfall distribution is 6-hour
IA= .24 DTHETA= .29 PSIF= 3.88 XKSAT= .70RTIMP= 10.0
Phoenix Valley S-graph was selected.
Lag Time = 32.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	12.
220.	12.
	12.
	12.
235.	12.
240.	12.
245.	12.
250.	12.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 339

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.08 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	212.	130.	41.	200.	7.
65.	264.	135.	39.	205.	7.

HYDROGRAPH FOR BASIN: 340

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 340

Area= .48
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.06 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 70.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
	10.				
215.	10.				
220.	10.				
225.	10.				
230.	10.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 341

Area= .79, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.77 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 78.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 341

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	76.	90.	120.	160.	7.
25.	95.	95.	105.	165.	7.
[illegible]	112.	100.	86.	170.	7.
[illegible]	125.	105.	61.	175.	7.
40.	141.	110.	39.	180.	0.
45.	161.	115.	37.	185.	0.
50.	187.	120.	36.		
55.	240.	125.	24.		
60.	283.	130.	22.		
65.	236.	135.	21.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 342

Area= .39
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.13 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 60.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	5.
[illegible]	5.
[illegible]	5.
225.	5.
230.	5.
235.	5.
240.	5.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 342A

Area= .38
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.64 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	6.
	6.
	6.
225.	6.
230.	6.
235.	6.
240.	6.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 343

Area= .51
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.68 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	7.
235.	7.
	7.
	7.
250.	7.
255.	7.
260.	7.
265.	7.
270.	7.
275.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 344

Area= .61
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.54 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 92.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65.	209.	135.	35.	205.	6.

UNIT HYDROGRAPH FOR BASIN: 345

[illegible]	DISCHARGE	TIME	DISCHARGE	TIME	DISCHARGE
(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
210.	6.				
215.	6.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 345

Area= .43
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.71 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	111.	90.	142.	160.	9.
25.	143.	95.	106.	165.	9.
[illegible]	165.	100.	71.	170.	0.
[illegible]	185.	105.	54.	175.	0.
40.	213.	110.	50.		
45.	244.	115.	41.		
50.	319.	120.	31.		
55.	386.	125.	31.		
60.	342.	130.	12.		
65.	287.	135.	9.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 346

Area= .51
Rainfall distribution is 6-hour
IA= .45 DTHETA= .12 PSIF= 3.74 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65. 78. 135. 13. 205. 2.

INIT HYDROGRAPH FOR BASIN: 346A

(min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	2.				
215.	2.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 346A

Area= .16

Rainfall distribution is 6-hour

IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .46RTIMP= .0

Phoenix Valley S-graph was selected.

Lag Time = 73.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	3.
230.	3.
	3.
	3.
245.	3.
250.	3.
255.	3.
260.	3.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 346B

Area= .27, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.83 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 88.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 346B

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	55.	90.	3.
25.	66.	95.	3.
	82.	100.	3.
	113.	105.	3.
40.	129.	110.	3.
45.	99.	115.	0.
50.	81.	120.	0.
55.	66.		
60.	53.		
65.	37.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 346C

Area= .12
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.64 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 37.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 346B

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	14.				
215.	14.				
220.	14.				
225.	14.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 347

Area= 1.02, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .46 DTHETA= .03 PSIF= 3.76 XKSAT= .44RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 76.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	71.	90.	98.	160.	6.
25.	90.	95.	83.	165.	6.
	104.	100.	60.	170.	6.
	117.	105.	37.	175.	0.
40.	133.	110.	34.	180.	0.
45.	153.	115.	33.		
50.	187.	120.	22.		
55.	244.	125.	20.		
60.	239.	130.	18.		
65.	196.	135.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 348

Area= .34
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.70 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 57.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	81.	90.	20.
25.	97.	95.	17.
[illegible]	115.	100.	8.
[illegible]	138.	105.	5.
40.	190.	110.	5.
45.	211.	115.	5.
50.	164.	120.	5.
55.	138.	125.	5.
60.	114.	130.	0.
65.	95.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 348A

Area= .22
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.62 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 43.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	7.
235.	7.
[illegible]	7.
[illegible]	7.
250.	7.
255.	7.
260.	7.
265.	7.
270.	7.
275.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 348B

Area= .66
Rainfall distribution is 6-hour
IA= .49 DTHETA= .04 PSIF= 3.59 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 94.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
IT
IO     5                    300
IC     3
KK
KM BASIN 348B
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .7   S=   26.7  Kn= .113  LAG=  94.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .53
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .49     .04    4.70     .47     .00
UI   19.     19.     19.     19.     48.     66.     76.     89.     96.    105.
UI  112.    121.    131.    143.    155.    181.    216.    246.    235.    206.
UI  184.    169.    157.    147.    133.    122.    113.    103.     94.     88.
UI   73.     57.     47.     34.     34.     31.     31.     28.     19.     19.
UI   19.     19.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

20.	271.
25.	238.
[illegible]	161.
[illegible]	99.
40.	43.
45.	26.
50.	8.
55.	8.
60.	8.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 302

Area= .15
Rainfall distribution is 6-hour
IA= .30 DTHETA= .33 PSIF= 3.54 XKSAT= .30RTIMP= 4.0
Phoenix Valley S-graph was selected.
Lag Time = 20.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	332.	90.	187.	160.	0.
25.	407.	95.	141.		
[illegible]	470.	100.	133.		
[illegible]	543.	105.	92.		
40.	636.	110.	81.		
45.	835.	115.	54.		
50.	1022.	120.	25.		
55.	868.	125.	25.		
60.	725.	130.	25.		
65.	631.	135.	25.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 303

Area= 1.21
Rainfall distribution is 6-hour
IA= .35 DTHETA= .34 PSIF= 4.19 XKSAT= .39RTIMP= .4
Phoenix Valley S-graph was selected.
Lag Time = 50.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
I     5                    300
IO    3
KK
KM BASIN 303
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.8  Lca=      1.3   S=   30.0  Kn= .050  LAG=  51.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .90
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.40     .37     .00
UI   59.     59.    145.    237.    294.    337.    388.    452.    566.    748.
UI  670.    551.    480.    411.    354.    297.    247.    166.    105.     99.
UI   84.     59.     59.     19.     18.     18.     18.     18.     18.     18.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

20.	67.	90.	24.
25.	81.	95.	17.
	94.	100.	15.
	112.	105.	7.
40.	145.	110.	5.
45.	187.	115.	5.
50.	158.	120.	5.
55.	130.	125.	5.
60.	111.	130.	5.
65.	92.	135.	5.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287E

Area= .20
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.69 XKSAT= .54RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 45.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	3.
230.	3.
	3.
	3.
245.	3.
250.	3.
255.	3.
260.	3.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 288

Area= .22
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.50 XKSAT= .19RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 230.          9.
 235.          9.
               9.
               9.
 250.          9.
 255.          9.
 260.          9.
 265.          9.
 270.          9.
 275.          9.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 288A
-----------------------------------------------------------------------
Area=    .83
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 8.48  XKSAT=  .12RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  93.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 287C
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

 230.          3.
 235.          3.
               3.
               3.
 250.          3.
 255.          3.
 260.          3.
 265.          3.
 270.          3.
 275.          3.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 288B
-----------------------------------------------------------------------
Area=    .26
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 7.90  XKSAT=  .16RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  96.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 287C
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

230.	46.	300.	8.	370.	8.
235.	46.	305.	8.	375.	8.
[illegible]	46.	310.	8.	380.	8.
[illegible]	43.	315.	8.	385.	0.
250.	43.	320.	8.	390.	0.
255.	43.	325.	8.		
260.	34.	330.	8.		
265.	26.	335.	8.		
270.	26.	340.	8.		
275.	26.	345.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 289

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.20 XKSAT= .21RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 128.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	6.
215.	6.
[illegible]	6.
[illegible]	6.
230.	6.
235.	6.
240.	6.
245.	6.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 289A

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.63 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 82.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	143.	90.	105.	160.	0.
25.	177.	95.	63.		
	204.	100.	60.		
	234.	105.	53.		
40.	272.	110.	36.		
45.	338.	115.	36.		
50.	452.	120.	14.		
55.	410.	125.	11.		
60.	336.	130.	11.		
65.	292.	135.	11.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 290

Area= .55
Rainfall distribution is 6-hour
IA= .47 DTHETA= .07 PSIF= 4.26 XKSAT= .65RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 51.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	11.
235.	11.
	11.
	11.
250.	11.
255.	11.
260.	11.
265.	11.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 291

Area= .99
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.01 XKSAT= .94RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 90.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	446.	90.	26.
25.	537.	95.	26.
[illegible]	663.	100.	26.
[illegible]	932.	105.	26.
40.	1030.	110.	26.
45.	785.	115.	0.
50.	647.	120.	0.
55.	521.		
60.	419.		
65.	284.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 292

Area= .96, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .30 DTHETA= .27 PSIF= 3.78 XKSAT= .36RTIMP= 6.0
Phoenix Valley S-graph was selected.
Lag Time = 37.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	191.	90.	164.	160.	0.
25.	239.	95.	105.	165.	0.
[illegible]	276.	100.	85.		
[illegible]	314.	105.	81.		
40.	366.	110.	55.		
45.	442.	115.	49.		
50.	591.	120.	36.		
55.	593.	125.	15.		
60.	480.	130.	15.		
65.	413.	135.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 293

Area= .77
Rainfall distribution is 6-hour
IA= .44 DTHETA= .07 PSIF= 3.74 XKSAT= .37RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 52.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	29.	90.	6.
25.	34.	95.	3.
	41.	100.	2.
	51.	105.	2.
40.	72.	110.	2.
45.	62.	115.	2.
50.	50.	120.	2.
55.	42.	125.	0.
60.	34.	130.	0.
65.	28.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 293A

Area= .07
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 40.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	272.
25.	306.
	206.
	140.
40.	67.
45.	39.
50.	20.
55.	9.
60.	9.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 294

Area= .18
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.54 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 21.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
IR
I     5                    300
IC    3
KK
KM BASIN 295
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       .9  Lca=       .4   S=   20.2  Kn= .045  LAG=  23.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .31
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .29     .33    5.10     .26    5.00
UI   44.    159.    248.    346.    521.    388.    280.    190.     90.     59.
UI   33.     13.     13.     13.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

eec

Project Title Loop 303 Project No. _____ Date _____

Subject Unit Hydrograph Prepared By GR Checked By _____ Page _____

Sub 4 Refer to FCDMC Drainage Report for RID canal overchute

eec

Project Title Loop 303 Project No. _____ Date _____

Subject Unit Hydrograph Prepared By GR Checked By _____ Page _____

Sub 7 - Refer to FCDMC Drainage Report for RID canal overchute

eec

Project Title Loop 303 Project No. _____ Date _____

Subject Unit Hydrograph Prepared By GK Checked By _____ Page _____

2711 Refer to FCD MC Drainage Report for RID canal overchute

eec

Project Title Loop 303 Project No. _____ Date _____

Subject Unit Hydrograph Prepared By GK Checked By _____ Page _____

2712 Refer to FCD MC Drainage Report for RID canal overchute

5.	25.
10.	75.
[illegible]	140.
[illegible]	117.
25.	66.
30.	25.
35.	10.
40.	4.
45.	0.
50.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 295A

Area= .06
Rainfall distribution is 6-hour
IA= .32 DTHETA= .34 PSIF= 3.54 XKSAT= .30RTIMP= 3.0
Phoenix Valley S-graph was selected.
Lag Time = 14.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	340.	130.	67.	200.	12.
65.	422.	135.	66.	205.	12.

[illegible] HYDROGRAPH FOR BASIN: 296

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	12.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 296

Area= .81
Rainfall distribution is 6-hour
IA= .49 DTHETA= .02 PSIF= 3.55 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
[illegible]    5                    300
IC     3
KK
KM BASIN 296
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .6   S=   12.8  Kn= .052  LAG=  42.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .38
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .28     .26    4.70     .35    8.00
UI   30.     33.    105.    142.    169.    201.    245.    343.    353.    276.
UI  233.    192.    158.    127.     78.     52.     49.     30.     29.      9.
UI    9.      9.      9.      9.      9.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
Z[illegible]
```

230.	27.	300.	9.	370.	3.
235.	26.	305.	8.	375.	3.
	18.	310.	3.	380.	3.
	16.	315.	3.	385.	3.
250.	16.	320.	3.	390.	3.
255.	16.	325.	3.	395.	3.
260.	15.	330.	3.	400.	3.
265.	15.	335.	3.	405.	3.
270.	15.	340.	3.	410.	0.
275.	12.	345.	3.	415.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 336A

Area= .37
Rainfall distribution is 6-hour
IA= .51 DTHETA= .02 PSIF= 3.86 XKSAT= .44RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 136.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
	0.				
	83.				
10.	262.				
15.	198.				
20.	57.				
25.	13.				
30.	0.				
35.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 336B

Area= .08
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.07 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 9.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
IT     5                    300
IC     3
KK
KM BASIN 296A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=    8.6  Kn= .044  LAG=  35.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .39
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .28     .32    4.65     .32    6.00
UI   37.     67.    151.    198.    242.    309.    447.    383.    304.    244.
UI  194.    141.     78.     61.     42.     33.     11.     11.     11.     11.
UI   11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
Z
```

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
[illegible]	5.				
[illegible]	5.				
220.	5.				
225.	5.				
230.	5.				
235.	5.				
240.	0.				
245.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 297

Area= .38
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 80.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	48.	90.	89.	160.	4.
25.	59.	95.	78.	165.	4.
[illegible]	70.	100.	69.	170.	4.
[illegible]	79.	105.	58.	175.	4.
40.	88.	110.	42.	180.	4.
45.	100.	115.	26.	185.	4.
50.	112.	120.	25.	190.	0.
55.	136.	125.	23.	195.	0.
60.	175.	130.	19.		
65.	178.	135.	14.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN= 297A

Area= .27
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	360.	130.	70.	200.	12.
65.	445.	135.	68.	205.	12.

HYDROGRAPH FOR BASIN: 298

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	12.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 298

Area= .84
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.53 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	166.	130.	33.	200.	6.
65.	207.	135.	33.	205.	6.

HYDROGRAPH FOR BASIN: 299

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 299

Area= .40
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.62 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	80.	90.	114.	160.	7.
25.	101.	95.	97.	165.	7.
[illegible]	118.	100.	72.	170.	7.
[illegible]	132.	105.	46.	175.	0.
[illegible]	150.	110.	39.	180.	0.
45.	172.	115.	37.		
50.	208.	120.	29.		
55.	271.	125.	22.		
60.	278.	130.	22.		
65.	227.	135.	9.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 300

Area= .39
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.36 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 58.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

15.	424.
20.	644.
[illegible]	427.
[illegible]	263.
35.	110.
40.	61.
45.	17.
50.	17.
55.	0.
60.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 301

Area= .30
Rainfall distribution is 6-hour
IA= .24 DTHETA= .28 PSIF= 5.79 XKSAT= .23RTIMP= 10.0
Phoenix Valley S-graph was selected.
Lag Time = 17.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65. 476. 135. 77. 205. 13.

UNIT HYDROGRAPH FOR BASIN: 349

(min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	13.				
215.	13.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 349

Area= .93
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.82 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 72.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	2.
235.	2.
[illegible]	2.
[illegible]	2.
250.	2.
255.	2.
260.	2.
265.	2.
270.	2.
275.	2.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 350

Area= .19
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 93.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	142.	90.	245.	160.	13.
25.	175.	95.	212.	165.	13.
[illegible]	207.	100.	186.	170.	13.
[illegible]	232.	105.	141.	175.	13.
40.	259.	110.	98.	180.	13.
45.	296.	115.	73.	185.	13.
50.	334.	120.	69.	190.	0.
55.	428.	125.	65.	195.	0.
60.	520.	130.	41.		
65.	480.	135.	41.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 351

Area= .76
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.82 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 62.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	38.	90.	51.	160.	3.
[illegible]	49.	95.	42.	165.	3.
[illegible]	56.	100.	29.	170.	3.
	63.	105.	19.	175.	0.
40.	72.	110.	18.	180.	0.
45.	83.	115.	17.		
50.	102.	120.	11.		
55.	134.	125.	11.		
60.	124.	130.	8.		
65.	103.	135.	3.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 352

Area= .18
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 57.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 352A

[illegible])	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	2.				
215.	2.				
220.	2.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 352A

Area= .13
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.79 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	46.	90.	64.	160.	4.
25.	58.	95.	54.	165.	4.
[illegible]	67.	100.	39.	170.	4.
[illegible]	75.	105.	25.	175.	0.
40.	86.	110.	22.	180.	0.
45.	98.	115.	21.		
50.	120.	120.	15.		
55.	156.	125.	13.		
60.	155.	130.	12.		
65.	127.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 353

Area= .22
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.79 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 58.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	104.	90.	38.
25.	127.	95.	24.
	147.	100.	23.
	175.	105.	9.
40.	232.	110.	7.
45.	291.	115.	7.
50.	242.	120.	7.
55.	200.	125.	7.
60.	171.	130.	7.
65.	142.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 354

Area= .31
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.64 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 45.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	17.	90.	34.	160.	2.
25.	21.	95.	31.	165.	2.
	24.	100.	27.	170.	2.
	28.	105.	24.	175.	2.
40.	31.	110.	19.	180.	2.
45.	34.	115.	14.	185.	2.
50.	39.	120.	9.	190.	2.
55.	45.	125.	9.	195.	2.
60.	57.	130.	8.	200.	0.
65.	67.	135.	6.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 355

Area= .10
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.75 XKSAT= .27RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 65.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	19.	90.	1.
25.	23.	95.	1.
[illegible]	28.	100.	1.
[illegible]	39.	105.	1.
40.	43.	110.	1.
45.	33.	115.	0.
50.	27.	120.	0.
55.	22.		
60.	17.		
65.	12.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 355A

Area= .04
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.88 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 37.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	114.	90.	43.
25.	138.	95.	33.
[illegible]	160.	100.	26.
[illegible]	191.	105.	17.
40.	238.	110.	8.
45.	324.	115.	8.
50.	281.	120.	8.
55.	229.	125.	8.
60.	197.	130.	8.
65.	164.	135.	8.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 356

Area= .35
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 45.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	40.	90.	18.
25.	49.	95.	16.
[illegible]	57.	100.	14.
[illegible]	66.	105.	10.
40.	78.	110.	9.
45.	104.	115.	3.
50.	122.	120.	3.
55.	98.	125.	3.
60.	82.	130.	3.
65.	71.	135.	3.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 357

Area= .14
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 49.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	2.
220.	2.
[illegible]	2.
[illegible]	2.
235.	2.
240.	2.
245.	2.
250.	2.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 358

Area= .19
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.50 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	37.	90.	9.
25.	44.	95.	8.
	52.	100.	4.
	63.	105.	2.
40.	86.	110.	2.
45.	96.	115.	2.
50.	75.	120.	2.
55.	63.	125.	2.
60.	52.	130.	0.
65.	43.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 359

Area= .10
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.54 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 43.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 360

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	3.				
215.	3.				
220.	3.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 360

Area= .25
Rainfall distribution is 6-hour
IA= .46 DTHETA= .08 PSIF= 5.43 XKSAT= .32RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	3.
220.	3.
[illegible]	3.
[illegible]	3.
235.	3.
240.	3.
245.	3.
250.	3.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 361

Area= .21
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.10 XKSAT= .35RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	79.	90.	135.	160.	7.
[illegible]	98.	95.	116.	165.	7.
[illegible]	115.	100.	101.	170.	7.
[illegible]	130.	105.	76.	175.	7.
40.	144.	110.	51.	180.	7.
45.	166.	115.	41.	185.	0.
50.	188.	120.	38.	190.	0.
55.	242.	125.	34.		
60.	290.	130.	23.		
65.	263.	135.	23.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 362

Area= .42
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.38 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 61.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  230.            7.
  235.            7.
  240.            7.
  245.            7.
  250.            7.
  255.            7.
  260.            7.
  265.            7.
  270.            7.
  275.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 363
-----------------------------------------------------------------------
Area=    .63, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.71  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  90.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                  HEC-1 INPUT IS STORED IN FILE: 363
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

60.	338.	130.	65.	200.	11.
65.	418.	135.	63.	205.	11.

HYDROGRAPH FOR BASIN: 364

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	11.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 364

Area= .78
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.22 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	71.
25.	112.
[illegible]	90.
[illegible]	66.
40.	47.
45.	24.
50.	15.
55.	10.
60.	3.
65.	3.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 364A

Area= .07
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.50 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	78.	90.	111.	160.	7.
25.	98.	95.	96.	165.	7.
30.	114.	100.	71.	170.	7.
35.	128.	105.	47.	175.	0.
40.	145.	110.	38.	180.	0.
45.	167.	115.	36.		
50.	200.	120.	29.		
55.	261.	125.	22.		
60.	272.	130.	22.		
65.	222.	135.	9.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 365

Area= .38, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.11 XKSAT= .73RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 58.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 365

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65. 215. 135. 36. 205. 6.

UNIT HYDROGRAPH FOR BASIN: 366

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 366

Area= .44

Rainfall distribution is 6-hour

IA= .50 DTHETA= .00 PSIF= 4.25 XKSAT= .55RTIMP= .0

Phoenix Valley S-graph was selected.

Lag Time = 73.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

10.	181.
15.	333.
[illegible]	299.
[illegible]	174.
30.	67.
35.	29.
40.	10.
45.	10.
50.	0.
55.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 367

Area= .15

Rainfall distribution is 6-hour

IA= .35 DTHETA= .35 PSIF= 4.19 XKSAT= .47RTIMP= .0

Phoenix Valley S-graph was selected.

Lag Time = 15.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	25.	300.	8.
235.	25.	305.	8.
	25.	310.	8.
	25.	315.	8.
250.	25.	320.	8.
255.	11.	325.	8.
260.	8.	330.	8.
265.	8.	335.	8.
270.	8.	340.	0.
275.	8.	345.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 368

Area= .83
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.07 XKSAT= .60RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 112.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	158.
25.	245.
	191.
	139.
40.	98.
45.	48.
50.	31.
55.	19.
60.	6.
65.	6.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 369

Area= .15
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.16 XKSAT= .97RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	54.	90.	0.
25.	76.		
[illegible]	100.		
[illegible]	74.		
40.	57.		
45.	42.		
50.	25.		
55.	14.		
60.	10.		
65.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 370

Area= .07
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.42 XKSAT= .82RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 28.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	42.	300.	8.
[illegible]	27.	305.	8.
[illegible]	27.	310.	8.
[illegible]	27.	315.	8.
250.	27.	320.	8.
255.	27.	325.	8.
260.	10.	330.	8.
265.	8.	335.	8.
270.	8.	340.	8.
275.	8.	345.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 371

Area= .93
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.97 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 114.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	75.	300.	14.	370.	0.
235.	74.	305.	14.		
[illegible]	74.	310.	14.		
[illegible]	58.	315.	14.		
250.	45.	320.	14.		
255.	45.	325.	14.		
260.	45.	330.	14.		
265.	45.	335.	14.		
270.	45.	340.	14.		
275.	14.	345.	14.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 372

Area= 1.62, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .33RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 120.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	93.	90.	121.	160.	8.
25.	119.	95.	92.	165.	8.
	137.	100.	63.	170.	0.
	154.	105.	45.	175.	0.
40.	178.	110.	42.		
45.	203.	115.	37.		
50.	260.	120.	26.		
55.	323.	125.	26.		
60.	291.	130.	13.		
65.	243.	135.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 373

Area= .43
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.37 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	21.	300.	8.
235.	8.	305.	8.
	8.	310.	0.
	8.	315.	0.
250.	8.		
255.	8.		
260.	8.		
265.	8.		
270.	8.		
275.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 374

Area= .76
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.92 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 102.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.
235.	4.
[illegible]	4.
[illegible]	4.
250.	4.
255.	4.
260.	4.
265.	4.
270.	4.
275.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 375

Area= .41
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.98 XKSAT= .24RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 96.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	186.	130.	35.	200.	6.
65.	232.	135.	34.	205.	6.

[illegible] HYDROGRAPH FOR BASIN: 376

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 376

Area= .42
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.90 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 70.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	52.	90.	3.
25.	65.	95.	3.
[illegible]	90.	100.	0.
[illegible]	111.	105.	0.
[illegible]	83.		
45.	67.		
50.	52.		
55.	40.		
60.	21.		
65.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 377

Area= .09
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.76 XKSAT= .33RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 33.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65.	139.	135.	22.	205.	4.

UNIT HYDROGRAPH FOR BASIN: 377A

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	4.				
215.	4.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 377A

Area= .27
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.82 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 72.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.	300.	1.
235.	4.	305.	1.
[illegible]	4.	310.	1.
[illegible]	2.	315.	1.
250.	1.	320.	1.
255.	1.	325.	0.
260.	1.	330.	0.
265.	1.		
270.	1.		
275.	1.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 377B

Area= .12
Rainfall distribution is 6-hour
IA= .42 DTHETA= .05 PSIF= 3.50 XKSAT= .45RTIMP= 4.0
Phoenix Valley S-graph was selected.
Lag Time = 107.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	9.	300.	8.
235.	8.	305.	0.
[illegible]	8.	310.	0.
[illegible]	8.		
250.	8.		
255.	8.		
260.	8.		
265.	8.		
270.	8.		
275.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 378

Area= .78
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.16 XKSAT= .77RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 100.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	14.	300.	4.
235.	14.	305.	4.
[illegible]0.	14.	310.	4.
[illegible]5.	14.	315.	4.
[illegible].	14.	320.	4.
255.	4.	325.	4.
260.	4.	330.	4.
265.	4.	335.	0.
270.	4.	340.	0.
275.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 379

Area= .46
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.68 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 111.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	39.	90.	62.	160.	3.
25.	49.	95.	54.	165.	3.
[illegible].	57.	100.	44.	170.	3.
[illegible]5.	64.	105.	31.	175.	3.
[illegible].	72.	110.	20.	180.	0.
45.	83.	115.	19.	185.	0.
50.	96.	120.	18.		
55.	124.	125.	12.		
60.	145.	130.	11.		
65.	121.	135.	11.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 380

Area= .20
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.20 XKSAT= .22RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 60.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	35.	90.	72.	160.	3.
25.	44.	95.	64.	165.	3.
[illegible]).	52.	100.	56.	170.	3.
[illegible]5.	59.	105.	50.	175.	3.
[illegible].	65.	110.	38.	180.	3.
45.	73.	115.	28.	185.	3.
50.	82.	120.	19.	190.	3.
55.	96.	125.	18.	195.	3.
60.	121.	130.	18.	200.	0.
65.	140.	135.	13.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN= 381

Area= .21
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.15 XKSAT= .23RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 65.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	15.	90.	20.	160.	1.
25.	19.	95.	15.	165.	1.
1.	22.	100.	10.	170.	0.
5.	25.	105.	7.	175.	0.
	29.	110.	7.		
45.	33.	115.	6.		
50.	43.	120.	4.		
55.	53.	125.	4.		
60.	47.	130.	2.		
65.	39.	135.	1.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 381B

Area= .07
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.68 XKSAT= .27RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	9.
.	9.
.	9.
.	9.
230.	9.
235.	9.
240.	9.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 382

Area= .71
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.29 XKSAT= .21RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 80.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	31.	90.	61.	160.	3.
25.	38.	95.	54.	165.	3.
[illegible]	45.	100.	47.	170.	3.
[illegible]	51.	105.	41.	175.	3.
[illegible]	56.	110.	31.	180.	3.
45.	64.	115.	22.	185.	3.
50.	72.	120.	17.	190.	3.
55.	85.	125.	16.	195.	0.
60.	107.	130.	15.	200.	0.
65.	121.	135.	10.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 383

Area= .18
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.68 XKSAT= .27RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 65.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 383A

[illegible]	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	2.				
215.	2.				
220.	2.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 383A

Area= .16
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.41 XKSAT= .29RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	53.	90.	95.	160.	5.
25.	65.	95.	83.	165.	5.
[illegible]	77.	100.	73.	170.	5.
[illegible]	86.	105.	59.	175.	5.
[illegible]	96.	110.	43.	180.	5.
45.	109.	115.	27.	185.	5.
50.	123.	120.	26.	190.	0.
55.	150.	125.	25.	195.	0.
60.	193.	130.	19.		
65.	188.	135.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 384

Area= .29
Rainfall distribution is 6-hour
IA= .46 DTHETA= .02 PSIF= 7.54 XKSAT= .18RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 63.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

[illegible]10.	5.
[illegible]	5.
[illegible]	5.
225.	5.
230.	5.
235.	5.
240.	5.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 385

Area= .39
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.53 XKSAT= .19RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.
235.	4.
[illegible]0.	4.
[illegible]5.	4.
[illegible]	4.
[illegible]	4.
260.	4.
265.	4.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 386

Area= .35
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.87 XKSAT= .33RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 89.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	96.	125.	24.	195.	4.
60.	115.	130.	21.	200.	4.
[illegible]	145.	135.	20.	205.	4.

[illegible] HYDROGRAPH FOR BASIN: 387

[illegible]ME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 387

Area= .25
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.86 XKSAT= .26RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	5.
215.	5.
[illegible]	5.
[illegible]	5.
230.	5.
235.	5.
240.	5.
245.	5.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 261

Area= .41
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.87 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 82.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	12.
225.	12.
[illegible]	12.
[illegible]	12.
240.	12.
245.	12.
250.	12.
255.	12.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 262

Area= 1.03
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.68 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 86.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
	7.				
215.	7.				
220.	7.				
225.	7.				
230.	7.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 263

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.78 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 77.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65. 254. 135. 41. 205. 7.

UNIT HYDROGRAPH FOR BASIN: 264

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	7.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 264

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.80 XKSAT= .52RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 72.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	2.
235.	2.
[illegible]	2.
[illegible]	2.
250.	2.
255.	2.
260.	2.
265.	2.
270.	2.
275.	2.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 265

Area= .22
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.83 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 95.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	13.				
215.	13.				
220.	13.				
225.	13.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 265A

Area= .95
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 76.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.
235.	4.
[illegible]	4.
[illegible]	4.
250.	4.
255.	4.
260.	4.
265.	4.
270.	4.
275.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 266

Area= .33
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 95.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

[illegible]0.	6.
[illegible].	6.
[illegible].	6.
225.	6.
230.	6.
235.	6.
240.	6.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 267

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.36 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	11.
230.	11.
[illegible].	11.
[illegible].	11.
245.	11.
250.	11.
255.	11.
260.	11.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 268

Area= .95
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.00 XKSAT= .38RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	253.	125.	64.	195.	10.
[illegible]0.	303.	130.	56.	200.	10.
[illegible].	380.	135.	52.	205.	10.

HYDROGRAPH FOR BASIN: 269

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 269

Area= .66
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.44 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	307.
25.	481.
[illegible]	387.
[illegible]	283.
40.	201.
45.	104.
50.	65.
55.	41.
60.	13.
65.	13.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 270

Area= .30
Rainfall distribution is 6-hour
IA= .16 DTHETA= .22 PSIF= 3.58 XKSAT= .38RTIMP= 18.0
Phoenix Valley S-graph was selected.
Lag Time = 24.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	7.
[illegible]	7.
[illegible]	7.
[illegible]	7.
245.	7.
250.	7.
255.	7.
260.	7.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 271

Area= .57
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.47 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 251

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	2.
235.	2.
240.	2.
245.	2.
250.	2.
255.	2.
260.	2.
265.	2.
270.	2.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 271A

Area= .16, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.93 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 91.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 271A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	29.	90.	48.	160.	3.
25.	35.	95.	41.	165.	3.
30.	42.	100.	35.	170.	3.
35.	47.	105.	26.	175.	3.
40.	52.	110.	17.	180.	3.
45.	60.	115.	14.	185.	0.
50.	68.	120.	14.	190.	0.
55.	88.	125.	11.		
60.	105.	130.	8.		
65.	93.	135.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 271B

Area= .15
Rainfall distribution is 6-hour
IA= .46 DTHETA= .11 PSIF= 3.61 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 61.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 271A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	297.
25.	296.
30.	201.
35.	131.
40.	58.
45.	36.
50.	15.
55.	9.
60.	9.
65.	0.

VOLUME OF CALGULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 271C

Area= .18
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.90 XKSAT= .34RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 20.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 271A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
   20.          276.
   25.          345.
   30.          235.
   35.          164.
   40.           87.
   45.           48.
   50.           28.
   55.            9.
   60.            9.
   65.            9.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 272
-----------------------------------------------------------------------
Area=    .20
Rainfall distribution is 6-hour
IA= .35  DTHETA= .35  PSIF= 3.88  XKSAT=  .62RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  22.1 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 271A
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          373.       90.          20.
   25.          466.       95.          20.
   30.          643.      100.           0.
   35.          800.      105.           0.
   40.          605.
   45.          484.
   50.          378.
   55.          289.
   60.          156.
   65.          112.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 273
-----------------------------------------------------------------------
Area=    .65
Rainfall distribution is 6-hour
IA= .33  DTHETA= .34  PSIF= 4.25  XKSAT=  .40RTIMP=  2.0
Phoenix Valley S-graph was selected.
Lag Time =  33.2 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 271A
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

230.	21.	300.	6.
235.	20.	305.	6.
240.	6.	310.	6.
245.	6.	315.	0.
250.	6.	320.	0.
255.	6.		
260.	6.		
265.	6.		
270.	6.		
275.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 274

Area= .66
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.29 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 104.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 271A

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	57.	90.	3.
25.	69.	95.	3.
30.	89.	100.	3.
35.	128.	105.	3.
40.	109.	110.	0.
45.	86.	115.	0.
50.	69.		
55.	55.		
60.	40.		
65.	22.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 275

Area= .11, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.84 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 35.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 275

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	101.	125.	23.	195.	4.
60.	122.	130.	22.	200.	4.
65.	153.	135.	21.	205.	4.

T HYDROGRAPH FOR BASIN: 276

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 276

Area= .26
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.08 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 275

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
.0.	12.				
.5.	12.				
220.	12.				
225.	12.				
230.	12.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 277

Area= .91
Rainfall distribution is 6-hour
IA= .43 DTHETA= .09 PSIF= 3.60 XKSAT= .42RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 77.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 275

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  230.          11.
  235.          11.
  240.          11.
  [illegible]   11.
  [illegible]   11.
  255.          11.
  260.          11.
  265.          11.
  270.          11.
  275.          11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 278
-----------------------------------------------------------------------
Area=   1.00
Rainfall distribution is 6-hour
IA= .42  DTHETA= .13  PSIF= 3.55  XKSAT=  .39RTIMP=  2.0
Phoenix Valley S-graph was selected.
Lag Time =  92.3 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 275
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          56.
   25.          84.
   30.          63.
   [illegible]  45.
   [illegible]  30.
   45.          14.
   50.           9.
   55.           5.
   60.           2.
   65.           2.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 279
-----------------------------------------------------------------------
Area=    .05
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.96  XKSAT=  .42RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  23.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 275
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
   20.          44.       90.          2.
   25.          55.       95.          0.
   30.          81.      100.          0.
   [illegible]  84.
   [illegible]  63.
   [illegible]  49.
   50.          38.
   55.          26.
   60.          13.
   65.          11.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN 279A
-----------------------------------------------------------------------
Area=    .07
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.53  XKSAT=  .47RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  31.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 275
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


   20.          33.
   25.          50.
   30.          38.
   [illegible]  27.
   [illegible]  19.
   45.           9.
   50.           6.
   55.           3.
   60.           1.
   65.           1.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN 279B
-----------------------------------------------------------------------
Area=    .03
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.60  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  24.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 275
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

20.	51.
25.	80.
[illegible]	64.
[illegible]	47.
[illegible]	33.
45.	17.
50.	11.
55.	7.
60.	2.
65.	2.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 279C

Area= .05, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .37RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	35.
25.	32.
[illegible]	22.
[illegible]	14.
40.	6.
45.	4.
50.	1.
55.	1.
60.	1.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 279D

Area= .02
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 20.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	7.
235.	7.
[illegible]	7.
[illegible]	7.
250.	7.
255.	7.
260.	7.
265.	7.
270.	7.
275.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 280

Area= .61
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.62 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 94.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	15.	90.	13.	160.	0.
25.	18.	95.	9.	165.	0.
[illegible]	21.	100.	7.		
[illegible]	24.	105.	6.		
40.	28.	110.	5.		
45.	34.	115.	4.		
50.	45.	120.	3.		
55.	47.	125.	1.		
60.	38.	130.	1.		
65.	32.	135.	1.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 280A

Area= .06
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.68 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 53.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	10.
235.	10.
	10.
	10.
250.	10.
255.	10.
260.	10.
265.	10.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 281

Area= .85
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 89.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	81.	90.	4.
25.	106.	95.	0.
	159.	100.	0.
	136.		
40.	104.		
45.	80.		
50.	60.		
55.	32.		
60.	22.		
65.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 282

Area= .12
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.58 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 30.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
[illegible]	2.				
[illegible]	2.				
220.	2.				
225.	2.				
230.	2.				
235.	2.				
240.	0.				
245.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 283

Area= .16
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.52 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 79.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	7.
[illegible]	7.
[illegible]	7.
225.	7.
230.	7.
235.	7.
240.	7.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 284

Area= .52
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	32.	90.	0.
25.	46.		
[illegible]	58.		
[illegible]	42.		
40.	32.		
45.	23.		
50.	12.		
55.	8.		
60.	5.		
65.	3.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 285

Area= .04
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 27.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	43.	90.	0.
25.	57.	95.	0.
[illegible]	84.		
[illegible]	66.		
40.	51.		
45.	38.		
50.	27.		
55.	14.		
60.	10.		
65.	7.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 285A

Area= .06
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 29.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	47.	90.	0.
25.	65.		
	86.		
	63.		
40.	48.		
45.	36.		
50.	21.		
55.	12.		
60.	9.		
65.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 285B

Area= .06
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 28.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
	9.				
	9.				
220.	9.				
225.	9.				
230.	9.				
235.	9.				
240.	0.				
245.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 286

Area= .70
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.06 XKSAT= .37RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 79.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	63.	90.	36.	160.	0.
25.	77.	95.	27.		
	89.	100.	25.		
	103.	105.	18.		
40.	121.	110.	15.		
45.	158.	115.	11.		
50.	194.	120.	5.		
55.	165.	125.	5.		
60.	138.	130.	5.		
65.	120.	135.	5.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287

Area= .23
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.77 XKSAT= .38RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 50.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	68.	90.	102.	160.	6.
25.	86.	95.	90.	165.	6.
.	100.	100.	67.	170.	6.
.	112.	105.	47.	175.	6.
40.	127.	110.	34.	180.	0.
45.	145.	115.	32.	185.	0.
50.	172.	120.	29.		
55.	222.	125.	19.		
60.	246.	130.	19.		
65.	202.	135.	13.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287A

Area= .34
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.63 XKSAT= .18RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 59.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 279C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	46.	90.	3.
25.	55.	95.	3.
	68.	100.	3.
	95.	105.	3.
40.	108.	110.	3.
45.	82.	115.	0.
50.	68.	120.	0.
55.	55.		
60.	44.		
65.	31.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287B

Area= .10, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.82 XKSAT= .26RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 37.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287B

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	67.	90.	28.
25.	82.	95.	26.
[illegible]0.	94.	100.	21.
[illegible]	111.	105.	16.
40.	131.	110.	13.
45.	176.	115.	5.
50.	199.	120.	5.
55.	159.	125.	5.
60.	135.	130.	5.
65.	116.	135.	5.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287C

Area= .23, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 9.74 XKSAT= .09RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 48.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	67.	90.	28.
25.	82.	95.	27.
[illegible]0.	94.	100.	22.
[illegible]	110.	105.	16.
40.	130.	110.	14.
45.	174.	115.	5.
50.	200.	120.	5.
55.	159.	125.	5.
60.	135.	130.	5.
65.	117.	135.	5.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287D

Area= .23
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.26 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 48.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	400.
25.	629.
	559.
	409.
40.	297.
45.	178.
50.	95.
55.	63.
60.	32.
65.	17.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 303A

Area= .42
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.08 XKSAT= .36RTIMP= .1
Phoenix Valley S-graph was selected.
Lag Time = 25.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	724.	90.	37.
25.	938.	95.	0.
	1412.	100.	0.
.	1262.		
40.	968.		
45.	745.		
50.	562.		
55.	322.		
60.	205.		
65.	145.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 304

Area= 1.10
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.09 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 30.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65.	470.	135.	76.	205.	13.

UNIT HYDROGRAPH FOR BASIN: 305

	DISCHARGE	TIME	DISCHARGE	TIME	DISCHARGE
(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
210.	13.				
215.	13.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 305

Area= .92
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.25 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 72.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	80.	90.	169.	160.	8.
25.	100.	95.	150.	165.	8.
[illegible]	119.	100.	132.	170.	8.
[illegible]	136.	105.	118.	175.	8.
40.	149.	110.	94.	180.	8.
45.	167.	115.	70.	185.	8.
50.	189.	120.	44.	190.	8.
55.	218.	125.	43.	195.	8.
60.	275.	130.	41.	200.	0.
65.	325.	135.	33.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 306

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 66.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	78.	90.	18.
25.	94.	95.	17.
	111.	100.	6.
	135.	105.	5.
40.	188.	110.	5.
45.	199.	115.	5.
50.	155.	120.	5.
55.	131.	125.	5.
60.	108.	130.	0.
65.	89.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 307

Area= .21
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.59 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 42.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	69.	90.	90.	160.	6.
25.	89.	95.	69.	165.	6.
	102.	100.	47.	170.	0.
	115.	105.	34.	175.	0.
40.	132.	110.	32.		
45.	151.	115.	27.		
50.	194.	120.	19.		
55.	241.	125.	19.		
60.	217.	130.	10.		
65.	181.	135.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 308

Area= .32
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	13.
215.	13.
[illegible]	13.
[illegible]	13.
230.	13.
235.	13.
240.	13.
245.	13.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 309

Area= 1.07
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 83.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	59.	90.	23.
[illegible]	71.	95.	22.
[illegible]	82.	100.	14.
[illegible]	97.	105.	14.
40.	118.	110.	6.
45.	162.	115.	4.
50.	159.	120.	4.
55.	128.	125.	4.
60.	109.	130.	4.
65.	92.	135.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 310

Area= .19
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.76 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 47.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	8.
235.	8.
[illegible]	8.
[illegible]	8.
250.	8.
255.	8.
260.	8.
265.	8.
270.	8.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 311

Area= .73
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.75 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 91.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	55.	90.	104.	160.	5.
[illegible]	67.	95.	92.	165.	5.
[illegible]	79.	100.	80.	170.	5.
[illegible]	89.	105.	69.	175.	5.
40.	99.	110.	51.	180.	5.
45.	112.	115.	35.	185.	5.
50.	125.	120.	29.	190.	5.
55.	151.	125.	27.	195.	0.
60.	192.	130.	25.	200.	0.
65.	207.	135.	16.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 311A

Area= .31
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.09 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 64.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
          8.
          8.
          8.
          8.
          8.
          8.
          8.
          0.
          0.
-----------------------------------------------------------------
   VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------
            INPUT DATA FOR SUB-BASIN: 312
-----------------------------------------------------------------
   .66
11 distribution is 6-hour
0  DTHETA= .00  PSIF= 3.60  XKSAT=  .44RTIMP=   .0
x Valley S-graph was selected.
me =  80.4 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------
           HEC-1 INPUT IS STORED IN FILE: 292
-----------------------------------------------------------------
 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP


          5.
          5.
          5.
          5.
          5.
          5.
          5.
          5.
          0.
          0.
-----------------------------------------------------------------
   VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------
            INPUT DATA FOR SUB-BASIN: 313
-----------------------------------------------------------------
   .43
11 distribution is 6-hour
0  DTHETA= .00  PSIF= 3.50  XKSAT=  .47RTIMP=   .0
x Valley S-graph was selected.
me =  85.0 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------
           HEC-1 INPUT IS STORED IN FILE: 292
-----------------------------------------------------------------
 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

```
ID DDM MCUHP2 Loop 303
ID
I     5                    300
IO    3
KK
KM BASIN 313
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=   20.3  Kn= .030  LAG=  21.2
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .43
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .12     .25    4.80     .36   20.00
UI   72.    284.    426.    676.    723.    489.    328.    149.     91.     44.
UI   21.     21.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 Loop 303
ID
I[illegible]    5                    300
I[illegible]    3
KK
KM BASIN 314
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.0  Lca=       .4   S=   18.5  Kn= .088  LAG=  52.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .42
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .37     .09    4.80     .44    7.00
UI   27.     27.     63.    105.    132.    151.    173.    201.    245.    328.
UI  320.    260.    225.    196.    166.    142.    120.     87.     54.     46.
UI   44.     28.     27.     17.      8.      8.      8.      8.      8.      8.
UI    8.      0.      0.      0.      0.      0.      0.      0.      0.      0.
U[illegible]   0.      0.      0.      0.      0.      0.      0.      0.      0.
```

60.	176.	130.	35.	200.	6.
65.	219.	135.	34.	205.	6.

HYDROGRAPH FOR BASIN: 314

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 314

Area= .42
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	6.
230.	6.
[illegible]	6.
[illegible]	6.
245.	6.
250.	6.
255.	6.
260.	6.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 315

Area= .47
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	10.
220.	10.
[illegible]	10.
[illegible]	10.
235.	10.
240.	10.
245.	10.
250.	10.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN= 316

Area= .82
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

220.	7.
225.	7.
[illegible]	7.
[illegible]	7.
240.	7.
245.	7.
250.	7.
255.	7.
260.	0.
265.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN= 317

Area= .57
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.52 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 85.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	181.	90.	76.
25.	222.	95.	71.
[illegible]	254.	100.	58.
[illegible]	299.	105.	43.
40.	354.	110.	36.
45.	475.	115.	13.
50.	537.	120.	13.
55.	428.	125.	13.
60.	363.	130.	13.
65.	313.	135.	13.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 318

Area= .62
Rainfall distribution is 6-hour
IA= .27 DTHETA= .14 PSIF= 3.66 XKSAT= .39RTIMP= 12.0
Phoenix Valley S-graph was selected.
Lag Time = 48.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	225.	90.	44.
[illegible]	268.	95.	14.
[illegible]	324.	100.	14.
[illegible]	414.	105.	14.
40.	570.	110.	14.
45.	471.	115.	14.
50.	383.	120.	0.
55.	317.	125.	0.
60.	259.		
65.	208.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 319

Area= .54
Rainfall distribution is 6-hour
IA= .23 DTHETA= .18 PSIF= 3.50 XKSAT= .40RTIMP= 14.0
Phoenix Valley S-graph was selected.
Lag Time = 40.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	349.	90.	19.
25.	434.	95.	19.
[illegible]	575.	100.	19.
[illegible]	780.	105.	0.
40.	610.	110.	0.
45.	489.		
50.	386.		
55.	301.		
60.	191.		
65.	110.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 320

Area= .64
Rainfall distribution is 6-hour
IA= .22 DTHETA= .30 PSIF= 4.27 XKSAT= .48RTIMP= 14.5
Phoenix Valley S-graph was selected.
Lag Time = 34.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	1193.
[illegible]	1047.
[illegible]	707.
[illegible]	432.
40.	188.
45.	116.
50.	34.
55.	34.
60.	34.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 321

Area= .66
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.24 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 20.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	55.	90.	118.	160.	5.
25.	69.	95.	105.	165.	5.
	82.	100.	92.	170.	5.
	94.	105.	82.	175.	5.
40.	103.	110.	68.	180.	5.
45.	115.	115.	50.	185.	5.
50.	130.	120.	31.	190.	5.
55.	149.	125.	30.	195.	5.
60.	190.	130.	28.	200.	0.
65.	224.	135.	24.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 322

Area= .34
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.13 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 66.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	109.	90.	0.
25.	148.	95.	0.
	212.		
	163.		
40.	125.		
45.	94.		
50.	64.		
55.	32.		
60.	25.		
65.	17.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 323

Area= .15
Rainfall distribution is 6-hour
IA= .38 DTHETA= .28 PSIF= 3.95 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 29.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	65.	90.	119.	160.	6.
25.	80.	95.	105.	165.	6.
[illegible]	94.	100.	92.	170.	6.
[illegible]	106.	105.	77.	175.	6.
40.	118.	110.	55.	180.	6.
45.	134.	115.	34.	185.	6.
50.	151.	120.	33.	190.	0.
55.	183.	125.	31.	195.	0.
60.	235.	130.	25.		
65.	236.	135.	19.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 324

Area= .36
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.90 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	6.
235.	6.
[illegible]	6.
[illegible]	6.
250.	6.
255.	6.
260.	6.
265.	6.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 325

Area= .49
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.12 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 89.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	8.				
215.	8.				
220.	8.				
225.	8.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 325A

Area= .61
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.84 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 76.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65.	269.	135.	44.	205.	8.

UNIT HYDROGRAPH FOR BASIN: 326

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	8.				
215.	8.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 326

Area= .54
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.69 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	231.	130.	45.	200.	8.
65.	287.	135.	43.	205.	8.

HYDROGRAPH FOR BASIN: 327

Time (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	8.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 327

Area= .53
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 70.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	111.	90.	275.	160.	11.
25.	144.	95.	241.	165.	11.
	177.	100.	217.	170.	11.
	198.	105.	189.	175.	11.
40.	218.	110.	168.	180.	11.
45.	242.	115.	130.	185.	11.
50.	274.	120.	96.	190.	11.
55.	305.	125.	66.	195.	11.
60.	380.	130.	64.	200.	11.
65.	468.	135.	62.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 328

Area= .76
Rainfall distribution is 6-hour
IA= .46 DTHETA= .09 PSIF= 3.56 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 68.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	129.	90.	184.	160.	11.
25.	163.	95.	158.	165.	11.
[illegible]	190.	100.	117.	170.	11.
[illegible]	213.	105.	76.	175.	0.
40.	241.	110.	63.	180.	0.
45.	277.	115.	60.		
50.	334.	120.	47.		
55.	435.	125.	36.		
60.	449.	130.	36.		
65.	368.	135.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 329

Area= .63
Rainfall distribution is 6-hour
IA= .43 DTHETA= .07 PSIF= 3.62 XKSAT= .44RTIMP= 3.0
Phoenix Valley S-graph was selected.
Lag Time = 58.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	118.	90.	178.	160.	10.
[illegible]	148.	95.	157.	165.	10.
[illegible]	173.	100.	118.	170.	10.
[illegible]	194.	105.	83.	175.	10.
40.	219.	110.	59.	180.	0.
45.	251.	115.	56.	185.	0.
50.	295.	120.	52.		
55.	381.	125.	33.		
60.	427.	130.	33.		
65.	351.	135.	24.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 330

Area= .59
Rainfall distribution is 6-hour
IA= .39 DTHETA= .08 PSIF= 3.59 XKSAT= .43RTIMP= 6.0
Phoenix Valley S-graph was selected.
Lag Time = 59.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
IT     5                    300
IO     3
KK
KM BASIN 330
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=   34.8  Kn= .079  LAG=  50.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .59
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .33     .11    4.70     .46    9.00
UI   39.     39.    100.    161.    198.    228.    263.    308.    404.    496.
UI  425.    354.    308.    261.    223.    190.    144.     93.     69.     65.
UI   46.     39.     28.     12.     12.     12.     12.     12.     12.     12.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
	10.				
215.	10.				
220.	10.				
225.	10.				
230.	10.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 331

Area= .75
Rainfall distribution is 6-hour
IA= .46 DTHETA= .02 PSIF= 3.55 XKSAT= .46RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 77.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	7.
215.	7.
[illegible]	7.
[illegible]	7.
230.	7.
235.	7.
240.	7.
245.	7.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 332

Area= .56
Rainfall distribution is 6-hour
IA= .46 DTHETA= .03 PSIF= .37 XKSAT= .44RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 82.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
[illegible]    5                    300
IC     3
KK
KM BASIN 333
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.1  Lca=       .4   S=   20.5  Kn= .066  LAG=  41.3
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .58
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .27     .15    4.80     .41   12.00
UI   47.     58.    170.    231.    274.    329.    408.    576.    525.    419.
UI  352.    289.    235.    173.    101.     80.     65.     47.     30.     15.
UI   15.     15.     15.     15.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER BASIN 15 - 334
ID
IT     5                    300
IO     3
KK
KM BASIN 334
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .9  Lca=        .4   S=   21.6  Kn= .085  LAG=  46.3
KM  AGRICULTURAL S-GRAPH WAS USED FOR THIS BASIN
BA   .62
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .50     .26    3.70     .89     .00
UI   49.     52.    113.    222.    283.    358.    385.    415.    415.    364.
UI  362.    309.    276.    215.    174.    142.    132.     88.     76.     61.
UI   51.     45.     37.     28.     28.     26.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER BASIN 15 - 335
ID
IT     5                    300
IO     3
KK
KM BASIN 335
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=        .5  Lca=        .2   S=   29.6  Kn= .120  LAG=  39.6
KM  AGRICULTURAL S-GRAPH WAS USED FOR THIS BASIN
BA   .24
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .50     .25    3.95     .76     .00
UI   22.     31.     67.    127.    146.    176.    188.    185.    156.    159.
UI  122.    102.     76.     66.     48.     36.     28.     23.     20.     15.
UI   13.     13.      5.      3.      3.      3.      3.      3.      3.      3.
UI    3.      3.      3.      3.      3.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER BASIN 15 - 336
ID
IT     5                    300
IO     3
KK
KM BASIN 336
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.3  Lca=      1.4   S=   20.6  Kn= .106  LAG= 132.0
KM  AGRICULTURAL S-GRAPH WAS USED FOR THIS BASIN
BA  1.60
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .43     .26    3.60     .94   14.00
UI   45.     45.     45.     45.     45.     67.     94.     94.    145.    175.
UI  235.    244.    287.    235.    252.    313.    391.    287.    375.    375.
UI  375.    375.    375.    375.    375.    375.    338.    313.    313.    313.
UI  353.    326.    301.    235.    235.    244.    267.    231.    184.    171.
UI  171.    160.    134.    130.    125.    134.    144.    100.     85.     85.
UI   74.     72.     72.     65.     55.     55.     55.     55.     42.     41.
UI   41.     41.     41.     41.     28.     25.     25.     25.     25.     25.
UI   25.     25.     25.     24.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      6.      6.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

```
ID DDM MCUHP2 SUPER BASIN 15 - 336A
ID
IT     5                    300
IO     3
KK
KM BASIN 336A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      2.1  Lca=      1.1   S=   20.7  Kn= .111  LAG= 122.0
KM  AGRICULTURAL S-GRAPH WAS USED FOR THIS BASIN
BA   .37
IN    15
KM RAINFALL DEPTH OF 4.03 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.030
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .47     .25    4.25     .65    3.00
UI   11.     11.     11.     11.     11.     22.     23.     30.     39.     58.
UI   59.     73.     59.     65.     78.     93.     81.     94.     94.     94.
UI   94.     94.     94.     94.     85.     78.     78.     78.     88.     88.
UI   59.     59.     59.     66.     61.     46.     43.     43.     39.     34.
UI   32.     31.     36.     31.     21.     21.     19.     18.     18.     16.
UI   14.     14.     14.     13.     10.     10.     10.     10.     10.      7.
UI    6.      6.      6.      6.      6.      6.      6.      6.      3.      1.
UI    1.      1.      1.      1.      1.      1.      1.      1.      1.      1.
UI    1.      1.      1.      1.      1.      1.      1.      1.      1.      1.
UI    1.      1.      1.      1.      1.      1.      1.      1.      1.      1.
UI    1.      1.      1.      1.      1.      1.      1.      1.      1.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

20.	519.
25.	803.
[illegible]	624.
[illegible]	455.
40.	319.
45.	156.
50.	101.
55.	61.
60.	21.
65.	21.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 337

Area= .49
Rainfall distribution is 6-hour
IA= .19 DTHETA= .30 PSIF= 3.60 XKSAT= .33RTIMP= 23.5
Phoenix Valley S-graph was selected.
Lag Time = 24.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	97.	90.	38.
25.	118.	95.	34.
[illegible]	136.	100.	22.
[illegible]	161.	105.	22.
40.	197.	110.	7.
45.	270.	115.	7.
50.	257.	120.	7.
55.	207.	125.	7.
60.	178.	130.	7.
65.	149.	135.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 338

Area= .31
Rainfall distribution is 6-hour
IA= .49 DTHETA= .03 PSIF= 4.17 XKSAT= .67RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 47.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	472.	90.	25.
25.	597.	95.	25.
	868.	100.	0.
	933.	105.	0.
40.	697.		
45.	549.		
50.	424.		
55.	292.		
60.	152.		
65.	125.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 338A

Area= .77
Rainfall distribution is 6-hour
IA= .24 DTHETA= .29 PSIF= 3.88 XKSAT= .70RTIMP= 10.0
Phoenix Valley S-graph was selected.
Lag Time = 32.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	12.
220.	12.
	12.
	12.
235.	12.
240.	12.
245.	12.
250.	12.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 339

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.08 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	212.	130.	41.	200.	7.
65.	264.	135.	39.	205.	7.

HYDROGRAPH FOR BASIN: 340

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	7.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 340

Area= .48
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.06 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 70.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
	10.				
215.	10.				
220.	10.				
225.	10.				
230.	10.				
235.	0.				
240.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 341

Area= .79, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.77 XKSAT= .48RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 78.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 341

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	76.	90.	120.	160.	7.
25.	95.	95.	105.	165.	7.
[illegible]	112.	100.	86.	170.	7.
[illegible]	125.	105.	61.	175.	7.
40.	141.	110.	39.	180.	0.
45.	161.	115.	37.	185.	0.
50.	187.	120.	36.		
55.	240.	125.	24.		
60.	283.	130.	22.		
65.	236.	135.	21.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 342

Area= .39
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.13 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 60.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	5.
[illegible]	5.
[illegible]	5.
225.	5.
230.	5.
235.	5.
240.	5.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 342A

Area= .38
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.64 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	6.
	6.
	6.
225.	6.
230.	6.
235.	6.
240.	6.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 343

Area= .51
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.68 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	7.
235.	7.
	7.
	7.
250.	7.
255.	7.
260.	7.
265.	7.
270.	7.
275.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 344

Area= .61
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.54 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 92.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65.	209.	135.	35.	205.	6.

UNIT HYDROGRAPH FOR BASIN: 345

[illegible]	DISCHARGE	TIME	DISCHARGE	TIME	DISCHARGE
(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
210.	6.				
215.	6.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 345

Area= .43
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.71 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	111.	90.	142.	160.	9.
25.	143.	95.	106.	165.	9.
[illegible]	165.	100.	71.	170.	0.
[illegible]	185.	105.	54.	175.	0.
40.	213.	110.	50.		
45.	244.	115.	41.		
50.	319.	120.	31.		
55.	386.	125.	31.		
60.	342.	130.	12.		
65.	287.	135.	9.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 346

Area= .51
Rainfall distribution is 6-hour
IA= .45 DTHETA= .12 PSIF= 3.74 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65. 78. 135. 13. 205. 2.

INIT HYDROGRAPH FOR BASIN: 346A

(min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	2.				
215.	2.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 346A

Area= .16

Rainfall distribution is 6-hour

IA= .50 DTHETA= .00 PSIF= 3.67 XKSAT= .46RTIMP= .0

Phoenix Valley S-graph was selected.

Lag Time = 73.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	3.
230.	3.
	3.
	3.
245.	3.
250.	3.
255.	3.
260.	3.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 346B

Area= .27, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.83 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 88.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 346B

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	55.	90.	3.
25.	66.	95.	3.
	82.	100.	3.
	113.	105.	3.
40.	129.	110.	3.
45.	99.	115.	0.
50.	81.	120.	0.
55.	66.		
60.	53.		
65.	37.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 346C

Area= .12
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.64 XKSAT= .50RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 37.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 346B

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	14.				
215.	14.				
220.	14.				
225.	14.				
230.	0.				
235.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 347

Area= 1.02, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .46 DTHETA= .03 PSIF= 3.76 XKSAT= .44RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 76.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	71.	90.	98.	160.	6.
25.	90.	95.	83.	165.	6.
	104.	100.	60.	170.	6.
	117.	105.	37.	175.	0.
40.	133.	110.	34.	180.	0.
45.	153.	115.	33.		
50.	187.	120.	22.		
55.	244.	125.	20.		
60.	239.	130.	18.		
65.	196.	135.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 348

Area= .34
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.70 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 57.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	81.	90.	20.
25.	97.	95.	17.
[illegible]	115.	100.	8.
[illegible]	138.	105.	5.
40.	190.	110.	5.
45.	211.	115.	5.
50.	164.	120.	5.
55.	138.	125.	5.
60.	114.	130.	0.
65.	95.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 348A

Area= .22
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.62 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 43.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	7.
235.	7.
[illegible]	7.
[illegible]	7.
250.	7.
255.	7.
260.	7.
265.	7.
270.	7.
275.	7.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 348B

Area= .66
Rainfall distribution is 6-hour
IA= .49 DTHETA= .04 PSIF= 3.59 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 94.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
IT
IO     5                    300
IC     3
KK
KM BASIN 348B
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.6  Lca=       .7   S=   26.7  Kn= .113  LAG=  94.0
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .53
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .49     .04    4.70     .47     .00
UI   19.     19.     19.     19.     48.     66.     76.     89.     96.    105.
UI  112.    121.    131.    143.    155.    181.    216.    246.    235.    206.
UI  184.    169.    157.    147.    133.    122.    113.    103.     94.     88.
UI   73.     57.     47.     34.     34.     31.     31.     28.     19.     19.
UI   19.     19.      6.      6.      6.      6.      6.      6.      6.      6.
UI    6.      6.      6.      6.      6.      6.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

20.	271.
25.	238.
[illegible]	161.
[illegible]	99.
40.	43.
45.	26.
50.	8.
55.	8.
60.	8.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 302

Area= .15
Rainfall distribution is 6-hour
IA= .30 DTHETA= .33 PSIF= 3.54 XKSAT= .30RTIMP= 4.0
Phoenix Valley S-graph was selected.
Lag Time = 20.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	332.	90.	187.	160.	0.
25.	407.	95.	141.		
[illegible]	470.	100.	133.		
[illegible]	543.	105.	92.		
40.	636.	110.	81.		
45.	835.	115.	54.		
50.	1022.	120.	25.		
55.	868.	125.	25.		
60.	725.	130.	25.		
65.	631.	135.	25.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 303

Area= 1.21
Rainfall distribution is 6-hour
IA= .35 DTHETA= .34 PSIF= 4.19 XKSAT= .39RTIMP= .4
Phoenix Valley S-graph was selected.
Lag Time = 50.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
I     5                    300
IO    3
KK
KM BASIN 303
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.8  Lca=      1.3   S=   30.0  Kn= .050  LAG=  51.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .90
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .35     .35    4.40     .37     .00
UI   59.     59.    145.    237.    294.    337.    388.    452.    566.    748.
UI  670.    551.    480.    411.    354.    297.    247.    166.    105.     99.
UI   84.     59.     59.     19.     18.     18.     18.     18.     18.     18.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
```

20.	67.	90.	24.
25.	81.	95.	17.
	94.	100.	15.
	112.	105.	7.
40.	145.	110.	5.
45.	187.	115.	5.
50.	158.	120.	5.
55.	130.	125.	5.
60.	111.	130.	5.
65.	92.	135.	5.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 287E

Area= .20
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.69 XKSAT= .54RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 45.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

225.	3.
230.	3.
	3.
	3.
245.	3.
250.	3.
255.	3.
260.	3.
265.	0.
270.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 288

Area= .22
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.50 XKSAT= .19RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 87.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
 230.          9.
 235.          9.
               9.
               9.
 250.          9.
 255.          9.
 260.          9.
 265.          9.
 270.          9.
 275.          9.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 288A
-----------------------------------------------------------------------
Area=    .83
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 8.48  XKSAT=  .12RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  93.7 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 287C
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

 230.          3.
 235.          3.
               3.
               3.
 250.          3.
 255.          3.
 260.          3.
 265.          3.
 270.          3.
 275.          3.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 288B
-----------------------------------------------------------------------
Area=    .26
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 7.90  XKSAT=  .16RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  96.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                 HEC-1 INPUT IS STORED IN FILE: 287C
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

230.	46.	300.	8.	370.	8.
235.	46.	305.	8.	375.	8.
[illegible]	46.	310.	8.	380.	8.
[illegible]	43.	315.	8.	385.	0.
250.	43.	320.	8.	390.	0.
255.	43.	325.	8.		
260.	34.	330.	8.		
265.	26.	335.	8.		
270.	26.	340.	8.		
275.	26.	345.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 289

Area= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.20 XKSAT= .21RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 128.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	6.
215.	6.
[illegible]	6.
[illegible]	6.
230.	6.
235.	6.
240.	6.
245.	6.
250.	0.
255.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 289A

Area= .50
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.63 XKSAT= .39RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 82.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	143.	90.	105.	160.	0.
25.	177.	95.	63.		
	204.	100.	60.		
	234.	105.	53.		
40.	272.	110.	36.		
45.	338.	115.	36.		
50.	452.	120.	14.		
55.	410.	125.	11.		
60.	336.	130.	11.		
65.	292.	135.	11.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 290

Area= .55
Rainfall distribution is 6-hour
IA= .47 DTHETA= .07 PSIF= 4.26 XKSAT= .65RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 51.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	11.
235.	11.
	11.
	11.
250.	11.
255.	11.
260.	11.
265.	11.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 291

Area= .99
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.01 XKSAT= .94RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 90.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 287C

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	446.	90.	26.
25.	537.	95.	26.
[illegible]	663.	100.	26.
[illegible]	932.	105.	26.
40.	1030.	110.	26.
45.	785.	115.	0.
50.	647.	120.	0.
55.	521.		
60.	419.		
65.	284.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 292

Area= .96, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .30 DTHETA= .27 PSIF= 3.78 XKSAT= .36RTIMP= 6.0
Phoenix Valley S-graph was selected.
Lag Time = 37.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	191.	90.	164.	160.	0.
25.	239.	95.	105.	165.	0.
[illegible]	276.	100.	85.		
[illegible]	314.	105.	81.		
40.	366.	110.	55.		
45.	442.	115.	49.		
50.	591.	120.	36.		
55.	593.	125.	15.		
60.	480.	130.	15.		
65.	413.	135.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 293

Area= .77
Rainfall distribution is 6-hour
IA= .44 DTHETA= .07 PSIF= 3.74 XKSAT= .37RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 52.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	29.	90.	6.
25.	34.	95.	3.
	41.	100.	2.
	51.	105.	2.
40.	72.	110.	2.
45.	62.	115.	2.
50.	50.	120.	2.
55.	42.	125.	0.
60.	34.	130.	0.
65.	28.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 293A

Area= .07
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 40.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	272.
25.	306.
	206.
	140.
40.	67.
45.	39.
50.	20.
55.	9.
60.	9.
65.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 294

Area= .18
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.54 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 21.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
IR
I     5                    300
IC    3
KK
KM BASIN 295
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=       .9  Lca=       .4   S=   20.2  Kn= .045  LAG=  23.8
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .31
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .29     .33    5.10     .26    5.00
UI   44.    159.    248.    346.    521.    388.    280.    190.     90.     59.
UI   33.     13.     13.     13.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
ZZ
```

eec

Project Title Loop 303 Project No. _____ Date _____

Subject Unit Hydrograph Prepared By GR Checked By _____ Page _____

Sub 4 Refer to FCDMC Drainage Report for RID canal overchute

eec

Project Title Loop 303 Project No. _____ Date _____

Subject Unit Hydrograph Prepared By GR Checked By _____ Page _____

Sub 7 - Refer to FCDMC Drainage Report for RID canal overchute

eec

Project Title Loop 303 Project No. _____ Date _____

Subject Unit Hydrograph Prepared By GK Checked By _____ Page _____

2711 Refer to FCD MC Drainage Report for RID canal overchute

eec

Project Title Loop 303 Project No. _____ Date _____

Subject Unit Hydrograph Prepared By GK Checked By _____ Page _____

2712 Refer to FCD MC Drainage Report for RID canal overchute

5.	25.
10.	75.
[illegible]	140.
[illegible]	117.
25.	66.
30.	25.
35.	10.
40.	4.
45.	0.
50.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 295A

Area= .06
Rainfall distribution is 6-hour
IA= .32 DTHETA= .34 PSIF= 3.54 XKSAT= .30RTIMP= 3.0
Phoenix Valley S-graph was selected.
Lag Time = 14.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	340.	130.	67.	200.	12.
65.	422.	135.	66.	205.	12.

[illegible] HYDROGRAPH FOR BASIN: 296

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	12.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 296

Area= .81
Rainfall distribution is 6-hour
IA= .49 DTHETA= .02 PSIF= 3.55 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
[illegible]    5                    300
IC     3
KK
KM BASIN 296
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.3  Lca=       .6   S=   12.8  Kn= .052  LAG=  42.4
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .38
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .28     .26    4.70     .35    8.00
UI   30.     33.    105.    142.    169.    201.    245.    343.    353.    276.
UI  233.    192.    158.    127.     78.     52.     49.     30.     29.      9.
UI    9.      9.      9.      9.      9.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
Z[illegible]
```

230.	27.	300.	9.	370.	3.
235.	26.	305.	8.	375.	3.
	18.	310.	3.	380.	3.
	16.	315.	3.	385.	3.
250.	16.	320.	3.	390.	3.
255.	16.	325.	3.	395.	3.
260.	15.	330.	3.	400.	3.
265.	15.	335.	3.	405.	3.
270.	15.	340.	3.	410.	0.
275.	12.	345.	3.	415.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 336A

Area= .37
Rainfall distribution is 6-hour
IA= .51 DTHETA= .02 PSIF= 3.86 XKSAT= .44RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 136.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
	0.				
	83.				
10.	262.				
15.	198.				
20.	57.				
25.	13.				
30.	0.				
35.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= .99

INPUT DATA FOR SUB-BASIN: 336B

Area= .08
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 4.07 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 9.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
ID DDM MCUHP2 Loop 303
ID
IT     5                    300
IC     3
KK
KM BASIN 296A
KM  THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM  L=      1.2  Lca=       .6   S=    8.6  Kn= .044  LAG=  35.5
KM  PHOENIX VALLEY S-GRAPH WAS USED FOR THIS BASIN
BA   .39
IN    15
KM RAINFALL DEPTH OF 4.01 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
KM AN AREAL REDUCTION COEFFICIENT OF 1.000 WAS USED
PB 4.010
KM THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II RAINFALL
PC  .000    .002    .005    .008    .011    .014    .017    .020    .023    .026
PC  .029    .032    .035    .038    .041    .044    .048    .052    .056    .060
PC  .064    .068    .072    .076    .080    .085    .090    .095    .100    .105
PC  .110    .115    .120    .126    .135    .142    .150    .158    .166    .175
PC  .184    .195    .208    .224    .243    .266    .318    .479    .678    .716
PC  .743    .764    .781    .795    .808    .818    .828    .837    .844    .851
PC  .858    .865    .871    .877    .883    .889    .895    .900    .905    .910
PC  .915    .919    .923    .927    .931    .935    .939    .943    .947    .951
PC  .954    .957    .960    .963    .966    .969    .972    .975    .978    .981
PC  .984    .987    .990    .993    .996    .999   1.000
LG   .28     .32    4.65     .32    6.00
UI   37.     67.    151.    198.    242.    309.    447.    383.    304.    244.
UI  194.    141.     78.     61.     42.     33.     11.     11.     11.     11.
UI   11.      0.      0.      0.      0.      0.      0.      0.      0.      0.
UI    0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
Z
```

(min.)	(cfs)	(min.)	(cfs)	(min.)	(cfs)
[illegible]	5.				
[illegible]	5.				
220.	5.				
225.	5.				
230.	5.				
235.	5.				
240.	0.				
245.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 297

Area= .38
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 80.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	48.	90.	89.	160.	4.
25.	59.	95.	78.	165.	4.
[illegible]	70.	100.	69.	170.	4.
[illegible]	79.	105.	58.	175.	4.
40.	88.	110.	42.	180.	4.
45.	100.	115.	26.	185.	4.
50.	112.	120.	25.	190.	0.
55.	136.	125.	23.	195.	0.
60.	175.	130.	19.		
65.	178.	135.	14.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN= 297A

Area= .27
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 63.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	360.	130.	70.	200.	12.
65.	445.	135.	68.	205.	12.

HYDROGRAPH FOR BASIN: 298

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	12.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 298

Area= .84
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.53 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	166.	130.	33.	200.	6.
65.	207.	135.	33.	205.	6.

HYDROGRAPH FOR BASIN: 299

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 299

Area= .40
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.62 XKSAT= .40RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	80.	90.	114.	160.	7.
25.	101.	95.	97.	165.	7.
[illegible]	118.	100.	72.	170.	7.
[illegible]	132.	105.	46.	175.	0.
[illegible]	150.	110.	39.	180.	0.
45.	172.	115.	37.		
50.	208.	120.	29.		
55.	271.	125.	22.		
60.	278.	130.	22.		
65.	227.	135.	9.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 300

Area= .39
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.36 XKSAT= .30RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 58.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

15.	424.
20.	644.
[illegible]	427.
[illegible]	263.
35.	110.
40.	61.
45.	17.
50.	17.
55.	0.
60.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 301

Area= .30
Rainfall distribution is 6-hour
IA= .24 DTHETA= .28 PSIF= 5.79 XKSAT= .23RTIMP= 10.0
Phoenix Valley S-graph was selected.
Lag Time = 17.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 292

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65. 476. 135. 77. 205. 13.

UNIT HYDROGRAPH FOR BASIN: 349

(min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	13.				
215.	13.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 349

Area= .93
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.82 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 72.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	2.
235.	2.
[illegible]	2.
[illegible]	2.
250.	2.
255.	2.
260.	2.
265.	2.
270.	2.
275.	2.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 350

Area= .19
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.57 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 93.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	142.	90.	245.	160.	13.
25.	175.	95.	212.	165.	13.
[illegible]	207.	100.	186.	170.	13.
[illegible]	232.	105.	141.	175.	13.
40.	259.	110.	98.	180.	13.
45.	296.	115.	73.	185.	13.
50.	334.	120.	69.	190.	0.
55.	428.	125.	65.	195.	0.
60.	520.	130.	41.		
65.	480.	135.	41.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 351

Area= .76
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.82 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 62.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	38.	90.	51.	160.	3.
[illegible]	49.	95.	42.	165.	3.
[illegible]	56.	100.	29.	170.	3.
	63.	105.	19.	175.	0.
40.	72.	110.	18.	180.	0.
45.	83.	115.	17.		
50.	102.	120.	11.		
55.	134.	125.	11.		
60.	124.	130.	8.		
65.	103.	135.	3.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 352

Area= .18
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 57.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 352A

[illegible])	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	2.				
215.	2.				
220.	2.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 352A

Area= .13
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.79 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 75.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	46.	90.	64.	160.	4.
25.	58.	95.	54.	165.	4.
[illegible]	67.	100.	39.	170.	4.
[illegible]	75.	105.	25.	175.	0.
40.	86.	110.	22.	180.	0.
45.	98.	115.	21.		
50.	120.	120.	15.		
55.	156.	125.	13.		
60.	155.	130.	12.		
65.	127.	135.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 353

Area= .22
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.79 XKSAT= .44RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 58.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	104.	90.	38.
25.	127.	95.	24.
	147.	100.	23.
	175.	105.	9.
40.	232.	110.	7.
45.	291.	115.	7.
50.	242.	120.	7.
55.	200.	125.	7.
60.	171.	130.	7.
65.	142.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 354

Area= .31
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.64 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 45.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	17.	90.	34.	160.	2.
25.	21.	95.	31.	165.	2.
	24.	100.	27.	170.	2.
	28.	105.	24.	175.	2.
40.	31.	110.	19.	180.	2.
45.	34.	115.	14.	185.	2.
50.	39.	120.	9.	190.	2.
55.	45.	125.	9.	195.	2.
60.	57.	130.	8.	200.	0.
65.	67.	135.	6.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 355

Area= .10
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.75 XKSAT= .27RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 65.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	19.	90.	1.
25.	23.	95.	1.
[illegible]	28.	100.	1.
[illegible]	39.	105.	1.
40.	43.	110.	1.
45.	33.	115.	0.
50.	27.	120.	0.
55.	22.		
60.	17.		
65.	12.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 355A

Area= .04
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.88 XKSAT= .45RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 37.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	114.	90.	43.
25.	138.	95.	33.
[illegible]	160.	100.	26.
[illegible]	191.	105.	17.
40.	238.	110.	8.
45.	324.	115.	8.
50.	281.	120.	8.
55.	229.	125.	8.
60.	197.	130.	8.
65.	164.	135.	8.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 356

Area= .35
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 45.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	40.	90.	18.
25.	49.	95.	16.
[illegible]	57.	100.	14.
[illegible]	66.	105.	10.
40.	78.	110.	9.
45.	104.	115.	3.
50.	122.	120.	3.
55.	98.	125.	3.
60.	82.	130.	3.
65.	71.	135.	3.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 357

Area= .14
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.50 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 49.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	2.
220.	2.
[illegible]	2.
[illegible]	2.
235.	2.
240.	2.
245.	2.
250.	2.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 358

Area= .19
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.50 XKSAT= .41RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	37.	90.	9.
25.	44.	95.	8.
	52.	100.	4.
	63.	105.	2.
40.	86.	110.	2.
45.	96.	115.	2.
50.	75.	120.	2.
55.	63.	125.	2.
60.	52.	130.	0.
65.	43.	135.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 359

Area= .10
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.54 XKSAT= .47RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 43.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 360

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	3.				
215.	3.				
220.	3.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 360

Area= .25
Rainfall distribution is 6-hour
IA= .46 DTHETA= .08 PSIF= 5.43 XKSAT= .32RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

215.	3.
220.	3.
[illegible]	3.
[illegible]	3.
235.	3.
240.	3.
245.	3.
250.	3.
255.	0.
260.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 361

Area= .21
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.10 XKSAT= .35RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 84.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	79.	90.	135.	160.	7.
[illegible]	98.	95.	116.	165.	7.
[illegible]	115.	100.	101.	170.	7.
[illegible]	130.	105.	76.	175.	7.
40.	144.	110.	51.	180.	7.
45.	166.	115.	41.	185.	0.
50.	188.	120.	38.	190.	0.
55.	242.	125.	34.		
60.	290.	130.	23.		
65.	263.	135.	23.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 362

Area= .42
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.38 XKSAT= .42RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 61.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

```
  230.            7.
  235.            7.
  240.            7.
  245.            7.
  250.            7.
  255.            7.
  260.            7.
  265.            7.
  270.            7.
  275.            0.
-----------------------------------------------------------------------
        VOLUME OF CALCULATED HYDROGRAPH (Inches)=  1.00
-----------------------------------------------------------------------
                  INPUT DATA FOR SUB-BASIN: 363
-----------------------------------------------------------------------
Area=    .63, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50  DTHETA= .00  PSIF= 3.71  XKSAT=  .46RTIMP=   .0
Phoenix Valley S-graph was selected.
Lag Time =  90.5 min., Hydrograph Time Step=   5min.
-----------------------------------------------------------------------
                  HEC-1 INPUT IS STORED IN FILE: 363
-----------------------------------------------------------------------
 ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP
```

60.	338.	130.	65.	200.	11.
65.	418.	135.	63.	205.	11.

HYDROGRAPH FOR BASIN: 364

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	11.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 364

Area= .78
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.22 XKSAT= .43RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 71.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	71.
25.	112.
[illegible]	90.
[illegible]	66.
40.	47.
45.	24.
50.	15.
55.	10.
60.	3.
65.	3.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 364A

Area= .07
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.50 XKSAT= .28RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	78.	90.	111.	160.	7.
25.	98.	95.	96.	165.	7.
30.	114.	100.	71.	170.	7.
35.	128.	105.	47.	175.	0.
40.	145.	110.	38.	180.	0.
45.	167.	115.	36.		
50.	200.	120.	29.		
55.	261.	125.	22.		
60.	272.	130.	22.		
65.	222.	135.	9.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 365

Area= .38, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.11 XKSAT= .73RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 58.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 365

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65. 215. 135. 36. 205. 6.

UNIT HYDROGRAPH FOR BASIN: 366

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	6.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN 366

Area= .44

Rainfall distribution is 6-hour

IA= .50 DTHETA= .00 PSIF= 4.25 XKSAT= .55RTIMP= .0

Phoenix Valley S-graph was selected.

Lag Time = 73.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

10.	181.
15.	333.
[illegible]	299.
[illegible]	174.
30.	67.
35.	29.
40.	10.
45.	10.
50.	0.
55.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 367

Area= .15

Rainfall distribution is 6-hour

IA= .35 DTHETA= .35 PSIF= 4.19 XKSAT= .47RTIMP= .0

Phoenix Valley S-graph was selected.

Lag Time = 15.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	25.	300.	8.
235.	25.	305.	8.
	25.	310.	8.
	25.	315.	8.
250.	25.	320.	8.
255.	11.	325.	8.
260.	8.	330.	8.
265.	8.	335.	8.
270.	8.	340.	0.
275.	8.	345.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 368

Area= .83
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.07 XKSAT= .60RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 112.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	158.
25.	245.
	191.
	139.
40.	98.
45.	48.
50.	31.
55.	19.
60.	6.
65.	6.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 369

Area= .15
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.16 XKSAT= .97RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 24.3 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	54.	90.	0.
25.	76.		
[illegible]	100.		
[illegible]	74.		
40.	57.		
45.	42.		
50.	25.		
55.	14.		
60.	10.		
65.	6.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 370

Area= .07
Rainfall distribution is 6-hour
IA= .35 DTHETA= .35 PSIF= 3.42 XKSAT= .82RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 28.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	42.	300.	8.
[illegible]	27.	305.	8.
[illegible]	27.	310.	8.
[illegible]	27.	315.	8.
250.	27.	320.	8.
255.	27.	325.	8.
260.	10.	330.	8.
265.	8.	335.	8.
270.	8.	340.	8.
275.	8.	345.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 371

Area= .93
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.97 XKSAT= .31RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 114.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	75.	300.	14.	370.	0.
235.	74.	305.	14.		
[illegible]	74.	310.	14.		
[illegible]	58.	315.	14.		
250.	45.	320.	14.		
255.	45.	325.	14.		
260.	45.	330.	14.		
265.	45.	335.	14.		
270.	45.	340.	14.		
275.	14.	345.	14.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 372

Area= 1.62, Point rainfall depth= 3.3, Reduction coefficient= 1.00
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.56 XKSAT= .33RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 120.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	93.	90.	121.	160.	8.
25.	119.	95.	92.	165.	8.
	137.	100.	63.	170.	0.
	154.	105.	45.	175.	0.
40.	178.	110.	42.		
45.	203.	115.	37.		
50.	260.	120.	26.		
55.	323.	125.	26.		
60.	291.	130.	13.		
65.	243.	135.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 373

Area= .43
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.37 XKSAT= .36RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	21.	300.	8.
235.	8.	305.	8.
	8.	310.	0.
	8.	315.	0.
250.	8.		
255.	8.		
260.	8.		
265.	8.		
270.	8.		
275.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 374

Area= .76
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.92 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 102.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.
235.	4.
[illegible]	4.
[illegible]	4.
250.	4.
255.	4.
260.	4.
265.	4.
270.	4.
275.	4.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 375

Area= .41
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.98 XKSAT= .24RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 96.4 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

60.	186.	130.	35.	200.	6.
65.	232.	135.	34.	205.	6.

[illegible] HYDROGRAPH FOR BASIN: 376

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	6.				
215.	0.				
220.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 376

Area= .42
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.90 XKSAT= .25RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 70.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	52.	90.	3.
25.	65.	95.	3.
[illegible]	90.	100.	0.
[illegible]	111.	105.	0.
[illegible]	83.		
45.	67.		
50.	52.		
55.	40.		
60.	21.		
65.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 377

Area= .09
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.76 XKSAT= .33RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 33.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

65.	139.	135.	22.	205.	4.

UNIT HYDROGRAPH FOR BASIN: 377A

TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	4.				
215.	4.				
220.	0.				
225.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 377A

Area= .27
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.82 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 72.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.	300.	1.
235.	4.	305.	1.
[illegible]	4.	310.	1.
[illegible]	2.	315.	1.
250.	1.	320.	1.
255.	1.	325.	0.
260.	1.	330.	0.
265.	1.		
270.	1.		
275.	1.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 377B

Area= .12
Rainfall distribution is 6-hour
IA= .42 DTHETA= .05 PSIF= 3.50 XKSAT= .45RTIMP= 4.0
Phoenix Valley S-graph was selected.
Lag Time = 107.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	9.	300.	8.
235.	8.	305.	0.
[illegible]	8.	310.	0.
[illegible]	8.		
250.	8.		
255.	8.		
260.	8.		
265.	8.		
270.	8.		
275.	8.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 378

Area= .78
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 4.16 XKSAT= .77RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 100.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	14.	300.	4.
235.	14.	305.	4.
[illegible]0.	14.	310.	4.
[illegible]5.	14.	315.	4.
[illegible].	14.	320.	4.
255.	4.	325.	4.
260.	4.	330.	4.
265.	4.	335.	0.
270.	4.	340.	0.
275.	4.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 379

Area= .46
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 3.68 XKSAT= .46RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 111.8 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	39.	90.	62.	160.	3.
25.	49.	95.	54.	165.	3.
[illegible].	57.	100.	44.	170.	3.
[illegible]5.	64.	105.	31.	175.	3.
[illegible].	72.	110.	20.	180.	0.
45.	83.	115.	19.	185.	0.
50.	96.	120.	18.		
55.	124.	125.	12.		
60.	145.	130.	11.		
65.	121.	135.	11.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 380

Area= .20
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.20 XKSAT= .22RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 60.2 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	35.	90.	72.	160.	3.
25.	44.	95.	64.	165.	3.
[illegible]).	52.	100.	56.	170.	3.
[illegible]5.	59.	105.	50.	175.	3.
[illegible].	65.	110.	38.	180.	3.
45.	73.	115.	28.	185.	3.
50.	82.	120.	19.	190.	3.
55.	96.	125.	18.	195.	3.
60.	121.	130.	18.	200.	0.
65.	140.	135.	13.	205.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN= 381

Area= .21
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.15 XKSAT= .23RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 65.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	15.	90.	20.	160.	1.
25.	19.	95.	15.	165.	1.
1.	22.	100.	10.	170.	0.
5.	25.	105.	7.	175.	0.
	29.	110.	7.		
45.	33.	115.	6.		
50.	43.	120.	4.		
55.	53.	125.	4.		
60.	47.	130.	2.		
65.	39.	135.	1.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 381B

Area= .07
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.68 XKSAT= .27RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 56.5 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

210.	9.
.	9.
.	9.
.	9.
230.	9.
235.	9.
240.	9.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 382

Area= .71
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.29 XKSAT= .21RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 80.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	31.	90.	61.	160.	3.
25.	38.	95.	54.	165.	3.
[illegible]	45.	100.	47.	170.	3.
[illegible]	51.	105.	41.	175.	3.
[illegible]	56.	110.	31.	180.	3.
45.	64.	115.	22.	185.	3.
50.	72.	120.	17.	190.	3.
55.	85.	125.	16.	195.	0.
60.	107.	130.	15.	200.	0.
65.	121.	135.	10.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 383

Area= .18
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.68 XKSAT= .27RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 65.0 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

UNIT HYDROGRAPH FOR BASIN: 383A

[illegible]	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	2.				
215.	2.				
220.	2.				
225.	0.				
230.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 383A

Area= .16
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.41 XKSAT= .29RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 73.7 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

20.	53.	90.	95.	160.	5.
25.	65.	95.	83.	165.	5.
[illegible]	77.	100.	73.	170.	5.
[illegible]	86.	105.	59.	175.	5.
[illegible]	96.	110.	43.	180.	5.
45.	109.	115.	27.	185.	5.
50.	123.	120.	26.	190.	0.
55.	150.	125.	25.	195.	0.
60.	193.	130.	19.		
65.	188.	135.	15.		

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 384

Area= .29
Rainfall distribution is 6-hour
IA= .46 DTHETA= .02 PSIF= 7.54 XKSAT= .18RTIMP= 2.0
Phoenix Valley S-graph was selected.
Lag Time = 63.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

[illegible]10.	5.
[illegible]	5.
[illegible]	5.
225.	5.
230.	5.
235.	5.
240.	5.
245.	0.
250.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 385

Area= .39
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 7.53 XKSAT= .19RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 81.9 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

230.	4.
235.	4.
[illegible]0.	4.
[illegible]5.	4.
[illegible]	4.
[illegible]	4.
260.	4.
265.	4.
270.	0.
275.	0.

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 386

Area= .35
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 5.87 XKSAT= .33RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 89.1 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP

55.	96.	125.	24.	195.	4.
60.	115.	130.	21.	200.	4.
[illegible]	145.	135.	20.	205.	4.

[illegible] HYDROGRAPH FOR BASIN: 387

[illegible]ME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)	TIME (min.)	DISCHARGE (cfs)
210.	0.				
215.	0.				

VOLUME OF CALCULATED HYDROGRAPH (Inches)= 1.00

INPUT DATA FOR SUB-BASIN: 387

Area= .25
Rainfall distribution is 6-hour
IA= .50 DTHETA= .00 PSIF= 6.86 XKSAT= .26RTIMP= .0
Phoenix Valley S-graph was selected.
Lag Time = 69.6 min., Hydrograph Time Step= 5min.

HEC-1 INPUT IS STORED IN FILE: 347

ENTER 1 FOR A NEW SUB-BASIN CALCULATION, 2 TO STOP