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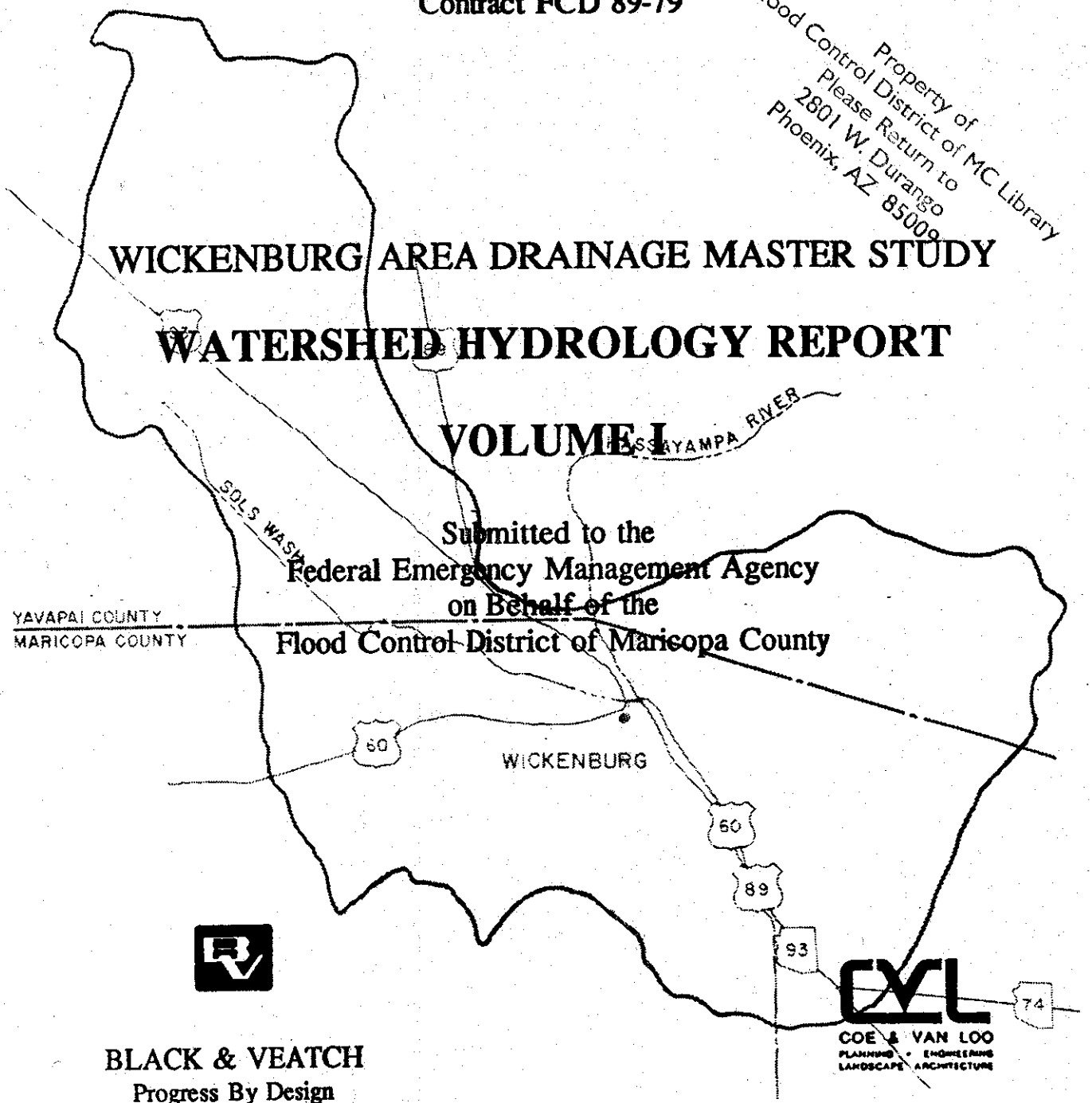
WICKENBURG AREA DRAINAGE MASTER STUDY

WATERSHED HYDROLOGY REPORT

VOLUME I

Submitted to the
Federal Emergency Management Agency
on Behalf of the
Flood Control District of Maricopa County



BLACK & VEATCH
Progress By Design
Project No. 17676

COE & VAN LOO
PLANNING • ENGINEERING
LANDSCAPE ARCHITECTURE

CVL No. 1197-02

December 1992

Flood Control District of Maricopa County
Contract FCD 89-79

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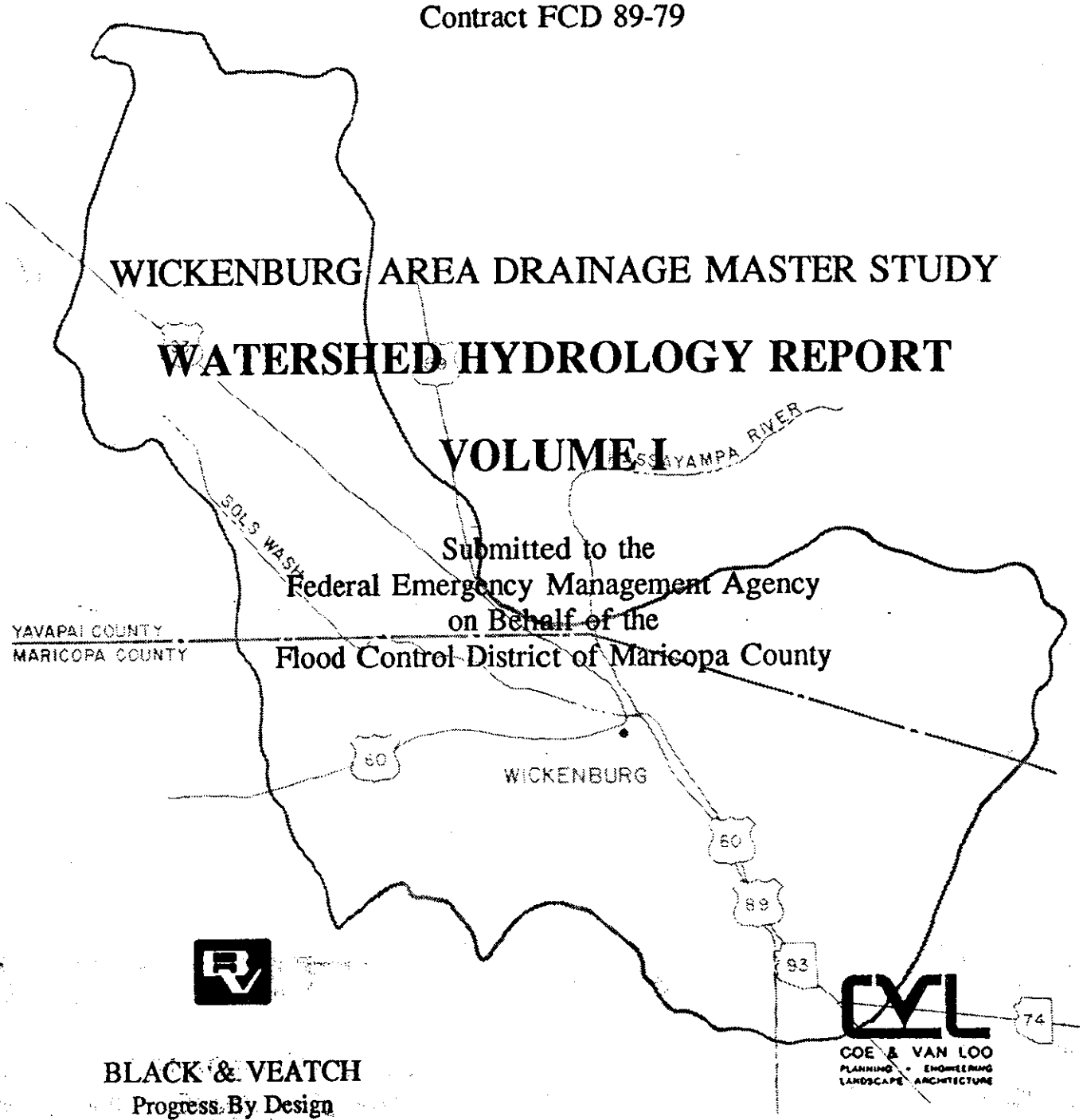

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TABLE 1-2 HEC-1 Output Summary: Peak Flows, cfs						
		STORM RETURN PERIOD, years				
HEC-1 ID	DESCRIPTION	2	10	25	50	100
SOLS WASH AREA						
SA	Amir Wash	19	593	935	1222	1500
SAH65	Sols Wash Tributary AH2	530	2838	4026	5001	6031
SAH80	Sols Wash Tributary AH3	279	979	1330	1620	1908
CAH86	Sols Wash Tributary AH3	174	1177	1753	2253	2741
SAH90	Rt. Bank Tributary to AH3	282	877	1176	1429	1680
CAH96	Sols Wash Tributary AH3	279	1795	2662	3360	4046
SAH100	Sols Wash Tributary AH4	89	441	618	763	907
SAH120	Sols Wash Tributary AH5	282	1070	1463	1787	2129
CAI162	Hartman Wash @ Hwy 60	400	1897	2509	3056	3641
CAI167	Hartman Wash	384	2013	2587	3096	3660
CAI171	Hartman Wash Outflow	297	2018	2772	3312	3802
SAB180	Twin Peaks Wash	221	650	866	1049	1231
SAB190	Yucca Tank	360	1095	1464	1776	2085
CAB186	Twin Peaks Wash Outflow	287	1022	1424	1759	2099
SAB200	George's Tank	148	466	627	761	896
CAB206	Flying E Tank	345	1124	1506	1829	2152
CAB208	Flying E Wash @ Hwy 60	889	3494	4769	5856	6943
CAB211	Flying E Wash Outflow	811	3732	5244	6479	7708
WEST TRIBUTARIES AREA						
RAD4	Sunset Wash	0	0	0	0	0
RAE12	Sunny Cove Wash	0	0	0	0	0
CAD16	Sunset Wash	34	271	409	506	600
SAG2	Unnamed Wash # 10	37	138	194	233	272
CR6	Cemetery Wash	290	917	1252	1491	1724
CR12	Cemetery Wash	388	1542	2001	2392	2797
CR20	Cemetery Wash	309	954	1303	1551	1793
CR28	Cemetery Wash	531	1710	2364	2839	3304
CR34	Cemetery Wash	694	3084	4373	5317	6308

TABLE 1-2 HEC-1 Output Summary: Peak Flows, cfs						
		STORM RETURN PERIOD, years				
HEC-1 ID	DESCRIPTION	2	10	25	50	100
CR40	Cemetery Wash	743	3362	4766	5776	6870
CR46	Cemetery Wash	783	3399	4947	6088	7299
CR52	Cemetery Wash	780	3250	4848	5968	7251
SQ2	Unnamed Wash # 14	112	317	428	507	584
SW2	Turtleback Wash	381	1020	1375	1628	1873
CW8	Turtleback Wash	773	2359	3206	3816	4412
CW16	Turtleback Wash	863	2757	3695	4469	5244
CW22	Turtleback Wash	859	2659	3649	4408	5180
EAST TRIBUTARIES AREA						
SP	Unnamed Wash # 13	209	498	666	781	898
SC5	Blue Tank Wash	653	1513	2011	2358	2732
CC12	Blue Tank Wash	695	2114	3018	3654	4290
CC17	Blue Tank Wash	714	2258	2938	3488	4140
CC22	Blue Tank Wash	712	2253	2909	3448	4071
SN	Unnamed Wash # 11	124	251	325	377	429
CAA12	Powder House Wash	480	1127	1508	1768	2034
CAA17	Powder House Wash	473	1164	1564	1839	2114
SAF	Unnamed Wash # 9	124	246	319	369	420
SB5	Calamity Wash	328	1195	1710	2062	2415
CB12	Calamity Wash	427	1559	2252	2713	3098
SO	Unnamed Wash # 12	519	1126	1480	1735	1995
CE12	Mockingbird Wash	232	578	779	917	1056
SE15	Mockingbird Wash	318	1225	1792	2182	2567
CE19	Mockingbird Wash	362	1480	2158	2496	2754
CE22	Mockingbird Wash	410	1729	2522	3001	3459
SM	Unnamed Wash # 8	110	227	295	343	390
SL	Unnamed Wash # 7	190	447	596	699	802
CK12	Unnamed Wash # 6	423	966	1286	1509	1739
CK17	Unnamed Wash # 6	539	1317	1805	2153	2508

TABLE 1-2 HEC-1 Output Summary: Peak Flows, cfs						
		STORM RETURN PERIOD, years				
HEC-1 ID	DESCRIPTION	2	10	25	50	100
SJ	Unnamed Wash # 5	113	270	361	424	488
CI12	Unnamed Wash # 4	385	926	1241	1458	1684
CI17	Unnamed Wash # 4	380	976	1320	1556	1795
CD12	Monarch Wash	692	2169	3042	3656	4245
CD17	Monarch Wash	644	2021	2700	3231	3774
CD24	Monarch Wash	651	2068	2744	3280	3832
SH2	Unnamed Wash # 3	440	982	1301	1521	1742
CH8	Unnamed Wash # 3	433	896	1179	1394	1631
SG2	Unnamed Wash # 2	94	274	380	453	526
SF2	Unnamed Wash # 1	72	183	251	298	345
ST2	San Domingo Wash	907	2499	3418	4052	4682
CT8	San Domingo Wash	1236	3797	5349	6489	7621
CT11	San Domingo Wash	1471	5015	7315	8978	10655
CT14	San Domingo Wash	1781	6061	8729	10646	12612
CT17	San Domingo Wash	1789	6090	8906	10878	12911
CT24	San Domingo Wash	1827	6042	9020	11093	13242
CT30	San Domingo Wash	1771	5983	8841	10780	12760
SV2	Ox Wash	911	1910	2494	2902	3315
CV6	Ox Wash	880	1806	2455	2917	3390
CV12	Ox Wash	1027	2268	3099	3738	4406
CV18	Ox Wash	976	2228	3084	3734	4402
CV24	Ox Wash	976	2232	3116	3773	4447
SS2	Little San Domingo Wash	691	1585	2106	2467	2849
CS8	Little San Domingo Wash	608	1653	2302	2756	3224
CS16	Little San Domingo Wash	589	1692	2302	2786	3299
CS22	Little San Domingo Wash	582	1668	2279	2847	3403

1.0 Summary and Recommendations

The Flood Control District of Maricopa County intends to establish regulatory floodplains meeting the requirements of the Federal Emergency Management Agency (FEMA) for participation in the National Flood Insurance Program. Washes to be regulated lie in and around the Town of Wickenburg in Maricopa County, Arizona.

1.1 Summary

1.1.1 Scope

Figure 1-1 (figures are in report Volume III) shows the extent and location of the Study Area. The Study Area has been divided into three hydrologically similar areas: Sols Wash Area, West Tributaries Area, and East Tributaries Area. Regulatory floodplains are delineated for the wash reaches listed in Table 1-1. The watersheds for these washes are shown on Figures 1-2 through 1-6. Figure 1-7 is an index map showing the orientation of Figures 1-2 through 1-6. The orientation of figures for subsequent chapters are consistent with Figure 1-7.

1.1.2 Analysis

Flow rates have been calculated using the Corps of Engineers' Generalized Computer Program HEC-1 with the following options:

- SCS 24-Hour Type II Temporal Distribution
- Point Precipitation Depth from NOAA Atlas 2, Volume 8: Arizona
- Area Reduction Factors from NOAA NWS HYDRO-40
- Losses from the HEC-1 Green and Ampt Infiltration Function
- Hydrograph Development from the Flood Control District's of Maricopa County Phoenix Mountain S-Graph
- Reservoir Routing using Modified Puls Method
- Channel Routing using Normal Depth Method

TABLE 1-1
WASHES IN THE WICKENBURG AREA DRAINAGE MASTER STUDY

Wash Name	Designation	Study Reach
SOLS WASH AREA		
Amir Wash	A	From the Hassayampa River northwest.
Flying E Wash	AB	From Sols Wash southwest.
Unnamed Tributaries	AH2	From Sols Wash southwest.
Unnamed Tributaries	AH3	From Sols Wash southwest.
Unnamed Tributaries	AH4	From Sols Wash southwest.
Unnamed Tributaries	AH5	From Sols Wash southwest.
Hartman Wash	AI	From Sols Wash southwest.
Ponding	AJ	Ponding along the south side of the AT&SF Railroad.
WEST TRIBUTARIES AREA		
Unnamed Wash # 14	Q	From the Hassayampa River, Sec 18 T7N R4W, southwest.
Cemetery Wash	R	From the Hassayampa River, Sec 7 T7N R4W, southwest.
Turtleback Wash	W	From the Hassayampa River southwest.
Sunset Wash	AD	From the Hassayampa River southwest.
Sunny Cove Wash	AE	From Sunset Wash southwest.
Unnamed Wash # 10	AG	From Sec 12 T7N R5W, southwest along the town cemetery.
EAST TRIBUTARIES AREA		
Calamity Wash	B	From the Hassayampa River northeast.
Blue Tank Wash	C	From the Hassayampa River northeast.
Monarch Wash	D	From the Hassayampa River northeast.

TABLE 1-1 WASHES IN THE WICKENBURG AREA DRAINAGE MASTER STUDY		
Wash Name	Designation	Study Reach
Mockingbird Wash	E	From the Hassayampa River northeast.
Unnamed Wash # 1	F	From the Hassayampa River, Sec 3 T6N R4W, northeast.
Unnamed Wash # 2	G	From the Hassayampa River, Sec 33 T7N R4W, northeast.
Unnamed Wash # 3	H	From the Hassayampa River, Sec 33 T7N R4W, northeast.
Unnamed Wash # 4	I	From the Hassayampa River, Sec 28 T7N R4W, northeast.
Unnamed Wash # 5	J	From the Hassayampa River, Sec 28 T7N R4W, northeast.
Unnamed Wash # 6	K	From the Hassayampa River, Sec 20 T7N R4W, northeast.
Unnamed Wash # 7	L	From the Hassayampa River, Sec 20 T7N R4W, northeast.
Unnamed Wash # 8	M	From the Hassayampa River, Sec 20 T7N R4W, northeast.
Unnamed Wash # 11	N	From the Hassayampa River, Sec 1 T7N R5W, northeast.
Unnamed Wash # 12	O	From the Hassayampa River, Sec 18 T7N R4W, northeast.
Unnamed Wash # 13	P	From the Hassayampa River, Sec 35 T8N R5W, east.
Little San Domingo Wash	S	From the Hassayampa River northeast.
San Domingo Wash	T	From the Hassayampa River Sec 3 T6E R4W northeast.
Ox Wash	V	From the Hassayampa River, Sec 10 T6N R4W, northeast.
Powder House Wash	AA	From the Hassayampa River northeast.
Unnamed Wash # 9	AF	From the Hassayampa River, Sec 12 T7N R4W, northeast.

1.1.3 Results

The calculated 100-year flow rates are shown in Table 1-2. Flow rates calculated for more frequent events are provided in *Volumes IIA and IIB.*

1.2 Recommendations

The Flood Control District of Maricopa County (District) has monitored and reviewed the hydrologic analyses and calculation of the flowrates shown in Table 1-2. These flowrates have been approved by the District. We recommend that the Federal Emergency Management Agency approve the use of the flowrates in Table 1-2 for the purpose of completing a Flood Insurance Study for the areas.

2.0 Introduction

2.1 Purpose

The purpose of this report is to document the investigations and hydrologic analyses completed for the Wickenburg Area Drainage Master Study (ADMS). In Phase I of the ADMS, the Flood Control District of Maricopa County (District) requires the development of hydrologic models for the watersheds contributing to the study washes and subsequent hydraulic analysis of the channels.

The documentation in this report provides the basis for approval of the computed flood flows by the District, State, and Federal regulatory agencies. The 100-year flows are used in subsequent analyses for delineating regulatory floodplains.

2.2 Scope

The accompanying floodplain delineation study required hydraulic analysis of approximately 110 miles of washes defined in the contract Scope of Work. Regulatory floodplains are proposed for the washes listed in Table 2-1. This report presents the hydrologic analyses of watersheds draining to these washes. General watershed characteristics, drainage and storage facilities, and hydrologic model details are presented in Chapters 5, 6, and 7 as follows:

- Chapter 5: Sols Wash Area
- Chapter 6: West Tributaries Area
- Chapter 7: East Tributaries Area

The watersheds cover approximately 146 square miles in northern Maricopa and southern Yavapai Counties, Arizona. The location of the watersheds and the structure of the analysis are discussed in Chapter 3.

TABLE 2-1
WASHES IN THE WICKENBURG AREA DRAINAGE MASTER STUDY

Wash Name	Designation	Study Reach
SOLS WASH AREA		
Amir Wash	A	From the Hassayampa River northwest.
Flying E Wash	AB	From Sols Wash southwest.
Unnamed Tributaries	AH2	From Sols Wash southhwest.
Unnamed Tributaries	AH3	From Sols Wash southhwest.
Unnamed Tributaries	AH4	From Sols Wash southhwest.
Unnamed Tributaries	AH5	From Sols Wash southhwest.
Hartman Wash	AI	From Sols Wash southwest.
Ponding	AJ	Ponding along the south side of the AT&SF Railroad.
WEST TRIBUTARIES AREA		
Unnamed Wash # 14	Q	From the Hassayampa River, Sec 18 T7N R4W, southwest.
Cemetery Wash	R	From the Hassayampa River, Sec 7 T7N R4W, southwest.
Turtleback Wash	W	From the Hassayampa River southwest.
Sunset Wash	AD	From the Hassayampa River southwest.
Sunny Cove Wash	AE	From Sunset Wash southwest.
Unnamed Wash # 10	AG	From Sec 12 T7N R5W, southwest along the town cemetery.
EAST TRIBUTARIES AREA		
Calamity Wash	B	From the Hassayampa River northeast.
Blue Tanks Wash	C	From the Hassayampa River northeast.
Monarch Wash	D	From the Hassayampa River northeast.

TABLE 2-1
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Unnamed Wash # 4	I	From the Hassayampa River, Sec 28 T7N R4W, northeast.
Unnamed Wash # 5	J	From the Hassayampa River, Sec 28 T7N R4W, northeast.
Unnamed Wash # 6	K	From the Hassayampa River, Sec 20 T7N R4W, northeast.
Unnamed Wash # 7	L	From the Hassayampa River, Sec 20 T7N R4W, northeast.
Unnamed Wash # 8	M	From the Hassayampa River, Sec 20 T7N R4W, northeast.
Unnamed Wash # 11	N	From the Hassayampa River, Sec 1 T7N R5W, northeast.
Unnamed Wash # 12	O	From the Hassayampa River, Sec 18 T7N R4W, northeast.
Unnamed Wash # 13	P	From the Hassayampa River, Sec 35 T8N R5W, east.
Little San Domingo Wash	S	From the Hassayampa River northeast.
San Domingo Wash	T	From the Hassayampa River, Sec 3 T6E R4W, northeast.
Ox Wash	V	From the Hassayampa River, Sec 10 T6N R4W, northeast.
Powder House Wash	AA	From the Hassayampa River northeast.
Unnamed Wash # 9	AF	From the Hassayampa River, Sec 12 T7N R4W, northeast.

3.0 Study Parameters

3.1 Available Mapping and Information Sources

Watershed delineations were completed using the most recently published USGS 7.5-minute topographic maps. The contour interval on these maps is either 20 or 40 ft.

As part of the study, more detailed mapping was prepared for areas in and around the Town of Wickenburg and for those outlying washes being analyzed. The aerial photographs were available to review characteristics not shown on the maps. Where the topography was uncertain from USGS map information, these aerial photographs were reviewed through stereoscopes to establish watershed boundaries and primary flow paths.

3.2 General Hydrologic Setting

The study area consists of approximately 146 sq mi as shown on Figure 3-1 (figures appear in Volume III). Within the study area are three smaller areas that are hydrologically similar:

- Sols Wash Area (46 sq mi)
- West Tributaries Area (17 sq mi)
- East Tributaries Area (83 sq mi)

3.2.1 Watershed Areas.

The Sols Wash Area includes southwest tributaries to Sols Wash as well as Amir Wash. Amir Wash is analyzed with the Sols Wash tributaries because review of precipitation-frequency maps indicates similar rainfall depths for all watersheds. The Sols Wash tributaries rise from watersheds in the foothills of the Vulture Mountains south of the wash. The Amir Wash watershed (2 sq mi) lies in low hills south of the Date Creek Mountains and just north of Sols Wash near the confluence of Sols Wash and the Hassayampa River. To provide adequate detail in subsequent figures, the area has been subdivided as shown on Figure 3-1 (figures are in Volume

III). Major named tributaries of Sols Wash are Hartman Wash, Flying E Wash, and Casandro Wash. As the preliminary Casandro Wash evaluation yielded flowrates not appreciably different from those in previous studies, Casandro Wash is omitted from this study.

The West Tributaries Area includes a series of small watersheds adjacent to the Hassayampa River in the Vulture Mountains. With the exception of Cemetery Wash, watersheds are typically small, long and narrow, and have few dendrils in their channel systems. Washes discharge directly to the Hassayampa River with the exception of Sunny Cove Wash. Sunny Cove Wash joins Sunset Wash just upstream of the Hassayampa River. Named washes in the West Tributaries Area include Sunset Wash, Sunny Cove Wash, Cemetery Wash, and Turtleback Wash.

The East Tributaries Area includes a series of small watersheds adjacent to the Hassayampa River in the Wickenburg Mountains. To provide adequate detail in subsequent figures, the East Tributaries Area has been subdivided into north and south portions as shown in Figure 3-1. Watersheds in these areas are typically small, long and narrow, and have few dendrils in their channel systems. Washes discharge directly to the Hassayampa River. Named washes in the East Tributaries Area include Blue Tanks Wash, Powder House Wash, Mockingbird Wash, Calamity Wash, Monarch Wash, San Domingo Wash, Ox Wash, and Little San Domingo Wash.

3.2.2 Drainage Facilities

Most of the Study Area is drained by natural washes. The ephemeral washes are dry during most of the year; short periods of flow follow significant precipitation events. Local drainage facilities in the Town of Wickenburg are generally designed for frequent events. The effects of drainage channel improvements in Wickenburg on watershed hydrology are assumed to be insignificant.

3.2.3 Storage Facilities

In areas used for grazing, numerous stock watering tanks have been constructed. They are typically low height (under 25 ft) and have small storage

capacity. Though these tanks are functional, they have not been designed and no data is available for their construction or expected performance during floods. Consequently they are not considered dependable for flood risk planning. Stock tanks have not been considered as storage facilities in developing hydrologic models for the area. This is consistent with previous hydrologic evaluations of the area by the Corps of Engineers, the Soil Conservation Service, and FEMA.

The Sunset and Sunny Cove Dams were constructed by the Soil Conservation Service and the District in 1976 to protect residential, commercial, and light industrial development in and around Wickenburg. These are specifically modeled in the study, and are discussed in chapter 6.

3.3 Land Use

Land use in the Study Area is shown on Figure 3-2. The core area of the Town of Wickenburg is most densely developed. Newer, less dense residential development has spread from the core area east approximately to Vulture Mine Road and south into the Vulture Mountain foothills.

Outside the Town of Wickenburg, the Sols Wash Area is typically open range. The West and East Tributaries Areas are generally foothills of the Vulture and Wickenburg Mountains. A number of mines operate in these areas, with limited grazing of cattle where terrain permits. Limited residential and commercial development has occurred in a narrow strip along U.S. Highway 60 east of Wickenburg and along Vulture Mine Road southwest of town.

4.0 Hydrologic Analysis

The hydrologic analyses for the Wickenburg Area Drainage Master Study were performed using the U.S. Army Corps of Engineers August 2, 1988 version of HEC-1. The SCS Type II 24-hour storm, the Green and Ampt Loss Rate, and the Phoenix Mountain S-graph were used in the HEC-1 models of the study areas. These parameters, procedures, and other modeling assumptions are based on procedures documented in the Flood Control District's Hydrologic Design Manual for Maricopa County. Any supplemental methods used are presented in the appropriate section.

4.1 Precipitation

The 24-hour point precipitation depths used in this study were obtained from isopluvial maps for Maricopa County (based on NOAA Atlas 2, Volume VIII). These values were corrected using the District's Depth-Duration Frequency Development Procedure and are given in Table 4-1.

Table 4-1

24-Hour Point Precipitation

Return Frequency	Sols Wash Area (inches)	West Tributaries Area (inches)	East Tributaries Area (inches)
2 year	1.60	1.61	1.91
10 year	2.70	2.68	2.85
25 year	3.30	3.30	3.43
50 year	3.80	3.74	3.84
100 year	4.30	4.19	4.25

The point precipitation values were adjusted with areal reduction factors obtained from NOAA Technical Memorandum NWS-HYDRO-40. The areal

reduction factors and the adjusted point rainfall values used in this study are given in Tables 4-2 through 4-4.

Table 4-2

Sols Wash Area
Areal Precipitation Reduction Data

		24-Hour Precipitation Depth (inches)				
Watershed Area (sq mi)	Areal Reduction Factor	100-Year	50-Year	25-Year	10-Year	2-Year
0.0	1.00	4.30	3.80	3.30	2.70	1.60
3.0	0.98	4.21	3.72	3.23	2.65	1.57
10.0	0.96	4.13	3.65	3.17	2.59	1.54
20.0	0.92	3.96	3.50	3.04	2.48	1.47

Table 4-3

West Tributaries Area
Areal Precipitation Reduction Data

		24-Hour Precipitation Depth (inches)				
Watershed Area (sq mi)	Areal Reduction Factor	100-Year	50-Year	25-Year	10-Year	2-Year
0.0	1.00	4.19	3.74	3.30	2.68	1.61
3.0	0.98	4.11	3.67	3.23	2.63	1.58
10.0	0.96	4.02	3.59	3.17	2.57	1.55

Table 4-4

East Tributaries Area
Areal Precipitation Reduction Data

		24-Hour Precipitation Depth (inches)				
Watershed Area (sq mi)	Areal Reduction Factor	100-Year	50-Year	25-Year	10-Year	2-Year
0.0	1.00	4.25	3.84	3.43	2.85	1.91
3.0	0.98	4.17	3.76	3.36	2.79	1.87
10.0	0.96	4.08	3.69	3.29	2.74	1.83
20.0	0.92	3.91	3.53	3.16	2.62	1.76

4.2 Losses

Precipitation loss rates were computed using the Green and Ampt Infiltration Function option in HEC-1. The Green and Ampt parameters (XKSAT, PSIF, and DTHETA) were determined for each sub-basin using procedures given in the Hydrologic Design Manual and data from SCS Soil Surveys. A list of each soil unit and the associated bare ground loss rate parameters are given in Appendix A.

Since the Green and Ampt parameters are based on bare ground soil characteristics, the XKSAT and DTHETA parameters must be adjusted to account for vegetative cover and/or land use. To account for vegetative cover, the XKSAT parameter for each sub-basin was adjusted. Table 4-5 shows the relationship between land use, percent ground cover, and C_k (XKSAT correction factor) used for correcting the XKSAT parameter in the Wickenburg study.

Table 4-5

XKSAT Correction Factors

Land Use Classification	Percent Ground Cover	C_k
Desert Range Land, Flat slopes	10	1.00
Hill slopes, Alluvial Fan	15	1.06
Mountains	10	1.00
Agricultural (Tilled/ Irrigated Fields)	90	1.89
Lawn and Turf	95	1.94
Desert Landscape	40	1.33
Pavement	0	1.00
Residential	15	1.06
Commercial	10	1.00

The DTHETA parameter is influenced by land use. The guidelines listed in Table 4.6 were used in the selection of the DTHETA condition.

Table 4-6

Soil Moisture Deficit - DTHETA

Land Use	DTHETA Condition
Non-irrigated lands, such as desert and range land	Dry
Irrigated lawn, turf, and permanent pasture	Normal
Irrigated agricultural land	Saturated

The HEC-1 percent impervious parameter (RTIMP) specifies the percentage of a sub-basin that is impervious and hydrologically connected. The RTIMP was computed for each sub-basin based on the percentage of natural rock outcropping or on land use, using the procedure specified by the District personnel. Table 4-7 gives the general guidelines used in calculating RTIMP for the Wickenburg study.

Table 4-7

Percent Impervious Connected Area - RTIMP

Land Use Classification	RTIMP
Desert Range Land, Flat Slopes	50% x RO*
Hillslopes, Alluvial Fan	50% x RO
Mountains	50% x RO
Agricultural (Tilled/Irrigated Fields)	50% x RO
Lawn and Turf	50% x RO
Desert Landscape	50% x RO
Pavement	100%
Residential	20%
Commercial	90%

* RO is the percent of sub-basin that is rock outcropping from SCS soil survey, i.e., half of the rock outcropping is considered hydraulically connected.

The surface retention loss parameter (IA) is a function of land use and surface vegetative cover. The general guidelines used in the Wickenburg study for calculating IA, as given by the District's Hydrologic Design Manual, are listed in Table 4-8.

Table 4-8

Surface Retention Loss - IA

Land Use Classification	Percent Ground Cover	IA (inches)
Desert Range Land, Flat Slopes	10	0.35
Hillslopes, Alluvial Fan	15	0.15
Mountains	10	0.25
Agricultural (Tilled/Irrigated Fields)	90	0.50
Lawn and Turf	95	0.20
Desert Landscape	40	0.10
Pavement	0	0.05
Residential	15	0.12
Commercial	10	0.06

4.3 Hydrograph Method

The unit hydrograph procedure used for the Wickenburg study was the Phoenix Mountain S-graph. This method was approved by District personnel due to the steep watercourse slopes in the study area. The application of the S-graph requires the estimation of the basin lag time (Lag). The relationship used for lag time in the Wickenburg study is a function of watershed characteristics as given by the following equation:

$$Lag = \left[24 k_n^{.350} \left(\frac{L * L_{ca}}{S^{1/2}}\right)^{.38}\right](60 min/hr)$$

Where Lag = basin lag time in minutes.

L = length of longest watercourse in miles.

L_{ca} = length along the watercourse to a point opposite the centroid in miles.

S = watercourse slope in feet per mile.

K_n = estimated mean Manning's n for all the channels within the basin.

Watercourse flow paths and centroids used to calculate basin lag time are presented in subsequent chapters. The mean Manning's n (K_n) was estimated for each sub-basin from field investigation, slope calculations, approximate relationships presented in the District's Hydrologic Design Manual and the guidelines shown in Table 4-9.

Table 4-9
Basin Factor Estimates - K_n

		Range of K_n Values		
Watershed Type	Mean Slope	Minimum	Normal	Maximum
Mountain	> .04 ft/ft	.040	.050	.060
Foothills	.01 to .04 ft/ft	.030	.035	.040
Valley	< .01 ft/ft	.027	.030-.040	.050

4.4 Other Modeling Assumptions

4.4.1 Reservoir Routing

There are two large detention basins in the Wickenburg study. They are Sunset Dam (NE 1/4 Section 11-7N-5W) and Sunny Cove Dam (SE 1/4 Section 11-7N-5W). Flows were routed through both storage structures using the Modified Puls method. The routing assumes that the primary spillways are closed (typical condition), and that all discharge occurs over the emergency spillway. Stage versus storage volume curves were computed based on As-Built construction plans and field observations.

4.4.2 Channel Routing

Channel routing was completed using the normal depth method for all study reaches. Channel geometry, slopes and Manning's roughness coefficients were estimated from available mapping and from field reconnaissance of the study reaches. Channel routing flow paths are shown on the appropriate figures in Chapters 5, 6, and 7.

5.0 Sols Wash Area

5.1 Area Description

The Sols Wash Area comprises the southwest tributaries to Sols Wash and Amir Wash. Amir Wash is analyzed with the Sols Wash tributaries because review of precipitation-frequency maps indicates similar rainfall depths for all watersheds. To provide adequate detail in subsequent figures, the area has been divided into two general subareas. Watersheds designated for study in this area are shown in Figures 5-1 and 5-2 (figures appear in Volume III). Washes designated for study in this area include the following:

Name	Model Designation
Unnamed Tributaries to Sols Wash	AH2 thru AH5
Hartman Wash	AI
Flying E Wash and Tributaries	AB
Local Ponding at AT&SF RR	AJ
Amir Wash	A

The model designations above are used throughout the documentation for this study. Within the model these designations are always preceded by a letter indicating the operation being completed:

- S - Drainage Sub-Basin Runoff Hydrograph
- C - Combine Hydrographs
- R - Route Hydrograph through Wash
- D - Route Hydrograph through Detention Storage

For example, SAB230 indicates that a hydrograph is to be calculated for sub-basin AB230 in the Flying E Wash watershed.

Watersheds south of Sols Wash lie in the foothills of the Vulture Mountains. Typically, these have well-defined boundaries and drainage channels, with watershed slopes ranging from 60 to 100 ft per mi. Amir Wash lies in the low hills south of the Date Creek Mountains and has similar characteristics.

Soil map units within the Sols Wash Area are shown on Figures 5-3 and 5-4. Soil Map Unit data is provided in Appendix A. Soils are typically sandy, gravelly, and rocky loams. Watersheds in the Vulture Mountains have significant areas of rock

outcropping. Soils in the Vulture and Date Creek Mountain foothills are predominantly shallow to very shallow, well-drained, with slow to medium runoff.

Vegetation consists of desert shrubs and cacti with an understory of grass, typically found in the Upper Sonoran Desert. Distribution of shrubs and cacti is quite consistent, except for narrow bands of slightly more dense vegetation at wash edges. The average ground cover is estimated at 10-20 percent. Areas that have been heavily grazed tend to be the most barren. As the extent of these barren grazed areas does not appear clearly in any photographs, 15 percent was used for calculating Green and Ampt parameters.

5.2 Drainage Facilities.

Drainage structures in the Vulture Mountain foothills are generally limited to culverts under U.S. Hwy. 60 and railroad bridges along the Atchison Topeka and Santa Fe (AT&SF) tracks west of Wickenburg. Changes in the alignment of approximately 6 miles of U.S. Hwy. 60 were made in the 1950s. Culverts under the abandoned alignment are still in place, and are in good condition. The new alignment follows the apparent historical course of Hartman Wash in the east half of section 12-7N-6W and the west half of section 7-7N-5W. In this reach, Hartman Wash appears to have been braided, following several courses. Several berms and a diversion channel have been constructed in the vicinity, apparently to protect the highway from possible channel migration.

The AT & SF railroad tracks cross Flying E Wash, Hartman Wash and sub-basins AJ140, AJ175 and AJ215 just upstream of their confluence with Sols Wash. The structures, however, have no significant effect on the sub-basin hydrology due to the sizes and number of separate structures within each sub-basin.

Amir Wash has undergone extensive channelization in the reach upstream of U.S. Highway 89-93. The Highway crosses the wash just upstream of its confluence with the Hassayampa River. The flow at the highway must pass through three 10 x 10 ft. RCB culverts. The RCB culverts can pass major runoff events and thus have no significant effects on the sub-basin hydrology.

5.3 Storage Facilities.

Seven stock watering tanks have been identified in the watershed, and several more may exist. These tanks were constructed using a low earthen dam and have small storage capacity. Nearly all stock tanks are several miles from developed areas, and are expected to have little effect on the flows from a 100-year event. As no construction data is available, they are not considered dependable for flood risk planning, and are not represented in the model as storage facilities.

5.4 Hydrologic Model

A schematic representation of the hydrologic model is shown on Figures 5-5 and 5-6. Figures 5-7 and 5-8 show the sub-basin's major flow paths and centroids used to develop lag times and routing parameters.

A summary of measured and calculated input parameters for each sub-basin is shown in Table 5-1. Detailed data and calculations used for developing sub-basin parameters are shown in Appendix B. Peak flow rates calculated by the HEC-1 model are shown in Table 5-2. *Volume II: HEC-1 Output* includes HEC-1 input files and level 5 summary output tables for all Sols Wash area watersheds.

TABLE 5-1
HEC 1 PARAMETERS:
SOLS WASH AREA

SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
A	2.19	4.45	46.7	74.6	0.030	44.35	0.15	0.34	4.25	0.42	1.4
AH65	10.27	7.66	47.0	41.1	0.027	67.68	0.35	0.30	3.51	0.25	1.3
AH80	2.23	3.50	56.9	55.0	0.030	42.18	0.15	0.29	3.59	0.27	4.5
AH85	2.54	4.64	57.1	36.6	0.027	50.90	0.35	0.32	3.85	0.32	3.9
AH90	1.52	3.22	35.4	92.9	0.030	29.93	0.15	0.30	3.87	0.24	6.5
AH95	0.89	2.08	45.7	65.8	0.030	25.26	0.15	0.32	4.06	0.36	2.0
AH100	0.94	2.84	50.0	124.0	0.035	34.26	0.15	0.32	3.79	0.30	1.3
AH120	2.89	5.30	50.0	70.3	0.030	52.55	0.15	0.31	3.64	0.28	5.2
AH125	0.81	2.46	42.3	120.2	0.035	28.99	0.15	0.32	3.81	0.31	0.0
AJ140	0.34	1.14	41.2	105.3	0.030	14.07	0.15	0.32	4.01	0.35	0.0
AI150	1.98	3.50	48.6	73.1	0.030	37.64	0.15	0.30	3.65	0.29	7.7
AI155	1.51	3.03	53.1	82.4	0.030	34.12	0.15	0.29	3.51	0.26	8.0
AI160	1.92	3.41	44.6	74.1	0.030	35.62	0.15	0.31	4.02	0.35	1.1
AI165	0.55	1.42	53.5	139.4	0.035	20.31	0.15	0.32	3.94	0.34	0.0
AI170	1.28	3.79	69.9	73.9	0.030	45.83	0.14	0.32	4.28	0.42	7.2
AJ175	0.97	2.37	35.9	95.4	0.030	23.71	0.14	0.32	3.85	0.32	8.1

TABLE 5-1 HEC 1 PARAMETERS: SOLS WASH AREA											
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
AB180	1.09	2.27	67.0	95.0	0.030	29.11	0.15	0.29	3.81	0.25	10.9
AB185	1.31	2.84	59.9	52.8	0.030	36.98	0.15	0.30	3.51	0.26	5.8
AB190	1.90	2.65	43.0	119.5	0.035	30.92	0.15	0.28	4.51	0.23	9.7
AB195	2.18	3.79	40.1	81.5	0.030	36.42	0.15	0.31	3.86	0.32	5.2
AB200	0.81	2.27	50.2	112.0	0.035	29.51	0.15	0.29	3.58	0.27	7.7
AB205	1.25	2.84	46.8	78.4	0.030	31.25	0.15	0.29	3.54	0.26	9.2
AB210	2.19	4.92	52.0	88.1	0.030	48.31	0.14	0.32	4.09	0.37	4.0
AJ215	0.47	1.04	26.9	106.6	0.035	12.99	0.14	0.32	4.04	0.36	6.0

44.03

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TABLE 5-2 HEC-1 Output Summary: SOLS WASH AREA Peak Flows, cfs						
		STORM RETURN PERIOD, years				
HEC-1 ID	DESCRIPTION	2	10	25	50	100
SA	Amir Wash	19	593	935	1222	1500
SAH65	Sols Wash Tributary AH2	530	2838	4026	5001	6031
SAH80	Sols Wash Tributary AH3	279	979	1330	1620	1908
CAH86	Sols Wash Tributary AH3	174	1177	1753	2253	2741
SAH90	Rt. Bank Tributary to AH3	282	877	1176	1429	1680
CAH96	Sols Wash Tributary AH3	279	1795	2662	3360	4046
SAH100	Sols Wash Tributary AH4	89	441	618	763	907
SAH120	Sols Wash Tributary AH5	282	1070	1463	1787	2129
CAI162	Hartman Wash @ Hwy 60	400	1897	2509	3056	3641
CAI167	Hartman Wash	384	2013	2587	3096	3660
CAI171	Hartman Wash Outflow	297	2018	2772	3312	3802
SAB180	Twin Peaks Wash	221	650	866	1049	1231
SAB190	Yucca Tank	360	1095	1464	1776	2085
CAB186	Twin Peaks Wash Outflow	287	1022	1424	1759	2099
SAB200	George's Tank	148	466	627	761	896
CAB206	Flying E Tank	345	1124	1506	1829	2152
CAB208	Flying E Wash @ Hwy 60	889	3494	4769	5856	6943
CAB211	Flying E Wash Outflow	811	3732	5244	6479	7708

6.0 West Tributaries Area

6.1 Area Description

The West Tributaries Area comprises six washes and their tributaries as well as local ponding along the AT&SF railroad tracks. The watersheds cover approximately 17 sq mi in the Vulture Mountains and foothill areas as shown in Figure 6-1 (figures appear in Volume III). Washes included are as follows:

Name	Model Designation
Sunset Wash	AD
Sunny Cove Wash	AE
Cemetery Wash	R
Turtleback Wash	W
Unnamed Wash #10	AG
Unnamed Wash #14	Q
Local Ponding at AT&SF RR	AJ

The model designations above are used throughout the figures in this chapter and in all model output. In the HEC-1 model these designations are always preceded by a letter indicating the operation being completed:

- S - Drainage Sub-basin Runoff Hydrograph
- C - Combine Hydrographs
- R - Route Hydrograph through Wash
- D - Route Hydrograph through Detention Storage

For example, SR2 indicates that a hydrograph is to be calculated for Cemetery Wash watershed R2.

The Vulture Mountains and foothill areas can be characterized as having steep slopes, relatively shallow coarse soils, many prominent rock outcroppings, and sparse desert vegetation. Slopes within the watersheds vary from one percent in the foothill areas to in excess of 50 percent in the headwater areas.

Soil maps units within the West Tributaries Area are shown on Figure 6-2. Soil Map Unit data is provided in Appendix A. Soil surveys indicate that the soils on the mountain and hillsides are primarily composed of sandy clay loams and sandy loams. It was observed during field reconnaissance that the soils on the mountain and

hillsides are generally covered with a layer of coarse gravel and small cobbles. This layer appears to have formed due to the erosion of some of the finer material.

Vegetation in the Vulture Mountains comprises desert shrubs and cacti with an estimated average ground cover of 15 percent. This estimate has been used to compute Green and Ampt parameters for the analysis.

Land use within the West Tributaries Area is primarily for grazing and small mining operations. Portions of the foothills within the Town of Wickenburg include significant urbanized areas, as shown previously in Figure 3-2.

6.2 Drainage Facilities

Drainage in the West Tributaries Area is typically by natural washes. Natural washes within the Vulture Mountains typically have shallow, well-defined main channels with vegetated overbank areas. The washes are dry during most of the year. Relatively short periods of flow follow significant precipitation events.

Atchison, Topeka & Santa Fe railroad tracks lie adjacent to the Hassayampa River in the West Tributaries Area. These tracks cross each study wash in the West Tributaries Area except Sunny Cove Wash. The confluence of Sunny Cove Wash with Sunset Wash is upstream from the AT&SF tracks. Flow passes through the raised railroad embankment via wooden bridges or concrete box culverts just upstream from the Hassayampa River.

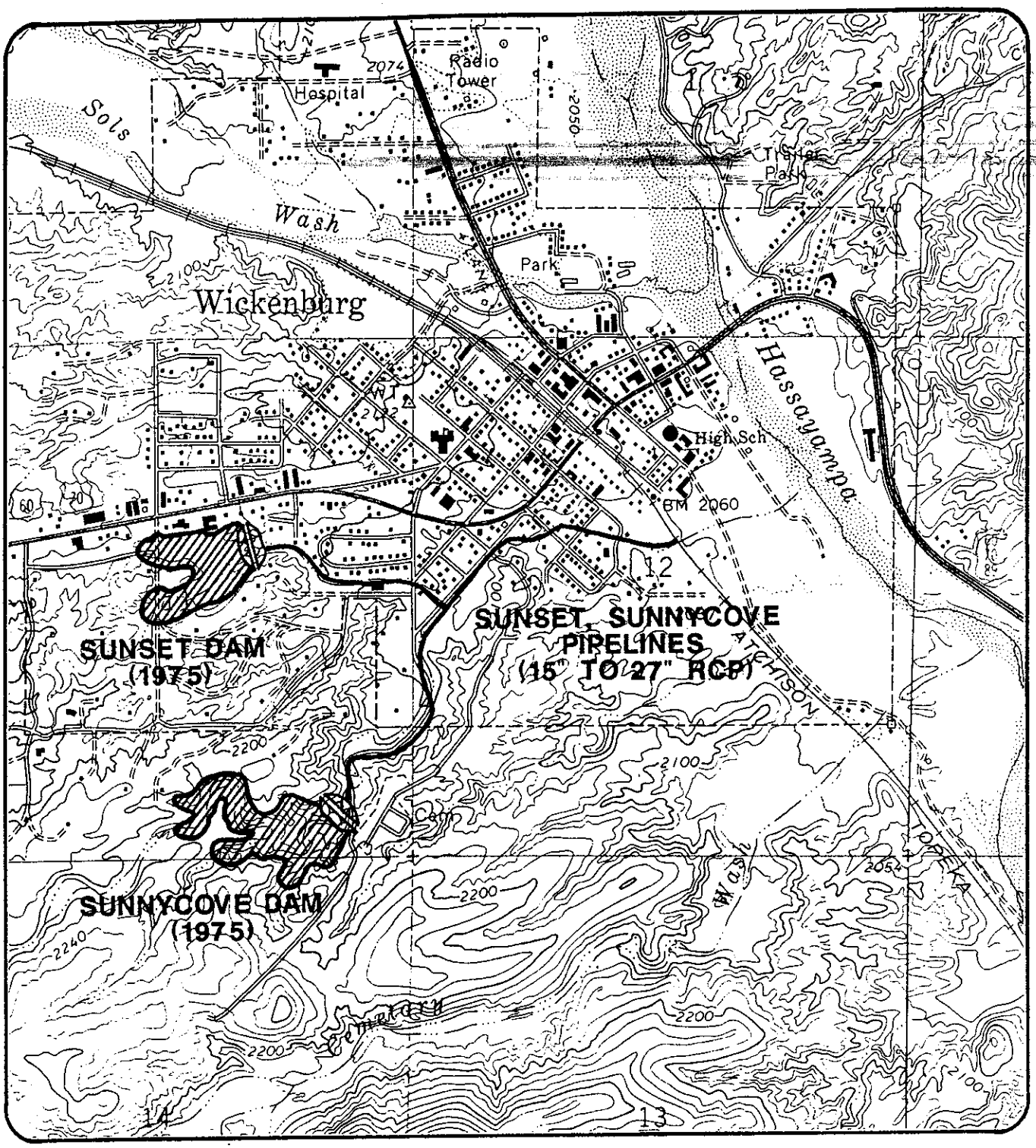
6.3 Storage Facilities

There are two large detention basins in the West Tributaries Area. They are Sunset Dam (NE 1/4 Section 11-7N-5W) and Sunny Cove Dam (SE 1/4 Section 11-7N-5W). The dams were designed and built by the SCS and are maintained by the Flood Control District of Maricopa County. Sunset and Sunny Cove Dams are approximately 30 and 50 feet in height, respectively. The primary spillways of these two dams drain into the Sunset and Sunny Cove pipelines, also designed and built by the SCS. The dams and the pipelines are shown schematically in Figure 6-3 on the following page.

6.4 Hydrologic Model

A schematic representation of the hydrologic model is shown on Figure 6-4. Figure 6-5 shows the major flow paths and watershed centroids used to develop the watershed lag and routing parameters.

A summary of measured and calculated input parameters for each sub-basin is shown in Table 6-1. Detailed data and calculations used to develop sub-basin parameters are shown in Appendix B. Peak flow rates calculated by the HEC-1 model are summarized in Table 6-2. *Volume II: HEC-1 Output* includes HEC-1 input files and level 5 output summary tables.



SUNSET & SUNNYCOVE DAMS & PIPELINES

LOCATION MAP

FIGURE 6-3

N.T.S.

TABLE 6-1
HEC-1 PARAMETERS: WEST TRIBUTARIES AREA

							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
AD2	0.59	1.82	46.0	115.4	0.030	20.57	0.14	0.32	3.91	0.33	7.6
AD8	0.53	1.86	48.0	91.4	0.030	22.21	0.14	0.33	4.20	0.39	6.1
AE10	1.34	3.41	51.0	82.1	0.030	36.77	0.15	0.31	3.61	0.28	6.2
AG2	0.18	1.10	55.0	254.5	0.030	12.92	0.15	0.32	3.72	0.29	1.5
Q2	0.37	1.29	42.0	268.8	0.030	13.03	0.15	0.30	3.61	0.25	9.1
R2	0.91	2.08	55.0	109.3	0.030	24.62	0.15	0.29	3.55	0.27	8.0
R4	0.47	1.61	50.0	134.1	0.030	18.80	0.15	0.30	3.67	0.29	10.0
R10	1.57	2.41	63.0	83.0	0.030	30.55	0.15	0.30	3.94	0.35	8.4
R16	0.75	1.89	55.0	129.6	0.030	22.16	0.15	0.30	3.61	0.28	11.2
R18	0.71	2.27	54.0	138.8	0.030	24.97	0.15	0.30	3.58	0.28	11.2
R24	0.44	1.48	54.0	87.8	0.030	19.67	0.15	0.30	3.59	0.28	12.7
R26	0.95	1.52	53.0	85.5	0.030	20.04	0.15	0.30	3.59	0.28	12.1
R32	0.94	2.12	48.0	127.3	0.030	23.04	0.15	0.30	3.86	0.33	11.3
R38	0.79	2.69	44.0	150.0	0.030	25.89	0.15	0.28	3.85	0.25	14.6
R44	1.05	1.89	36.0	153.4	0.030	18.27	0.15	0.29	3.59	0.28	14.2
R50	0.56	1.44	50.0	90.3	0.030	18.62	0.15	0.31	3.76	0.30	5.1
W2	1.25	1.35	39.0	125.9	0.030	15.14	0.15	0.28	4.64	0.23	14.9
W6	0.98	2.18	63.0	178.5	0.030	24.46	0.15	0.28	4.54	0.23	16.0

TABLE 6-1 HEC-1 PARAMETERS: WEST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
W7	1.30	2.42	50.0	103.3	0.030	26.92	0.15	0.28	4.71	0.22	15.0
W12	0.51	1.11	51.0	227.9	0.030	12.91	0.15	0.28	3.70	0.26	15.3
W14	0.76	1.55	43.0	198.7	0.030	16.00	0.15	0.29	3.71	0.31	13.8
W20	0.23	0.92	60.0	117.4	0.030	13.50	0.15	0.29	4.12	0.39	12.6

17.18

TABLE 6-2 HEC-1 Output Summary: WEST TRIBUTARIES AREA Peak Flows, cfs						
		STORM RETURN PERIOD, years				
HEC-1 ID	DESCRIPTION	2	10	25	50	100
RAD4	Sunset Wash	0	0	0	0	0
RAE12	Sunny Cove Wash	0	0	0	0	0
CAD16	Sunset Wash	34	271	409	506	600
SAG2	Unnamed Wash # 10	37	138	194	233	272
CR6	Cemetery Wash	290	917	1252	1491	1724
CR12	Cemetery Wash	388	1542	2001	2392	2797
CR20	Cemetery Wash	309	954	1303	1551	1793
CR28	Cemetery Wash	531	1710	2364	2839	3304
CR34	Cemetery Wash	694	3084	4373	5317	6308
CR40	Cemetery Wash	743	3362	4766	5776	6870
CR46	Cemetery Wash	783	3399	4947	6088	7299
CR52	Cemetery Wash	780	3250	4848	5968	7251
SQ2	Unnamed Wash # 14	112	317	428	507	584
SW2	Turtleback Wash	381	1020	1375	1628	1873
CW8	Turtleback Wash	773	2359	3206	3816	4412
CW16	Turtleback Wash	863	2757	3695	4469	5244
CW22	Turtleback Wash	859	2659	3649	4408	5180

7.0 East Tributaries Area

7.1 Area Description

The East Tributaries Area comprises 20 washes and their tributaries. To provide adequate detail in subsequent figures, the area has been divided into north and south portions. The watersheds cover approximately 83 sq mi as shown in Figures 7-1 and 7-2 (figures appear in Volume III). Washes included (listed from north to south) are as follows:

Name	Model Designation
North Portion	
Unnamed Wash #13	P
Blue Tanks Wash	C
Unnamed Wash #11	N
Powder House Wash	AA
Unnamed Wash # 9	AF
Calamity Wash	B
Unnamed Wash # 12	O
Mockingbird Wash and Tributaries	E
Unnamed Wash # 8	M
Unnamed Wash # 7	L
Unnamed Wash # 6	K
Unnamed Wash # 5	J
Unnamed Wash # 4	I
Monarch Wash and Tributaries	D
South Portion	
Unnamed Wash # 3	H
Unnamed Wash # 2	G
Unnamed Wash # 1	F
San Domingo Wash and Tributaries	T
Ox Wash and Tributaries	V
Little San Domingo Wash	S

The model designations above are used throughout the figures in this chapter and in all model output. In the HEC-1 model these designations are always preceded by a letter indicating the operation being completed:

- S - Drainage Sub-basin Runoff Hydrograph
- C - Combine Hydrographs
- R - Route Hydrograph through Wash
- D - Route Hydrograph through Detention Storage

For example, ST2 indicates that a hydrograph is to be calculated for San Domingo Wash watershed T2.

The Wickenburg Mountains and foothill areas can be characterized as having steep slopes, shallow and coarse soils, scattered rock outcroppings, and sparse desert vegetation. Slopes within the watershed range from 2 percent along the washes to in excess of 50 percent on the hillsides.

Within the East Tributary's watersheds, the washes are confined to well defined canyons and/or ravines. Within these canyons and ravines, the washes typically have shallow main channels with small vegetated overbank areas; however, many washes do have areas where the flow is braided, i.e., not confined to one main channel.

Soil map units for the area are shown on Figure 7-3 and 7-4. These indicate that soils on the mountain and hill sides are composed of primarily sandy loams and sandy clay loams. It was observed that the soils on the mountain and hillsides are covered by a layer of coarse gravel and small cobbles, that appears to have formed due to the erosion of the silt and clay material. Additional information on soil characteristics and methods of calculating losses are in Appendixes A and B.

Vegetation in the Wickenburg Mountains is primarily desert shrubs and cacti with an estimated ground cover of 15 percent. This estimate has been used to compute Green and Ampt parameters for the HEC-1 model.

Within the Wickenburg Mountains and foothill areas, the primary land uses include grazing and small mining operations. Limited residential and commercial development has occurred in a narrow strip along State Highway 93 east of Wickenburg. Land use in the Study Area is shown on Figure 3-2.

7.2 Drainage Facilities

Four washes in the East Tributaries Area enter the Hassayampa River north of the U.S. Highway 93 bridge, and have no hydraulic structures. Other washes are crossed by State Highway 93. With the exceptions of Ox Wash and Little San Domingo Wash, bridges and culverts are near the confluence with the Hassayampa River, and are frequently affected by the Hassayampa River floodplain. Ox Wash and Little San Domingo Wash also pass under the Atchison, Topeka, and Santa Fe

Railroad. Highway bridges have been constructed over San Domingo, Mockingbird, and Monarch Washes. Other washes flow under the highway through box culverts.

7.3 Storage Facilities

No significant storage facilities exist in the East Tributaries Area.

7.4 Hydrologic Model

A schematic representation of the hydrologic model is shown on Figures 7-5 and 7-6. Figures 7-7 and 7-8 show the major flow paths and centroids used to develop the watershed lag and routing parameters.

A summary of measured and calculated input parameters for each watershed is shown in Table 7-1. Detailed data and calculations used to develop watershed parameters are shown in Appendix B. Flows calculated by the HEC-1 model are shown in Table 7-2. *Volume II: HEC-1 Output* includes HEC-1 input files and level 5 summary output tables.

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X

TABLE 7-1 HEC-1 PARAMETERS: EAST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
AA5	1.33	2.37	48.0	142.4	0.035	28.64	0.15	0.32	3.70	0.29	10.9
AA10	0.50	1.70	55.6	148.3	0.035	23.39	0.15	0.33	3.93	0.33	3.1
AA15	0.12	0.76	62.5	105.0	0.025	10.07	0.12	0.30	4.21	0.40	23.5
AF	0.30	1.33	50.0	195.5	0.040	20.18	0.15	0.28	3.72	0.26	14.5
B5	3.17	4.16	45.4	153.7	0.035	42.38	0.15	0.34	4.21	0.38	5.2
B10	1.11	3.22	44.0	159.9	0.040	39.10	0.15	0.30	3.74	0.30	10.7
C5	4.43	5.87	50.0	162.5	0.040	64.59	0.15	0.31	3.68	0.29	7.0
C10	3.66	4.55	52.1	123.1	0.035	49.86	0.15	0.34	4.28	0.41	9.4
C15	2.31	4.92	48.0	125.0	0.035	51.14	0.15	0.34	4.19	0.38	6.2
C20	0.43	1.42	54.0	179.8	0.040	22.18	0.15	0.32	4.23	0.44	9.1
D5	5.42	7.57	72.5	190.5	0.040	87.55	0.15	0.33	4.16	0.38	8.1
D10	3.80	7.66	53.1	181.9	0.040	79.18	0.15	0.33	4.02	0.35	8.6
D15	0.93	2.18	56.5	110.1	0.035	30.03	0.15	0.34	4.24	0.43	1.3
D20	0.58	2.65	46.4	149.4	0.035	30.50	0.15	0.33	4.16	0.38	4.2
E5	0.37	1.89	60.0	148.1	0.035	26.05	0.15	0.31	3.95	0.35	16.7

28.46

TABLE 7-1 HEC-1 PARAMETERS: EAST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Ku	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
E10	0.94	4.17	45.5	166.5	0.040	47.81	0.15	0.30	3.93	0.34	10.5
E15	4.41	4.93	57.7	171.3	0.040	59.13	0.15	0.33	4.24	0.43	8.2
E20	1.11	3.60	57.9	128.7	0.035	43.07	0.15	0.32	4.24	0.44	7.2
I5	0.41	2.56	51.9	142.2	0.035	31.28	0.15	0.31	3.58	0.27	7.9
I10	1.61	4.17	50.0	138.5	0.035	44.93	0.15	0.31	3.77	0.30	3.2
I15	0.25	1.23	54.0	175.2	0.040	19.99	0.15	0.34	3.91	0.33	2.2
J	0.42	1.80	47.2	160.8	0.040	25.79	0.15	0.32	3.74	0.30	6.3
K5	0.84	2.28	50.0	177.3	0.040	30.93	0.15	0.31	3.78	0.30	0.0
K10	1.04	2.85	56.7	159.6	0.040	39.19	0.15	0.30	3.92	0.24	3.7
K15	1.09	3.50	57.0	147.9	0.035	40.82	0.15	0.30	3.51	0.26	9.7
L	0.79	2.56	55.5	147.2	0.035	31.88	0.15	0.32	3.69	0.29	7.1
M	0.30	1.52	50.0	171.1	0.040	22.91	0.15	0.30	3.51	0.26	10.8
N	0.33	1.70	44.7	200.0	0.040	23.20	0.15	0.29	3.72	0.25	12.3
O	2.90	4.73	60.0	159.4	0.040	58.95	0.15	0.30	3.55	0.26	5.9
P	0.87	2.84	43.3	156.3	0.035	31.08	0.15	0.32	3.76	0.30	8.7

gr = 45.81

TABLE 7-1
HEC-1 PARAMETERS: EAST TRIBUTARIES AREA

							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
V2	3.16	3.56	42.0	127.9	0.030	32.44	0.15	0.30	3.70	0.25	9.1
V4	0.74	2.22	63.0	85.6	0.030	28.53	0.15	0.32	4.16	0.38	3.5
V10	1.72	2.67	50.0	128.5	0.030	27.83	0.15	0.32	3.86	0.33	7.5
V16	0.48	1.36	43.0	109.2	0.030	16.26	0.15	0.33	4.20	0.45	4.3
V20	0.32	1.69	51.0	92.4	0.030	21.04	0.15	0.29	3.64	0.28	6.0
V22	0.19	1.12	39.0	137.6	0.030	12.92	0.15	0.32	3.79	0.31	3.3
S2	4.60	7.90	53.0	122.6	0.030	65.48	0.15	0.31	3.69	0.29	8.8
S6	1.60	3.30	57.0	75.8	0.030	37.99	0.15	0.30	4.18	0.46	0.0
S12	0.86	2.80	37.0	103.0	0.030	26.84	0.15	0.31	4.15	0.47	0.0
S14	1.31	2.09	32.0	124.9	0.030	19.61	0.15	0.30	3.81	0.61	0.0
S20	0.41	1.18	45.0	105.7	0.030	14.92	0.15	0.34	3.86	0.58	0.0
F2	0.24	1.12	54.0	150.3	0.030	14.37	0.15	0.33	3.98	0.34	7.2
G2	0.40	1.55	48.0	152.3	0.030	17.58	0.15	0.34	3.97	0.34	1.4
H2	1.34	2.08	40.0	117.8	0.030	21.50	0.15	0.30	3.88	0.33	18.6
H6	0.42	1.40	59.0	114.1	0.030	18.58	0.15	0.34	4.15	0.48	0.9

TABLE 7-1 HEC-1 PARAMETERS: EAST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
T2	4.50	3.56	43.0	260.7	0.030	28.59	0.15	0.32	3.82	0.31	0.5
T6	3.93	3.86	30.0	239.8	0.030	26.94	0.15	0.34	4.12	0.37	3.3
T10	2.70	3.78	52.0	205.7	0.030	33.65	0.15	0.32	3.86	0.32	9.8
T12	3.50	4.36	57.0	190.9	0.030	39.39	0.15	0.33	4.00	0.35	7.3
T14	2.76	3.90	39.0	190.8	0.030	31.33	0.15	0.30	3.61	0.28	10.6
T16	1.35	2.88	52.0	126.7	0.030	30.01	0.15	0.29	3.78	0.32	15.4
T20	0.28	1.02	67.0	196.1	0.030	13.82	0.15	0.34	3.68	0.69	3.7
T22	0.72	2.61	45.0	199.3	0.030	24.18	0.15	0.29	3.82	0.33	21.8
T26	0.59	1.52	42.0	113.0	0.030	17.39	0.15	0.33	4.10	0.50	6.2

67
83.5
17 18
44.03

TABLE 7-2 HEC-1 Output Summary: EAST TRIBUTARIES AREA Peak Flows, cfs						
		STORM RETURN PERIOD, years				
HEC-1 ID	DESCRIPTION	2	10	25	50	100
SP	Unnamed Wash # 13	209	498	666	781	898
SC5	Blue Tank Wash	653	1513	2011	2358	2732
CC12	Blue Tank Wash	695	2114	3018	3654	4290
CC17	Blue Tank Wash	714	2258	2938	3488	4140
CC22	Blue Tank Wash	712	2253	2909	3448	4071
SN	Unnamed Wash # 11	124	251	325	377	429
CAA12	Powder House Wash	480	1127	1508	1768	2034
CAA17	Powder House Wash	473	1164	1564	1839	2114
SAF	Unnamed Wash # 9	124	246	319	369	420
SB5	Calamity Wash	328	1195	1710	2062	2415
CB12	Calamity Wash	427	1559	2252	2713	3098
SO	Unnamed Wash # 12	519	1126	1480	1735	1995
CE12	Mockingbird Wash	232	578	779	917	1056
SE15	Mockingbird Wash	318	1225	1792	2182	2567
CE19	Mockingbird Wash	362	1480	2158	2496	2754
CE22	Mockingbird Wash	410	1729	2522	3001	3459
SM	Unnamed Wash # 8	110	227	295	343	390
SL	Unnamed Wash # 7	190	447	596	699	802
CK12	Unnamed Wash # 6	423	966	1286	1509	1739
CK17	Unnamed Wash # 6	539	1317	1805	2153	2508
SJ	Unnamed Wash # 5	113	270	361	424	488
CI12	Unnamed Wash # 4	385	926	1241	1458	1684
CI17	Unnamed Wash # 4	380	976	1320	1556	1795
CD12	Monarch Wash	692	2169	3042	3656	4245
CD17	Monarch Wash	644	2021	2700	3231	3774
CD24	Monarch Wash	651	2068	2744	3280	3832
SH2	Unnamed Wash # 3	440	982	1301	1521	1742
CH8	Unnamed Wash # 3	433	896	1179	1394	1631
SG2	Unnamed Wash # 2	94	274	380	453	526
SF2	Unnamed Wash # 1	72	183	251	298	345
ST2	San Domingo Wash	907	2499	3418	4052	4682

TABLE 7-2 HEC-1 Output Summary: EAST TRIBUTARIES AREA Peak Flows, cfs						
		STORM RETURN PERIOD, years				
HEC-1 ID	DESCRIPTION	2	10	25	50	100
CT8	San Domingo Wash	1236	3797	5349	6489	7621
CT11	San Domingo Wash	1471	5015	7315	8978	10655
CT14	San Domingo Wash	1781	6061	8729	10646	12612
CT17	San Domingo Wash	1789	6090	8906	10878	12911
CT24	San Domingo Wash	1827	6042	9020	11093	13242
CT30	San Domingo Wash	1771	5983	8841	10780	12760
SV2	Ox Wash	911	1910	2494	2902	3315
CV6	Ox Wash	880	1806	2455	2917	3390
CV12	Ox Wash	1027	2268	3099	3738	4406
CV18	Ox Wash	976	2228	3084	3734	4402
CV24	Ox Wash	976	2232	3116	3773	4447
SS2	Little San Domingo Wash	691	1585	2106	2467	2849
CS8	Little San Domingo Wash	608	1653	2302	2756	3224
CS16	Little San Domingo Wash	589	1692	2302	2786	3299
CS22	Little San Domingo Wash	582	1668	2279	2847	3403

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SOIL MAP UNIT DATA					
Map Unit	Textural class	DTHETA (dir)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
3	Sandy Loam	0.35	3.45	1.78	0.0
5	Loamy Sand	0.35	2.50	1.11	0.0
6	Loamy Sand	0.35	2.40	1.20	0.0
7	Loamy Sand	0.35	2.40	1.20	0.0
8	Sandy Loam	0.35	4.30	0.40	0.0
10	Loamy Sand	0.35	2.54	2.39	0.0
12	Clay Loam	0.25	8.20	0.04	0.0
13	Clay Loam	0.24	8.20	0.21	0.0
16	Sandy Loam	0.25	8.20	0.04	15.0
17	Sandy Loam	0.25	8.20	0.04	15.0
18	Loamy Sand	0.34	3.41	0.98	15.0
21	Sandy Clay Loam	0.26	7.40	0.17	4.0
22	Clay Loam	0.25	8.20	0.04	0.0
23	Clay Loam	0.24	8.80	0.04	0.0
24	Sandy Clay Loam	0.27	7.40	0.11	0.0
26	Clay Loam	0.25	8.30	0.04	0.0
27	Sandy Clay Loam	0.25	8.50	0.10	0.0
28	Sandy Clay Loam	0.26	7.90	0.11	0.0
29	Sandy Loam	0.35	4.28	0.40	0.0
31	Sandy Loam	0.34	4.60	0.37	35.0
32	Sandy Loam	0.34	4.60	0.37	35.0
33	Sandy Loam	0.33	5.10	0.33	0.0
35	Sandy Loam	0.33	5.10	0.33	0.0
36	Sandy Loam	0.30	6.50	0.21	0.0
38	Sandy Loam	0.32	5.20	0.30	0.0
39	Sandy Loam	0.34	4.60	0.32	3.0

SOIL MAP UNIT DATA					
Map Unit	Textural class	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
42	Sandy Loam	0.31	6.00	0.33	0.0
43	Sandy Loam	0.31	6.00	0.33	0.0
44	Sandy Clay Loam	0.26	8.24	0.10	0.0
45	Sandy Clay Loam	0.26	8.10	0.10	0.0
46	Sandy Clay Loam	0.26	8.10	0.21	0.0
47	Sandy Loam	0.30	5.70	0.65	0.0
48	Sandy Clay Loam	0.30	5.79	0.54	0.0
49	Sandy Clay Loam	0.30	5.69	0.55	0.0
50	Loam	0.35	4.20	0.26	0.0
52	Sandy Clay Loam	0.28	7.10	0.20	20.0
54	Loam	0.35	3.30	0.44	0.0
55	Sandy Loam	0.35	3.60	0.36	0.0
61	Sandy Loam	0.30	6.20	0.30	6.0
62	Sandy Loam	0.30	6.20	0.30	6.0
63	Sandy Clay Loam	0.30	6.40	0.27	25.0
64	Sandy Clay Loam	0.30	6.30	0.27	25.0
65	Sandy Loam	0.34	4.40	0.36	0.0
66	Sandy Loam	0.32	5.70	0.31	3.0
67	Clay	0.17	11.50	0.05	0.0
68	Sandy Loam	0.34	4.50	0.50	0.0
70	Sandy Loam	0.34	4.50	0.46	0.0
72	Sandy Clay Loam	0.28	7.20	0.21	30.0
73	Sandy Clay Loam	0.28	7.20	0.21	30.0
74	Sandy Loam	0.29	6.60	0.32	0.0
75	Loam	0.35	3.90	0.24	0.0
77	Loam	0.34	4.20	0.23	0.0

SOIL MAP UNIT DATA					
Map Unit	Textural class	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
83	Loam	0.34	3.80	0.24	0.0
84	Loam	0.34	4.20	0.25	0.0
85	Clay Loam	0.26	7.60	0.07	0.0
88	Loam	0.30	6.10	0.13	0.0
90	Sandy Loam	0.34	3.90	0.38	0.0
93	Sandy Loam	0.35	4.00	0.39	0.0
94	Sandy Loam	0.35	4.00	0.39	0.0
95	Clay Loam	0.25	8.20	0.04	0.0
96	Sandy Clay Loam	0.27	7.90	0.13	0.0
97	Sandy Clay Loam	0.27	7.90	0.13	0.0
98	Sandy Clay Loam	0.30	6.41	0.23	0.0
100	Loamy Sand	0.34	3.65	0.86	20.0
101	Sandy Loam	0.35	3.50	0.40	0.0
103	Sandy Clay Loam	0.28	7.10	0.05	65.0
105	Sandy Clay Loam	0.28	6.90	0.31	60.0
109	Sandy Clay Loam	0.25	8.60	0.06	35.0
110	Sandy Clay Loam	0.26	6.50	0.42	4.0
112	Sandy Loam	0.35	3.50	0.40	0.0
113	Sandy Loam	0.35	3.50	0.40	0.0
118	Sandy Loam	0.35	3.80	0.38	0.0
120	Sandy Clay Loam	0.26	8.00	0.14	0.0
121	Sandy Clay Loam	0.30	5.90	0.53	0.0
124	Sandy Loam	0.35	3.50	0.40	0.0
ApB	Loamy Sand	0.35	2.40	1.20	0.0
ArA	Loamy Sand	0.35	3.10	0.91	0.0
CgC	Loamy Sand	0.35	4.20	0.44	0.0

SOIL MAP UNIT DATA					
Map Unit	Textural class	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
ClD	Sandy Loam	0.35	4.10	0.48	0.0
CmD	Sandy Loam	0.35	4.30	0.40	0.0
CnC	Sandy Loam	0.34	4.80	0.36	20.0
CnF	Sandy Loam	0.34	4.80	0.36	20.0
CoD	Sandy Loam	0.33	5.40	0.32	0.0
CrF	Sandy Loam	0.35	4.50	0.38	0.0
CsC	Sandy Loam	0.35	4.20	0.44	0.0
CtD	Sandy Loam	0.35	4.30	0.40	0.0
CwD	Clay Loam	0.25	8.20	0.04	0.0
GsE	Clay	0.15	12.40	0.01	10.0
HmE	Sandy Loam	0.35	4.30	0.40	2.0
Lc	Sandy Loam	0.35	4.50	0.38	0.0
Le	Clay Loam	0.25	8.20	0.04	3.0
Lh	Clay Loam	0.25	8.20	0.04	40.0
LkD	Sandy Clay Loam	0.25	8.40	0.10	0.0
MkF	Sandy Loam	0.34	4.80	0.36	20.0
Mt	Sandy Loam	0.35	4.40	0.41	0.0
Rk	Clay	0.16	12.20	0.02	0.3
Rm	Clay	0.21	9.80	0.14	3.0
Rr	Sandy Loam	0.35	4.30	0.40	70.0
Sa	Loamy Sand	0.35	3.20	1.75	0.0
Vm	Clay Loam	0.30	6.40	0.23	0.0
WhC	Sandy Loam	0.35	3.70	0.64	0.0

SOLS WASH AREA

HEC 1 PARAMETERS: SOLS WASH AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
A	2.19	4.45	46.7	74.6	0.030	44.35	0.15	0.34	4.25	0.42	1.4
AH65	10.27	7.66	47.0	41.1	0.027	67.68	0.35	0.30	3.51	0.25	1.3
AH80	2.23	3.50	56.9	55.0	0.030	42.18	0.15	0.29	3.59	0.27	4.5
AH85	2.54	4.64	57.1	36.6	0.027	50.90	0.35	0.32	3.85	0.32	3.9
AH90	1.52	3.22	35.4	92.9	0.030	29.93	0.15	0.30	3.87	0.24	6.5
AH95	0.89	2.08	45.7	65.8	0.030	25.26	0.15	0.32	4.06	0.36	2.0
AH100	0.94	2.84	50.0	124.0	0.035	34.26	0.15	0.32	3.79	0.30	1.3
AH120	2.89	5.30	50.0	70.3	0.030	52.55	0.15	0.31	3.64	0.28	5.2
AH125	0.81	2.46	42.3	120.2	0.035	28.99	0.15	0.32	3.81	0.31	0.0
AJ140	0.34	1.14	41.2	105.3	0.030	14.07	0.15	0.32	4.01	0.35	0.0
AI150	1.98	3.50	48.6	73.1	0.030	37.64	0.15	0.30	3.65	0.29	7.7
AI155	1.51	3.03	53.1	82.4	0.030	34.12	0.15	0.29	3.51	0.26	8.0
AI160	1.92	3.41	44.6	74.1	0.030	35.62	0.15	0.31	4.02	0.35	1.1
AI165	0.55	1.42	53.5	139.4	0.035	20.31	0.15	0.32	3.94	0.34	0.0
AI170	1.28	3.79	69.9	73.9	0.030	45.83	0.14	0.32	4.28	0.42	7.2
AJ175	0.97	2.37	35.9	95.4	0.030	23.71	0.14	0.32	3.85	0.32	8.1

HEC 1 PARAMETERS: SOLS WASH AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
AB180	1.09	2.27	67.0	95.0	0.030	29.11	0.15	0.29	3.81	0.25	10.9
AB185	1.31	2.84	59.9	52.8	0.030	36.98	0.15	0.30	3.51	0.26	5.8
AB190	1.90	2.65	43.0	119.5	0.035	30.92	0.15	0.28	4.51	0.23	9.7
AB195	2.18	3.79	40.1	81.5	0.030	36.42	0.15	0.31	3.86	0.32	5.2
AB200	0.81	2.27	50.2	112.0	0.035	29.51	0.15	0.29	3.58	0.27	7.7
AB205	1.25	2.84	46.8	78.4	0.030	31.25	0.15	0.29	3.54	0.26	9.2
AB210	2.19	4.92	52.0	88.1	0.030	48.31	0.14	0.32	4.09	0.37	4.0
AJ215	0.47	1.04	26.9	106.6	0.035	12.99	0.14	0.32	4.04	0.36	6.0

SUBBASIN INPUT PARAMETERS

SUBBASIN # : A

Area = 2.19 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.95	100.0	0.093
3.50	240.0	0.423

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

L = 4.45 mi Av.Slope= 74.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.08 mi = 46.7 % of "L"

$\overline{Kn}$ = 0.030 Lag = 44.35 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	93 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
RES	7 %	Residential	0.12	20.0	15.0	1.06
Weight.Av	100 %		0.15	1.4	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CsC	28.0 %	Continental	Sandy Loam	0.35	----	0.44	0.44	0.0
38	23.8 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
94	21.4 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
ClD	9.3 %	Cave	Sandy Loam	0.35	----	0.48	0.48	0.0
8	8.3 %	-----	Sandy Loam	0.35	----	0.40	0.40	0.0
7	5.0 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
26	3.7 %	-----	Clay Loam	0.25	----	0.04	0.04	0.0
93	0.5 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
Weight.Av	100.0 %			0.34	4.25	0.42	0.42	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
A	2.19	0.15	0.34	4.25	0.42	1.4	44.35

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AH65

Area = 10.27 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.70	180.0	0.165
3.69	120.0	0.647
2.27	80.0	0.382

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

L = 7.66 mi Av.Slope= 41.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 3.60 mi = 47.0 % of "L"

$\overline{Kn}$ = 0.027 Lag = 67.68 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
DRL	100 %	Desert range,Bare agric.,Flat slopes	0.35	50%RTIMP	10.0	1.00
Weight.Av	100 %		0.35	1.3	10.0	1.00

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
Lc	21.6 %	Latene	Sandy Loam	0.35	----	0.38	0.38	0.0
65	14.2 %	-----	Sandy Loam	0.34	----	0.36	0.36	0.0
27	10.9 %	-----	Sandy Clay Loam	0.25	----	0.10	0.10	0.0
67	6.8 %	-----	Clay	0.17	----	0.05	0.05	0.0
73	6.5 %	-----	Sandy Clay Loam	0.28	----	0.21	0.21	30.0
28	6.4 %	-----	Sandy Clay Loam	0.26	----	0.11	0.11	0.0
Vm	5.2 %	Vekol	Clay Loam	0.30	----	0.23	0.23	0.0
24	4.0 %	-----	Sandy Clay Loam	0.27	----	0.11	0.11	0.0
120	3.7 %	-----	Sandy Clay Loam	0.26	----	0.14	0.14	0.0
Mt	3.0 %	Mohave	Sandy Loam	0.35	----	0.41	0.41	0.0
83	2.8 %	-----	Loam	0.34	----	0.24	0.24	0.0
64	2.7 %	-----	Sandy Clay Loam	0.30	----	0.27	0.27	25.0
38	2.5 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
85	1.6 %	-----	Clay Loam	0.26	----	0.07	0.07	0.0
95	1.5 %	-----	Clay Loam	0.25	----	0.04	0.04	0.0
97	1.5 %	-----	Sandy Clay Loam	0.27	----	0.13	0.13	0.0
94	1.3 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
62	0.9 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
7	0.7 %	-----	Loamy Sand	0.35	----	1.20	1.20	0.0
96	0.6 %	-----	Sandy Clay Loam	0.27	----	0.13	0.13	0.0
ArA	0.6 %	Anthony	Loamy Sand	0.35	----	0.91	0.91	0.0
42	0.5 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
84	0.5 %	-----	Loam	0.34	----	0.25	0.25	0.0
Weight.Av	100.0 %			0.30	3.51	0.25	0.25	2.7

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AH65	10.27	0.35	0.30	3.51	0.25	1.3	67.68

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AH80

Area = 2.23 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.57	180.0	0.032
2.93	130.0	0.440

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

L = 3.50 mi Av.Slope= 55.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.99 mi = 56.9 % of "L"

$\overline{Kn}$ = 0.030 Lag = 42.18 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	4.5	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
62	47.8 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
24	18.4 %	-----	Sandy Clay Loam	0.27	----	0.11	0.12	0.0
73	11.6 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
64	10.8 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
38	8.4 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
5	2.1 %	-----	Loamy Sand	0.35	----	1.11	1.18	0.0
97	0.9 %	-----	Sandy Clay Loam	0.27	----	0.13	0.14	0.0
Weight.Av	100.0 %			0.29	3.59	0.27	0.27	9.1

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AH80	2.23	0.15	0.29	3.59	0.27	4.5	42.18

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AH85

Area = 2.54 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
4.64	170.0	0.767

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

L = 4.64 mi Av.Slope= 36.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.65 mi = 57.1 % of "L"

$\overline{Kn}$ = 0.027 Lag = 50.90 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
DRL	100 %	Desert range,Bare agric.,Flat slopes	0.35	50%RTIMP	10.0	1.00
Weight.Av	100 %		0.35	3.9	10.0	1.00

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
65	71.8 %	-----	Sandy Loam	0.34	----	0.36	0.36	0.0
73	25.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.21	30.0
95	1.1 %	-----	Clay Loam	0.25	----	0.04	0.04	0.0
97	0.8 %	-----	Sandy Clay Loam	0.27	----	0.13	0.13	0.0
120	0.4 %	-----	Sandy Clay Loam	0.26	----	0.14	0.14	0.0
42	0.2 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
Weight.Av	100.0 %			0.32	3.85	0.32	0.32	7.7

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AH85	2.54	0.35	0.32	3.85	0.32	3.9	50.90

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AH90

S-GRAPH PARAMETERS

Area = 1.52 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.76	521.0	0.029
2.46	160.0	0.305

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

L = 3.22 mi Av.Slope= 92.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.14 mi = 35.4 % of "L"

$\overline{Kn}$ = 0.030 Lag = 29.93 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	6.5	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	43.5 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
65	34.0 %	-----	Sandy Loam	0.34	----	0.36	0.36	0.0
95	16.6 %	-----	Clay Loam	0.25	----	0.04	0.04	0.0
38	5.9 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
Weight.Av	100.0 %			0.30	3.87	0.24	0.24	13.1

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AH90	1.52	0.15	0.30	3.87	0.24	6.5	29.93

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AH95

S-GRAPH PARAMETERS

Area = 0.89 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.56	80.0	0.047
1.52	80.0	0.210

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

L = 2.08 mi Av.Slope= 65.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.95 mi = 45.7 % of "L"

$\overline{Kn}$ = 0.030 Lag = 25.26 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	2.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	42.9 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
65	39.0 %	-----	Sandy Loam	0.34	----	0.36	0.36	0.0
73	13.3 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	4.8 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	4.06	0.35	0.36	4.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AH95	0.89	0.15	0.32	4.06	0.36	2.0	25.26

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AH100

Area = 0.94 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.85	560.0	0.033
1.99	160.0	0.222

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

L = 2.84 mi Av.Slope= 124.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.42 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.035 Lag = 34.26 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	1.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	79.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
65	11.9 %	-----	Sandy Loam	0.34	----	0.36	0.36	0.0
73	8.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	0.5 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	3.79	0.30	0.30	2.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AH100	0.94	0.15	0.32	3.79	0.30	1.3	34.26

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AH120

S-GRAPH PARAMETERS

Area = 2.89 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.04	120.0	0.097
4.26	270.0	0.535

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

L = 5.30 mi Av.Slope= 70.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.65 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 52.55 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	5.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	53.8 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
73	34.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
65	5.4 %	-----	Sandy Loam	0.34	----	0.36	0.36	0.0
36	3.8 %	-----	Sandy Loam	0.30	----	0.21	0.21	0.0
62	1.8 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
7	0.8 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.31	3.64	0.28	0.28	10.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AH120	2.89	0.15	0.31	3.64	0.28	5.2	52.55

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AJ125

S-GRAPH PARAMETERS

Area = 0.81 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.28	80.0	0.017
2.18	240.0	0.208

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

L = 2.46 mi Av.Slope= 120.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.04 mi = 42.3 % of "L"

$\overline{Kn}$ = 0.035 Lag = 28.99 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	99.1 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
7	0.9 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	3.81	0.31	0.31	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AJ125	0.81	0.15	0.32	3.81	0.31	0.0	28.99

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AJ140

S-GRAPH PARAMETERS

Area = 0.34 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.14	120.0	0.111

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

L = 1.14 mi Av.Slope= 105.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.47 mi = 41.2 % of "L"

$\overline{Kn}$ = 0.030 Lag = 14.07 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	94.9 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
7	5.1 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	4.01	0.35	0.35	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AJ140	0.34	0.15	0.32	4.01	0.35	0.0	14.07

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AI150

S-GRAPH PARAMETERS

Area = 1.98 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.66	300.0	0.031
2.84	160.0	0.378

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

L = 3.50 mi Av.Slope= 73.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.70 mi = 48.6 % of "L"

$\overline{Kn}$ = 0.030 Lag = 37.64 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	7.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
62	43.4 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
64	31.8 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
73	16.2 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
33	8.6 %	-----	Sandy Loam	0.33	----	0.33	0.33	0.0
Weight.Av	100.0 %			0.30	3.65	0.28	0.29	15.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AI150	1.98	0.15	0.30	3.65	0.29	7.7	37.64

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AI155

S-GRAPH PARAMETERS

Area = 1.51 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.66	140.0	0.045
2.37	160.0	0.288

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

L = 3.03 mi Av.Slope= 82.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.61 mi = 53.1 % of "L"

$\overline{Kn}$ = 0.030 Lag = 34.12 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	8.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
62	47.8 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
73	43.5 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
24	5.1 %	-----	Sandy Clay Loam	0.27	----	0.11	0.12	0.0
38	3.6 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
Weight.Av	100.0 %			0.29	3.51	0.25	0.26	15.9

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AI155	1.51	0.15	0.29	3.51	0.26	8.0	34.12

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AI160

Area = 1.92 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.57	120.0	0.039
2.84	180.0	0.357

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

L = 3.41 mi Av.Slope= 74.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.52 mi = 44.6 % of "L"

$\overline{Kn}$ = 0.030 Lag = 35.62 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	1.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	50.0 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
62	31.8 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
7	6.8 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
33	4.7 %	-----	Sandy Loam	0.33	----	0.33	0.33	0.0
95	3.7 %	-----	Clay Loam	0.25	----	0.04	0.04	0.0
97	2.1 %	-----	Sandy Clay Loam	0.27	----	0.13	0.14	0.0
73	1.0 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.31	4.02	0.35	0.35	2.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AI160	1.92	0.15	0.31	4.02	0.35	1.1	35.62

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AI165

Area = 0.55 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.28	120.0	0.014
1.14	130.0	0.107

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

L = 1.42 mi Av.Slope= 139.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.76 mi = 53.5 % of "L"

$\overline{Kn}$ = 0.035 Lag = 20.31 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	96.4 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
7	3.6 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	3.94	0.33	0.34	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AI165	0.55	0.15	0.32	3.94	0.34	0.0	20.31

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AI170

Area = 1.28 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
3.79	280.0	0.441

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

L = 3.79 mi Av.Slope= 73.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.65 mi = 69.9 % of "L"

$\overline{Kn}$ = 0.030 Lag = 45.83 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	92 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
COM	8 %	Commercial	0.06	90.0	10.0	1.00
Weight.Av	100 %		0.14	7.2	14.6	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	76.7 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
7	13.7 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
97	8.6 %	-----	Sandy Clay Loam	0.27	----	0.13	0.14	0.0
94	1.0 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
Weight.Av	100.0 %			0.32	4.28	0.41	0.42	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AI170	1.28	0.14	0.32	4.28	0.42	7.2	45.83

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AJ175

Area = 0.97 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.37	226.0	0.243
0.00	0.0	0.000
0.00	0.0	0.000
0.00	0.0	0.000
0.00	0.0	0.000

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

L = 2.37 mi Av.Slope= 95.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.85 mi = 35.9 % of "L"

$\overline{Kn}$ = 0.030 Lag = 23.71 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	91 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
COM	9 %	Commercial	0.06	90.0	10.0	1.00
Weight.Av	100 %		0.14	8.1	14.6	1.05

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	89.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
94	9.9 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
7	0.8 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	3.85	0.32	0.32	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AJ175	0.97	0.14	0.32	3.85	0.32	8.1	23.71

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AB180

Area = 1.09 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	20.0	0.019
1.80	160.0	0.191
0.28	40.0	0.023

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

L = 2.27 mi Av.Slope= 95.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.52 mi = 67.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 29.11 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	10.9	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	72.8 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
35	18.6 %	-----	Sandy Loam	0.33	----	0.33	0.33	0.0
38	8.6 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
Weight.Av	100.0 %			0.29	3.81	0.24	0.25	21.8

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AB180	1.09	0.15	0.29	3.81	0.25	10.9	29.11

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AB18S

S-GRAPH PARAMETERS

Area = 1.31 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.84	150.0	0.391

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

L = 2.84 mi Av.Slope= 52.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.70 mi = 59.9 % of "L"

$\overline{Kn}$ = 0.030 Lag = 36.98 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	5.8	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	40.8 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
73	36.0 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
62	14.0 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
97	5.5 %	-----	Sandy Clay Loam	0.27	----	0.13	0.14	0.0
24	3.8 %	-----	Sandy Clay Loam	0.27	----	0.11	0.12	0.0
Weight.Av	100.0 %			0.30	3.51	0.25	0.26	11.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AB18S	1.31	0.15	0.30	3.51	0.26	5.8	36.98

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AB190

Area = 1.90 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.31	230.0	0.011
2.34	240.0	0.231

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

L = 2.65 mi Av.Slope= 119.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.14 mi = 43.0 % of "L"

$\overline{Kn}$ = 0.035 Lag = 30.92 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	9.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	60.9 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
62	19.1 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
97	16.9 %	-----	Sandy Clay Loam	0.27	----	0.13	0.14	0.0
42	3.2 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
Weight.Av	100.0 %			0.28	4.51	0.22	0.23	19.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AB190	1.90	0.15	0.28	4.51	0.23	9.7	30.92

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AB195

S-GRAPH PARAMETERS

Area = 2.18 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.66	360.0	0.028
3.13	200.0	0.392
0.00	0.0	0.000
0.00	0.0	0.000
0.00	0.0	0.000

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

L = 3.79 mi Av.Slope= 81.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.52 mi = 40.1 % of "L"

$\overline{Kn}$ = 0.030 Lag = 36.42 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	88 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
RES	12 %	Residential	0.12	20.0	15.0	1.06
Weight.Av	100 %		0.15	5.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	50.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
73	19.5 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
94	9.0 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
62	8.8 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
24	6.4 %	-----	Sandy Clay Loam	0.27	----	0.11	0.12	0.0
7	4.6 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
97	1.2 %	-----	Sandy Clay Loam	0.27	----	0.13	0.14	0.0
36	0.3 %	-----	Sandy Loam	0.30	----	0.21	0.21	0.0
Weight.Av	100.0 %			0.31	3.86	0.32	0.32	6.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AB195	2.18	0.15	0.31	3.86	0.32	5.2	36.42

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AB200

Area = 0.81 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.57	120.0	0.039
1.70	160.0	0.175
0.00	0.0	0.000
0.00	0.0	0.000
0.00	0.0	0.000

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

L = 2.27 mi Av.Slope= 112.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.14 mi = 50.2 % of "L"

$\overline{Kn}$ = 0.035 Lag = 29.51 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	7.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
62	61.3 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
73	38.8 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.29	3.58	0.27	0.27	15.3

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AB200	0.81	0.15	0.29	3.58	0.27	7.7	29.51

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AB205

Area = 1.25 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.38	225.0	0.016
2.46	160.0	0.305
0.00	0.0	0.000
0.00	0.0	0.000
0.00	0.0	0.000

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

L = 2.84 mi Av.Slope= 78.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.33 mi = 46.8 % of "L"

$\overline{Kn}$ = 0.030 Lag = 31.25 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	9.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	56.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
62	24.4 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
38	14.6 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
94	4.1 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
7	0.5 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.29	3.54	0.26	0.26	18.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AB205	1.25	0.15	0.29	3.54	0.26	9.2	31.25

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AB210

Area = 2.19 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	160.0	0.007
4.73	395.0	0.518
0.00	0.0	0.000
0.00	0.0	0.000
0.00	0.0	0.000

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

L = 4.92 mi Av.Slope= 88.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.56 mi = 52.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 48.31 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	79 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
RES	20 %	Residential	0.12	20.0	15.0	1.06
LWN	1 %	Lawn & Turf	0.20	50%RTIMP	95.0	1.94
Weight.Av	100 %		0.14	4.0	15.8	1.07

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	89.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
7	7.0 %	-----	Loamy Sand	0.35	----	1.20	1.28	0.0
36	2.7 %	-----	Sandy Loam	0.30	----	0.21	0.21	0.0
94	1.2 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
Weight.Av	100.0 %			0.32	4.09	0.36	0.37	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AB210	2.19	0.14	0.32	4.09	0.37	4.0	48.31

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AJ215

S-GRAPH PARAMETERS

Area = 0.47 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	40.0	0.013
0.85	80.0	0.088

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

L = 1.04 mi Av.Slope= 106.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.28 mi = 26.9 % of "L"

$\overline{Kn}$ = 0.035 Lag = 12.99 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	70 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
RES	30 %	Residential	0.12	20.0	15.0	1.06
Weight.Av	100 %		0.14	6.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	94.3 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
7	5.7 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	4.04	0.35	0.36	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AJ215	0.47	0.14	0.32	4.04	0.36	6.0	12.99

WEST TRIBUTARIES AREA

HEC 1 PARAMETERS: WEST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
AD2	0.59	1.82	46.0	115.4	0.030	20.57	0.14	0.32	3.91	0.33	7.6
AD8	0.53	1.86	48.0	91.4	0.030	22.21	0.14	0.33	4.20	0.39	6.1
AE10	1.34	3.41	51.0	82.1	0.030	36.77	0.15	0.31	3.61	0.28	6.2
AG2	0.18	1.10	55.0	254.5	0.030	12.92	0.15	0.32	3.72	0.29	1.5
Q2	0.37	1.29	42.0	268.8	0.030	13.03	0.15	0.30	3.61	0.25	9.1
R2	0.91	2.08	55.0	109.3	0.030	24.62	0.15	0.29	3.55	0.27	8.0
R4	0.47	1.61	50.0	134.1	0.030	18.80	0.15	0.30	3.67	0.29	10.0
R10	1.57	2.41	63.0	83.0	0.030	30.55	0.15	0.30	3.94	0.35	8.4
R16	0.75	1.89	55.0	129.6	0.030	22.16	0.15	0.30	3.61	0.28	11.2
R18	0.71	2.27	54.0	138.8	0.030	24.97	0.15	0.30	3.58	0.28	11.2
R24	0.44	1.48	54.0	87.8	0.030	19.67	0.15	0.30	3.59	0.28	12.7
R26	0.95	1.52	53.0	85.5	0.030	20.04	0.15	0.30	3.59	0.28	12.1
R32	0.94	2.12	48.0	127.3	0.030	23.04	0.15	0.30	3.86	0.33	11.3
R38	0.79	2.69	44.0	150.0	0.030	25.89	0.15	0.28	3.85	0.25	14.6
R44	1.05	1.89	36.0	153.4	0.030	18.27	0.15	0.29	3.59	0.28	14.2
R50	0.56	1.44	50.0	90.3	0.030	18.62	0.15	0.31	3.76	0.30	5.1
W2	1.25	1.35	39.0	125.9	0.030	15.14	0.15	0.28	4.64	0.23	14.9

HEC 1 PARAMETERS: WEST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
W6	0.98	2.18	63.0	178.5	0.030	24.46	0.15	0.28	4.54	0.23	16.0
W7	1.30	2.42	50.0	103.3	0.030	26.92	0.15	0.28	4.71	0.22	15.0
W12	0.51	1.11	51.0	227.9	0.030	12.91	0.15	0.28	3.70	0.26	15.3
W14	0.76	1.55	43.0	198.7	0.030	16.00	0.15	0.29	3.71	0.31	13.8
W20	0.23	0.92	60.0	117.4	0.030	13.50	0.15	0.29	4.12	0.39	12.6

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SAD2

S-GRAPH PARAMETERS

Area = 0.59 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.82	210.0	0.169

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

L = 1.82 mi Av.Slope= 115.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.84 mi = 46.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 20.57 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	75 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
RES	25 %	Residential	0.12	20.0	15.0	1.06
Weight.Av	100 %		0.14	7.6	15.0	1.06

Impery. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% Of Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	56.0 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
73	23.2 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
94	17.3 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
7	3.5 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	3.91	0.33	0.33	7.0

INPUT VALUES FOR < HCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SAD2	0.59	0.14	0.32	3.91	0.33	7.6	20.57

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SUBBASIN INPUT PARAMETERS

SUBBASIN # : SAD8

S-GRAPH PARAMETERS

Area = 0.53 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.86	170.0	0.195

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

L = 1.86 mi Av.Slope= 91.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.89 mi = 48.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 22.21 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	70 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
RES	30 %	Residential	0.12	20.0	15.0	1.06
Weight.Av	100 %		0.14	6.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	77.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
54	9.1 %	-----	Loam	0.35	----	0.44	0.47	0.0
7	7.1 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
94	5.8 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
73	0.8 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.33	4.20	0.38	0.39	0.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SAD8	0.53	0.14	0.33	4.20	0.39	6.1	22.21

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SAE10

Area = 1.34 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
3.41	280.0	0.376

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

L = 3.41 mi
Lca = 1.74 mi = 51.0 % of "L"

Av.Slope= 82.1 ft/mi

Av.slope =(SUM(Li)/I)^2

$\overline{Kn}$ = 0.030

Lag = 36.77 min

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

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	95 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
RES	5 %	Residential	0.12	20.0	15.0	1.06
Weight.Av	100 %		0.15	6.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	59.8 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
73	36.3 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
94	3.8 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
24	0.1 %	-----	Sandy Clay Loam	0.27	----	0.11	0.12	0.0
Weight.Av	100.0 %			0.31	3.61	0.27	0.28	10.9

INPUT VALUES FOR < HCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SAE10	1.34	0.15	0.31	3.61	0.28	6.2	36.77

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SUBBASIN INPUT PARAMETERS

SUBBASIN # : SAG2

S-GRAPH PARAMETERS

Area = 0.18 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.10	280.0	0.069

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

L = 1.10 mi Av.Slope= 254.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.61 mi = 55.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 12.92 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	1.5	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	90.0 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
73	10.0 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.32	3.72	0.29	0.29	3.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SAG2	0.18	0.15	0.32	3.72	0.29	1.5	12.92

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SQ2

S-GRAPH PARAMETERS

Area = 0.37 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.14	265.0	0.075
0.15	220.0	0.004

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

L = 1.29 mi Av.Slope= 268.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.54 mi = 42.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 13.03 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	9.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	59.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
38	40.0 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
105	0.6 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
Weight.Av	100.0 %			0.30	3.61	0.25	0.25	18.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SQ2	0.37	0.15	0.30	3.61	0.25	9.1	13.03

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR2

Area = 0.91 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.40	116.0	0.154
0.62	120.0	0.045
0.06	640.0	0.001

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

L = 2.08 mi Av.Slope= 109.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.14 mi = 55.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 24.62 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	8.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
62	46.4 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
73	41.9 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
42	5.7 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
97	3.4 %	-----	Sandy Clay Loam	0.27	----	0.13	0.14	0.0
64	2.3 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
7	0.3 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.29	3.55	0.26	0.27	15.9

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR2	0.91	0.15	0.29	3.55	0.27	8.0	24.62

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR4

S-GRAPH PARAMETERS

Area = 0.47 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.41	156.0	0.134
0.20	320.0	0.005

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

L = 1.61 mi Av.Slope= 134.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.81 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 18.80 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	10.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	51.4 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
62	28.9 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
73	18.1 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	1.6 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.30	3.67	0.28	0.29	20.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR4	0.47	0.15	0.30	3.67	0.29	10.0	18.80

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR10

Area = 1.57 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.41	200.0	0.265

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

L = 2.41 mi Av.Slope= 83.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.52 mi = 63.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 30.55 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	8.4	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	35.3 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
73	26.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
38	13.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
7	9.7 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
97	9.2 %	-----	Sandy Clay Loam	0.27	----	0.13	0.14	0.0
42	3.0 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
24	2.7 %	-----	Sandy Clay Loam	0.27	----	0.11	0.12	0.0
62	0.2 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
Weight.Av	100.0 %			0.30	3.94	0.33	0.35	16.8

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR10	1.57	0.15	0.30	3.94	0.35	8.4	30.55

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR16

S-GRAPH PARAMETERS

Area = 0.75 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.89	245.0	0.166

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

L = 1.89 mi
Lca = 1.04 mi = 55.0 % of "L"

Av.Slope= 129.6 ft/mi

Av.slope =(SUM(Li)/I)^2

$\overline{Kn}$ = 0.030

Lag = 22.16 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	11.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	78.4 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
62	15.1 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
73	6.5 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.30	3.61	0.27	0.28	22.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR16	0.75	0.15	0.30	3.61	0.28	11.2	22.16

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR18

S-GRAPH PARAMETERS

Area = 0.71 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.27	315.0	0.193

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

L = 2.27 mi
Lca = 1.23 mi = 54.0 % of "L"

Av.Slope= 138.8 ft/mi

Av.slope =(SUM(Li)/I)^2

$\overline{Kn}$ = 0.030

Lag = 24.97 min

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

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	11.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	55.2 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
73	23.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
43	11.4 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
62	8.1 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
105	1.6 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
Weight.Av	100.0 %			0.30	3.58	0.27	0.28	22.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR18	0.71	0.15	0.30	3.58	0.28	11.2	24.97

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR24

S-GRAPH PARAMETERS

Area = 0.44 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.48	130.0	0.158

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

L = 1.48 mi Av.Slope= 87.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.80 mi = 54.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 19.67 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	12.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	93.6 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
73	6.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.30	3.59	0.27	0.28	25.3

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR24	0.44	0.15	0.30	3.59	0.28	12.7	19.67

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR26

Area = 0.95 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.52	130.0	0.164

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

L = 1.52 mi Av.Slope= 85.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.81 mi = 53.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 20.04 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50XRTIMP	15.0	1.06
Weight.Av	100 %		0.15	12.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	84.8 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
73	8.8 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
62	6.4 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
Weight.Av	100.0 %			0.30	3.59	0.27	0.28	24.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR26	0.95	0.15	0.30	3.59	0.28	12.1	20.04

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR32

S-GRAPH PARAMETERS

Area = 0.94 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.74	190.0	0.167
0.38	120.0	0.021

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

L = 2.12 mi Av.Slope= 127.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.02 mi = 48.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 23.04 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	11.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	42.8 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
73	39.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
38	10.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
7	7.3 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.30	3.86	0.32	0.33	22.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR32	0.94	0.15	0.30	3.86	0.33	11.3	23.04

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR38

Area = 0.79 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.12	280.0	0.184
0.57	150.0	0.035

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

L = 2.69 mi Av.Slope= 150.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.18 mi = 44.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 25.89 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	14.6	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	97.1 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	2.9 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.28	3.85	0.24	0.25	29.1

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR38	0.79	0.15	0.28	3.85	0.25	14.6	25.89

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR44

S-GRAPH PARAMETERS

Area = 1.05 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.89	290.0	0.153

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

L = 1.89 mi Av.Slope= 153.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.68 mi = 36.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 18.27 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	14.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	82.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
38	6.9 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
105	6.2 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	4.5 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.29	3.59	0.27	0.28	28.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR44	1.05	0.15	0.29	3.59	0.28	14.2	18.27

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SR50

Area = 0.56 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.44	130.0	0.152

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

L = 1.44 mi Av.Slope= 90.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.72 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 18.62 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	5.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	81.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
105	15.0 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
73	3.8 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.31	3.76	0.30	0.30	10.1

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SR50	0.56	0.15	0.31	3.76	0.30	5.1	18.62

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SW2

S-GRAPH PARAMETERS

Area = 1.25 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.35	170.0	0.120

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

L = 1.35 mi Av.Slope= 125.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.53 mi = 39.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 15.14 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	14.9	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	94.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
64	5.6 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
Weight.Av	100.0 %			0.28	4.64	0.21	0.23	29.7

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SW2	1.25	0.15	0.28	4.64	0.23	14.9	15.14

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SW6

Area = 0.98 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.80	290.0	0.142
0.38	120.0	0.021

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

L = 2.18 mi Av.Slope= 178.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.37 mi = 63.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 24.46 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	- 16.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	93.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
105	6.6 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
Weight.Av	100.0 %			0.28	4.54	0.22	0.23	32.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SW6	0.98	0.15	0.28	4.54	0.23	16.0	24.46

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SW7

S-GRAPH PARAMETERS

Area = 1.30 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.42	250.0	0.238

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

L = 2.42 mi Av.Slope= 103.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.21 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 26.92 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	15.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	99.9 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	0.1 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.28	4.71	0.21	0.22	30.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SW7	1.30	0.15	0.28	4.71	0.22	15.0	26.92

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SW12

S-GRAPH PARAMETERS

Area = 0.51 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.11	253.0	0.074

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

L = 1.11 mi Av.Slope= 227.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.57 mi = 51.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 12.91 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	15.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	88.5 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
105	6.8 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	2.5 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
38	2.2 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
Weight.Av	100.0 %			0.28	3.70	0.24	0.26	30.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SW12	0.51	0.15	0.28	3.70	0.26	15.3	12.91

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SW14

S-GRAPH PARAMETERS

Area = 0.76 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.55	308.0	0.110

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

L = 1.55 mi Av.Slope= 198.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.67 mi = 43.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 16.00 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	13.8	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	92.0 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	8.0 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.29	3.71	0.29	0.31	27.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SW14	0.76	0.15	0.29	3.71	0.31	13.8	16.00

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SW20

S-GRAPH PARAMETERS

Area = 0.23 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.92	108.0	0.085

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

L = 0.92 mi Av.Slope= 117.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.55 mi = 60.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 13.50 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	12.6	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	84.2 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	15.8 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.29	4.12	0.37	0.39	25.3

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SW20	0.23	0.15	0.29	4.12	0.39	12.6	13.50

EAST TRIBUTARIES AREA

HEC 1 PARAMETERS: EAST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
AA5	1.33	2.37	48.0	142.4	0.035	28.64	0.15	0.32	3.70	0.29	10.9
AA10	0.50	1.70	55.6	148.3	0.035	23.39	0.15	0.33	3.93	0.33	3.1
AA15	0.12	0.76	62.5	105.0	0.025	10.07	0.12	0.30	4.21	0.40	23.5
AF	0.30	1.33	50.0	195.5	0.040	20.18	0.15	0.28	3.72	0.26	14.5
B5	3.17	4.16	45.4	153.7	0.035	42.38	0.15	0.34	4.21	0.38	5.2
B10	1.11	3.22	44.0	159.9	0.040	39.10	0.15	0.30	3.74	0.30	10.7
C5	4.43	5.87	50.0	162.5	0.040	64.59	0.15	0.31	3.68	0.29	7.0
C10	3.66	4.55	52.1	123.1	0.035	49.86	0.15	0.34	4.28	0.41	9.4
C15	2.31	4.92	48.0	125.0	0.035	51.14	0.15	0.34	4.19	0.38	6.2
C20	0.43	1.42	54.0	179.8	0.040	22.18	0.15	0.32	4.23	0.44	9.1
D5	5.42	7.57	72.5	190.5	0.040	87.55	0.15	0.33	4.16	0.38	8.1
D10	3.80	7.66	53.1	181.9	0.040	79.18	0.15	0.33	4.02	0.35	8.6
D15	0.93	2.18	56.5	110.1	0.035	30.03	0.15	0.34	4.24	0.43	1.3
D20	0.58	2.65	46.4	149.4	0.035	30.50	0.15	0.33	4.16	0.38	4.2
E5	0.37	1.89	60.0	148.1	0.035	26.05	0.15	0.31	3.95	0.35	16.7
E10	0.94	4.17	45.5	166.5	0.040	47.81	0.15	0.30	3.93	0.34	10.5
E15	4.41	4.93	57.7	171.3	0.040	59.13	0.15	0.33	4.24	0.43	8.2
E20	1.11	3.60	57.9	128.7	0.035	43.07	0.15	0.32	4.24	0.44	7.2

HEC 1 PARAMETERS: EAST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
I5	0.41	2.56	51.9	142.2	0.035	31.28	0.15	0.31	3.58	0.27	7.9
I10	1.61	4.17	50.0	138.5	0.035	44.93	0.15	0.31	3.77	0.30	3.2
I15	0.25	1.23	54.0	175.2	0.040	19.99	0.15	0.34	3.91	0.33	2.2
J	0.42	1.80	47.2	160.8	0.040	25.79	0.15	0.32	3.74	0.30	6.3
K5	0.84	2.28	50.0	177.3	0.040	30.93	0.15	0.31	3.78	0.30	0.0
K10	1.04	2.85	56.7	159.6	0.040	39.19	0.15	0.30	3.92	0.24	3.7
K15	1.09	3.50	57.0	147.9	0.035	40.82	0.15	0.30	3.51	0.26	9.7
L	0.79	2.56	55.5	147.2	0.035	31.88	0.15	0.32	3.69	0.29	7.1
M	0.30	1.52	50.0	171.1	0.040	22.91	0.15	0.30	3.51	0.26	10.8
N	0.33	1.70	44.7	200.0	0.040	23.20	0.15	0.29	3.72	0.25	12.3
O	2.90	4.73	60.0	159.4	0.040	58.95	0.15	0.30	3.55	0.26	5.9
P	0.87	2.84	43.3	156.3	0.035	31.08	0.15	0.32	3.76	0.30	8.7
V2	3.16	3.56	42.0	127.9	0.030	32.44	0.15	0.30	3.70	0.25	9.1
V4	0.74	2.22	63.0	85.6	0.030	28.53	0.15	0.32	4.16	0.38	3.5
V10	1.72	2.67	50.0	128.5	0.030	27.83	0.15	0.32	3.86	0.33	7.5
V16	0.48	1.36	43.0	109.2	0.030	16.26	0.15	0.33	4.20	0.45	4.3
V20	0.32	1.69	51.0	92.4	0.030	21.04	0.15	0.29	3.64	0.28	6.0
V22	0.19	1.12	39.0	137.6	0.030	12.92	0.15	0.32	3.79	0.31	3.3

HEC 1 PARAMETERS: EAST TRIBUTARIES AREA											
							GREEN & AMPT LOSS RATE PARAMETERS				
SUB-BASIN	AREA (mi^2)	L (mi)	Lca (% of L)	AVG SLOPE (ft/mi)	Kn	LAG TIME (min)	IA (in)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	RTIMP (%)
S2	4.60	7.90	53.0	122.6	0.030	65.48	0.15	0.31	3.69	0.29	8.8
S6	1.60	3.30	57.0	75.8	0.030	37.99	0.15	0.30	4.18	0.46	0.0
S12	0.86	2.80	37.0	103.0	0.030	26.84	0.15	0.31	4.15	0.47	0.0
S14	1.31	2.09	32.0	124.9	0.030	19.61	0.15	0.30	3.81	0.61	0.0
S20	0.41	1.18	45.0	105.7	0.030	14.92	0.15	0.34	3.86	0.58	0.0
F2	0.24	1.12	54.0	150.3	0.030	14.37	0.15	0.33	3.98	0.34	7.2
G2	0.40	1.55	48.0	152.3	0.030	17.58	0.15	0.34	3.97	0.34	1.4
H2	1.34	2.08	40.0	117.8	0.030	21.50	0.15	0.30	3.88	0.33	18.6
H6	0.42	1.40	59.0	114.1	0.030	18.58	0.15	0.34	4.15	0.48	0.9
T2	4.50	3.56	43.0	260.7	0.030	28.59	0.15	0.32	3.82	0.31	0.5
T6	3.93	3.86	30.0	239.8	0.030	26.94	0.15	0.34	4.12	0.37	3.3
T10	2.70	3.78	52.0	205.7	0.030	33.65	0.15	0.32	3.86	0.32	9.8
T12	3.50	4.36	57.0	190.9	0.030	39.39	0.15	0.33	4.00	0.35	7.3
T14	2.76	3.90	39.0	190.8	0.030	31.33	0.15	0.30	3.61	0.28	10.6
T16	1.35	2.88	52.0	126.7	0.030	30.01	0.15	0.29	3.78	0.32	15.4
T20	0.28	1.02	67.0	196.1	0.030	13.82	0.15	0.34	3.68	0.69	3.7
T22	0.72	2.61	45.0	199.3	0.030	24.18	0.15	0.29	3.82	0.33	21.8
T26	0.59	1.52	42.0	113.0	0.030	17.39	0.15	0.33	4.10	0.50	6.2

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AA5

S-GRAPH PARAMETERS

Area = 1.33 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	180.0	0.006
2.18	280.0	0.192

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

L = 2.37 mi Av.Slope= 142.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.14 mi = 48.0 % of "L"

$\overline{Kn}$ = 0.035 Lag = 28.64 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	10.9	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	28.4 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
CnC	26.0 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
73	17.1 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Lh	14.0 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	40.0
38	6.5 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
ClD	4.9 %	Cave	Sandy Loam	0.35	----	0.48	0.48	0.0
94	1.7 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
17	1.4 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
Weight.Av	100.0 %			0.32	3.70	0.29	0.29	21.8

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AA5	1.33	0.15	0.32	3.70	0.29	10.9	28.64

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AA10

S-GRAPH PARAMETERS

Area = 0.50 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.04	20.0	0.002
0.91	180.0	0.065
0.19	20.0	0.018
0.57	60.0	0.055
0.00	0.0	0.000

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

L = 1.70 mi
Lca = 0.95 mi = 55.6 % of "L"

Av.Slope= 148.3 ft/mi

Av.slope =(SUM(Li)/I)^2

$\overline{Kn}$ = 0.035

Lag = 23.39 min

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

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	3.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
94	71.4 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
73	11.3 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
17	10.7 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
CnC	6.3 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
62	0.2 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
Weight.Av	100.0 %			0.33	3.93	0.33	0.33	6.3

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AA10	0.50	0.15	0.33	3.93	0.33	3.1	23.39

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AA15

S-GRAPH PARAMETERS

Area = 0.12 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.57	80.0	0.048
0.19	10.0	0.026

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

L = 0.76 mi Av.Slope= 105.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.47 mi = 62.5 % of "L"

$\overline{Kn}$ = 0.025 Lag = 10.07 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
RES	95 %	Residential	0.12	20.0	15.0	1.06
COM	5 %	Commercial	0.06	90.0	10.0	1.00
Weight.Av	100 %		0.12	23.5	14.8	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	53.5 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
62	31.9 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
7	14.7 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.30	4.21	0.38	0.40	17.9

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AA15	0.12	0.12	0.30	4.21	0.40	23.5	10.07

SUBBASIN INPUT PARAMETERS

SUBBASIN # : AF

S-GRAPH PARAMETERS

Area = 0.30 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.33	260.0	0.095

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

L = 1.33 mi Av.Slope= 195.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.67 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.040 Lag = 20.18 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	14.5	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	96.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	3.3 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.28	3.72	0.24	0.26	29.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
AF	0.30	0.15	0.28	3.72	0.26	14.5	20.18

SUBBASIN INPUT PARAMETERS

SUBBASIN # : B5

Area = 3.17 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.89	300.0	0.150
2.27	340.0	0.185

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

L = 4.16 mi Av.Slope= 153.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.89 mi = 45.4 % of "L"

$\overline{Kn}$ = 0.035 Lag = 42.38 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	5.2	15.0	1.06

Imperv. is taken 50% RTIMP for *noncontiguous undeveloped areas*

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
ClD	41.9 %	Cave	Sandy Loam	0.35	----	0.48	0.48	0.0
CnC	36.1 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
CnF	8.9 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
Le	4.6 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	3.0
CoD	4.0 %	Cellar	Sandy Loam	0.33	----	0.32	0.32	0.0
Lh	3.0 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	40.0
CwD	0.8 %	Continental	Clay Loam	0.25	----	0.04	0.04	0.0
CsC	0.6 %	Continental	Sandy Loam	0.35	----	0.44	0.44	0.0
Weight.Av	100.0 %			0.34	4.21	0.38	0.38	10.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
B5	3.17	0.15	0.34	4.21	0.38	5.2	42.38

SUBBASIN INPUT PARAMETERS

SUBBASIN # : B10

S-GRAPH PARAMETERS

Area = 1.11 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.38	80.0	0.026
0.95	160.0	0.073
1.89	280.0	0.155

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

L = 3.22 mi Av.Slope= 159.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.42 mi = 44.0 % of "L"

$\overline{Kn}$ = 0.040 Lag = 39.10 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	10.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	20.2 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
105	17.7 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
94	14.3 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
38	12.3 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
CnC	10.4 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
62	6.5 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
43	6.5 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
17	5.6 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
Lh	3.2 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	40.0
CsC	1.5 %	Continental	Sandy Loam	0.35	----	0.44	0.44	0.0
7	1.1 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
CnF	0.8 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
Weight.Av	100.0 %			0.30	3.74	0.29	0.30	21.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
B10	1.11	0.15	0.30	3.74	0.30	10.7	39.10

SUBBASIN INPUT PARAMETERS

SUBBASIN # : C5

Area = 4.43 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.42	480.0	0.077
4.45	600.0	0.383

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

L = 5.87 mi Av.Slope= 162.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.94 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.040 Lag = 64.59 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	7.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	43.2 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
LkD	29.3 %	Lonti	Sandy Clay Loam	0.25	----	0.10	0.11	0.0
MkF	27.0 %	Moano	Sandy Loam	0.34	----	0.36	0.36	20.0
CmD	0.4 %	Cellar	Sandy Loam	0.35	----	0.40	0.40	0.0
Le	0.1 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	3.0
Weight.Av	100.0 %			0.31	3.68	0.28	0.29	14.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
C5	4.43	0.15	0.31	3.68	0.29	7.0	64.59

SUBBASIN INPUT PARAMETERS

SUBBASIN # : C10

Area = 3.66 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
4.55	560.0	0.410

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

L = 4.55 mi Av.Slope= 123.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.37 mi = 52.1 % of "L"

$\overline{Kn}$ = 0.035 Lag = 49.86 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	9.4	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	63.1 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
CnC	30.5 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
ApB	5.7 %	Anthony	Loamy Sand	0.35	----	1.20	1.27	0.0
ClD	0.4 %	Cave	Sandy Loam	0.35	----	0.48	0.48	0.0
CwD	0.3 %	Continental	Clay Loam	0.25	----	0.04	0.04	0.0
Weight.Av	100.0 %			0.34	4.28	0.41	0.41	18.7

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
C10	3.66	0.15	0.34	4.28	0.41	9.4	49.86

SUBBASIN INPUT PARAMETERS

SUBBASIN # : C15

Area = 2.31 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.85	220.0	0.053
3.22	360.0	0.305
0.85	90.0	0.083

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

L = 4.92 mi Av.Slope= 125.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.36 mi = 48.0 % of "L"

$\overline{Kn}$ = 0.035 Lag = 51.14 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	6.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	58.9 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
ClD	27.8 %	Cave	Sandy Loam	0.35	----	0.48	0.48	0.0
CsC	7.3 %	Continental	Sandy Loam	0.35	----	0.44	0.44	0.0
CwD	3.3 %	Continental	Clay Loam	0.25	----	0.04	0.04	0.0
Le	1.7 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	3.0
Lh	1.2 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	40.0
Weight.Av	100.0 %			0.34	4.19	0.38	0.38	12.3

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
C15	2.31	0.15	0.34	4.19	0.38	6.2	51.14

SUBBASIN INPUT PARAMETERS

SUBBASIN # : C20

Area = 0.43 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.76	200.0	0.047
0.09	60.0	0.003
0.57	60.0	0.056

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

L = 1.42 mi Av.Slope= 179.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.77 mi = 54.0 % of "L"

$\overline{Kn}$ = 0.040 Lag = 22.18 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	9.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	41.9 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
CnF	23.3 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
7	14.6 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
ClD	11.5 %	Cave	Sandy Loam	0.35	----	0.48	0.48	0.0
38	6.6 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
64	1.2 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
Rr	0.9 %	Rockland	Sandy Loam	0.35	----	0.40	0.40	70.0
Weight.Av	100.0 %			0.32	4.23	0.43	0.44	18.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
C20	0.43	0.15	0.32	4.23	0.44	9.1	22.18

SUBBASIN INPUT PARAMETERS

SUBBASIN # : D5

Area = 5.42 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	240.0	0.005
1.42	440.0	0.081
2.46	460.0	0.180
1.80	300.0	0.139
1.70	240.0	0.143

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

L = 7.57 mi Av.Slope= 190.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 5.49 mi = 72.5 % of "L"

$\overline{Kn}$ = 0.040 Lag = 87.55 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	8.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	59.0 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
CnC	17.4 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
43	15.3 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
64	4.0 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
7	3.0 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
LkD	0.9 %	Lonti	Sandy Clay Loam	0.25	----	0.10	0.11	0.0
94	0.2 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
39	0.2 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
Lh	0.0 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	40.0
Weight.Av	100.0 %			0.33	4.16	0.37	0.38	16.3

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
D5	5.42	0.15	0.33	4.16	0.38	8.1	87.55

SUBBASIN INPUT PARAMETERS

SUBBASIN # : D10

S-GRAPH PARAMETERS

Area = 3.80 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.28	360.0	0.008
1.89	560.0	0.110
3.12	500.0	0.246
2.37	320.0	0.204
0.00	0.0	0.000

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

L = 7.66 mi Av.Slope= 181.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 4.07 mi = 53.1 % of "L"

$\overline{Kn}$ = 0.040 Lag = 79.18 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	8.6	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	38.7 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
CmD	15.2 %	Cellar	Sandy Loam	0.35	----	0.40	0.40	0.0
CnC	12.5 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
64	9.9 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
43	5.7 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
73	5.1 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
105	4.4 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
62	4.2 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
LkD	1.8 %	Lonti	Sandy Clay Loam	0.25	----	0.10	0.11	0.0
7	1.3 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
39	1.0 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
17	0.4 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
Weight.Av	100.0 %			0.33	4.02	0.35	0.35	17.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
D10	3.80	0.15	0.33	4.02	0.35	8.6	79.18

SUBBASIN INPUT PARAMETERS

SUBBASIN # : D15

S-GRAPH PARAMETERS

Area = 0.93 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.18	240.0	0.208

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

L = 2.18 mi Av.Slope= 110.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.23 mi = 56.5 % of "L"

$\overline{Kn}$ = 0.035 Lag = 30.03 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	1.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	84.8 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
7	11.9 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
43	3.3 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
Weight.Av	100.0 %			0.34	4.24	0.42	0.43	2.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
D15	0.93	0.15	0.34	4.24	0.43	1.3	30.03

SUBBASIN INPUT PARAMETERS

SUBBASIN # : D20

Area = 0.58 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	120.0	0.008
2.46	340.0	0.209

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

L = 2.65 mi Av.Slope= 149.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.23 mi = 46.4 % of "L"

$\overline{Kn}$ = 0.035 Lag = 30.50 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	4.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	63.7 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
43	19.4 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
105	11.0 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	6.0 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.33	4.16	0.37	0.38	8.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
D20	0.58	0.15	0.33	4.16	0.38	4.2	30.50

SUBBASIN INPUT PARAMETERS

SUBBASIN # : E5

S-GRAPH PARAMETERS

Area = 0.37 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.89	280.0	0.155

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

L = 1.89 mi Av.Slope= 148.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.13 mi = 60.0 % of "L"

$\overline{Kn}$ = 0.035 Lag = 26.05 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	16.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
105	51.4 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
39	35.1 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
73	5.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
94	2.7 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
7	2.7 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
43	2.7 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
Weight.Av	100.0 %			0.31	3.95	0.33	0.35	33.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
E5	0.37	0.15	0.31	3.95	0.35	16.7	26.05

SUBBASIN INPUT PARAMETERS

SUBBASIN # : E10

Area = 0.94 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.09	125.0	0.002
4.08	660.0	0.321

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

L = 4.17 mi Av.Slope= 166.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.90 mi = 45.5 % of "L"

$\overline{Kn}$ = 0.040 Lag = 47.81 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	10.5	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
105	33.0 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
62	13.8 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
CwD	11.7 %	Continental	Clay Loam	0.25	----	0.04	0.04	0.0
38	11.7 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
39	10.6 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
CsC	9.6 %	Continental	Sandy Loam	0.35	----	0.44	0.44	0.0
43	6.4 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
Sa	2.1 %	Alluvial	Loamy Sand	0.35	----	1.75	1.85	0.0
7	1.1 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.30	3.93	0.33	0.34	20.9

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
E10	0.94	0.15	0.30	3.93	0.34	10.5	47.81

SUBBASIN INPUT PARAMETERS

SUBBASIN # : E15

S-GRAPH PARAMETERS

Area = 4.41 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.76	365.0	0.035
4.17	620.0	0.342

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

L = 4.93 mi Av.Slope= 171.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.84 mi = 57.7 % of "L"

$\overline{Kn}$ = 0.040 Lag = 59.13 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	8.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	45.6 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
CnC	34.5 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
CwD	6.8 %	Continental	Clay Loam	0.25	----	0.04	0.04	0.0
ApB	6.8 %	Anthony	Loamy Sand	0.35	----	1.20	1.27	0.0
Sa	1.8 %	Alluvial	Loamy Sand	0.35	----	1.75	1.85	0.0
38	1.4 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
Lh	0.9 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	40.0
7	0.9 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
CoD	0.7 %	Cellar	Sandy Loam	0.33	----	0.32	0.32	0.0
Le	0.2 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	3.0
CsC	0.2 %	Continental	Sandy Loam	0.35	----	0.44	0.44	0.0
43	0.2 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
Weight.Av	100.0 %			0.33	4.24	0.42	0.43	16.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
E15	4.41	0.15	0.33	4.24	0.43	8.2	59.13

SUBBASIN INPUT PARAMETERS

SUBBASIN # : E20

Area = 1.11 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.33	160.0	0.121
1.14	120.0	0.111
1.13	200.0	0.085

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

L = 3.60 mi

Lca = 2.08 mi = 57.9 % of "L"

Av.Slope= 128.7 ft/mi

Av.slope =(SUM(Li)/I)^2

$\overline{Kn}$ = 0.035

Lag = 43.07 min

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

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	96 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
RES	4 %	Residential	0.12	20.0	15.0	1.06
Weight.Av	100 %		0.15	7.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	30.3 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
39	23.2 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
105	17.8 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	12.1 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
73	6.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
94	3.7 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
43	3.6 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
CsC	1.5 %	Continental	Sandy Loam	0.35	----	0.44	0.44	0.0
62	0.9 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
Sa	0.6 %	Alluvial	Loamy Sand	0.35	----	1.75	1.85	0.0
Weight.Av	100.0 %			0.32	4.24	0.42	0.44	13.3

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
E20	1.11	0.15	0.32	4.24	0.44	7.2	43.07

SUBBASIN INPUT PARAMETERS

SUBBASIN # : I5

S-GRAPH PARAMETERS

Area = 0.41 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	60.0	0.011
2.37	320.0	0.204

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

L = 2.56 mi Av.Slope= 142.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.33 mi = 51.9 % of "L"

$\overline{Kn}$ = 0.035 Lag = 31.28 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	7.9	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	48.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
39	41.3 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
38	10.0 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
Weight.Av	100.0 %			0.31	3.58	0.26	0.27	15.8

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
I5	0.41	0.15	0.31	3.58	0.27	7.9	31.28

SUBBASIN INPUT PARAMETERS

SUBBASIN # : I10

S-GRAPH PARAMETERS

Area = 1.61 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.99	300.0	0.162
2.09	260.0	0.187
0.09	30.0	0.005

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

L = 4.17 mi Av.Slope= 138.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.09 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.035 Lag = 44.93 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	3.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
43	47.6 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
73	19.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
39	18.8 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
38	14.0 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
64	0.1 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
Weight.Av	100.0 %			0.31	3.77	0.30	0.30	6.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
I10	1.61	0.15	0.31	3.77	0.30	3.2	44.93

SUBBASIN INPUT PARAMETERS

SUBBASIN # : I15

S-GRAPH PARAMETERS

Area = 0.25 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.38	120.0	0.021
0.85	120.0	0.072

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

L = 1.23 mi Av.Slope= 175.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.66 mi = 54.0 % of "L"

$\overline{Kn}$ = 0.040 Lag = 19.99 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	2.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	96.8 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
105	2.4 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	0.8 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.34	3.91	0.33	0.33	4.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
I15	0.25	0.15	0.34	3.91	0.33	2.2	19.99

SUBBASIN INPUT PARAMETERS

SUBBASIN # : J

S-GRAPH PARAMETERS

Area = 0.42 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.38	100.0	0.023
1.23	160.0	0.108
0.19	60.0	0.011

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

L = 1.80 mi Av.Slope= 160.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.85 mi = 47.2 % of "L"

$\overline{Kn}$ = 0.040 Lag = 25.79 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	6.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	66.5 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
73	29.9 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
105	2.6 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	1.0 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.32	3.74	0.30	0.30	12.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
J	0.42	0.15	0.32	3.74	0.30	6.3	25.79

SUBBASIN INPUT PARAMETERS

SUBBASIN # : K5

Area = 0.84 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	120.0	0.008
0.76	180.0	0.049
1.33	180.0	0.114

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

L = 2.28 mi Av.Slope= 177.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.14 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.040 Lag = 30.93 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	55.8 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
43	40.8 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
CwD	3.4 %	Continental	Clay Loam	0.25	----	0.04	0.04	0.0
Weight.Av	100.0 %			0.31	3.78	0.30	0.30	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
K5	0.84	0.15	0.31	3.78	0.30	0.0	30.93

SUBBASIN INPUT PARAMETERS

SUBBASIN # : K10

Area = 1.04 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.19	200.0	0.006
1.52	240.0	0.121
0.04	40.0	0.001
1.10	140.0	0.097
0.00	0.0	0.000

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

L = 2.85 mi Av.Slope= 159.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.61 mi = 56.7 % of "L"

$\overline{Kn}$ = 0.040 Lag = 39.19 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	3.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
38	36.8 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
43	22.3 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
CwD	16.9 %	Continental	Clay Loam	0.25	----	0.04	0.04	0.0
Lh	11.1 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	40.0
CnC	8.9 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
73	2.6 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
64	1.4 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
Weight.Av	100.0 %			0.30	3.92	0.24	0.24	7.3

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
K10	1.04	0.15	0.30	3.92	0.24	3.7	39.19

SUBBASIN INPUT PARAMETERS

SUBBASIN # : K15

S-GRAPH PARAMETERS

Area = 1.09 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.61	260.0	0.127
1.89	260.0	0.161

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

L = 3.50 mi Av.Slope= 147.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.00 mi = 57.0 % of "L"

$\overline{Kn}$ = 0.035 Lag = 40.82 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	9.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	60.1 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
39	24.8 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
38	13.9 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
105	1.0 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	0.2 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.30	3.51	0.25	0.26	19.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
K15	1.09	0.15	0.30	3.51	0.26	9.7	40.82

SUBBASIN INPUT PARAMETERS

SUBBASIN # : L

S-GRAPH PARAMETERS

Area = 0.79 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.76	80.0	0.074
1.70	280.0	0.132
0.10	50.0	0.004

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

L = 2.56 mi Av.Slope= 147.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.42 mi = 55.5 % of "L"

$\overline{Kn}$ = 0.035 Lag = 31.88 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	7.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	60.6 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
73	36.2 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
105	2.4 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	0.6 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
94	0.1 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
Weight.Av	100.0 %			0.32	3.69	0.29	0.29	14.1

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
L	0.79	0.15	0.32	3.69	0.29	7.1	31.88

SUBBASIN INPUT PARAMETERS

SUBBASIN # : M

S-GRAPH PARAMETERS

Area = 0.30 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.52	260.0	0.116

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

L = 1.52 mi Av.Slope= 171.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.76 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.040 Lag = 22.91 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	10.8	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	64.2 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
39	30.4 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
94	3.0 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
105	2.4 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
Weight.Av	100.0 %			0.30	3.51	0.25	0.26	21.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
M	0.30	0.15	0.30	3.51	0.26	10.8	22.91

SUBBASIN INPUT PARAMETERS

SUBBASIN # : N

S-GRAPH PARAMETERS

Area = 0.33 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.70	340.0	0.120

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

L = 1.70 mi
Lca = 0.76 mi = 44.7 % of "L"

Av.Slope= 200.0 ft/mi

Av.slope =(SUM(Li)/I)^2

$\overline{Kn}$ = 0.040

Lag = 23.20 min

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

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	12.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	75.1 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
38	12.0 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
CnF	9.0 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
ClD	3.0 %	Cave	Sandy Loam	0.35	----	0.48	0.48	0.0
64	0.9 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
Weight.Av	100.0 %			0.29	3.72	0.24	0.25	24.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
N	0.33	0.15	0.29	3.72	0.25	12.3	23.20

SUBBASIN INPUT PARAMETERS

SUBBASIN # : 0

S-GRAPH PARAMETERS

Area = 2.90 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.76	270.0	0.040
3.97	560.0	0.334

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

L = 4.73 mi Av.Slope= 159.4 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.84 mi = 60.0 % of "L"

$\overline{Kn}$ = 0.040 Lag = 58.95 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	5.9	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
62	27.8 %	-----	Sandy Loam	0.30	----	0.30	0.30	6.0
CwD	18.8 %	Continental	Clay Loam	0.25	----	0.04	0.04	0.0
CsC	14.7 %	Continental	Sandy Loam	0.35	----	0.44	0.44	0.0
105	11.1 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
38	10.1 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
73	6.0 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
17	4.4 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
CnC	4.2 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
43	1.5 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
Lh	0.4 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	40.0
94	0.4 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
39	0.4 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
7	0.2 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.30	3.55	0.26	0.26	11.8

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
0	2.90	0.15	0.30	3.55	0.26	5.9	58.95

SUBBASIN INPUT PARAMETERS

SUBBASIN # : P

Area = 0.87 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.28	170.0	0.012
2.56	360.0	0.216

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

L = 2.84 mi Av.Slope= 156.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.23 mi = 43.3 % of "L"

$\overline{Kn}$ = 0.035 Lag = 31.08 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	8.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	40.1 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
Le	17.6 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	3.0
HmE	11.5 %	House Mountain	Sandy Loam	0.35	----	0.40	0.40	2.0
Rr	10.3 %	Rockland	Sandy Loam	0.35	----	0.40	0.40	70.0
ClD	6.3 %	Cave	Sandy Loam	0.35	----	0.48	0.48	0.0
17	4.6 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
CoD	3.4 %	Cellar	Sandy Loam	0.33	----	0.32	0.32	0.0
38	3.4 %	-----	Sandy Loam	0.32	----	0.30	0.30	0.0
73	2.3 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
8	0.6 %	-----	Sandy Loam	0.35	----	0.40	0.40	0.0
Weight.Av	100.0 %			0.32	3.76	0.30	0.30	17.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
P	0.87	0.15	0.32	3.76	0.30	8.7	31.08

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SV2

Area = 3.16 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.80	190.0	0.175
1.76	280.0	0.140

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

L = 3.56 mi Av.Slope= 127.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.50 mi = 42.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 32.44 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	9.1	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	39.3 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
39	16.9 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
64	14.5 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
28	14.3 %	-----	Sandy Clay Loam	0.26	----	0.11	0.12	0.0
43	8.5 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
31	6.5 %	-----	Sandy Loam	0.34	----	0.37	0.37	35.0
Weight.Av	100.0 %			0.30	3.70	0.24	0.25	18.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SV2	3.16	0.15	0.30	3.70	0.25	9.1	32.44

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SV4

Area = 0.74 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.22	190.0	0.240

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

L = 2.22 mi Av.Slope= 85.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.40 mi = 63.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 28.53 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	3.5	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas.

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	41.9 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
49	23.6 %	-----	Sandy Clay Loam	0.30	----	0.55	0.58	0.0
64	13.9 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
74	7.8 %	-----	Sandy Loam	0.29	----	0.32	0.32	0.0
73	7.3 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
47	4.4 %	-----	Sandy Loam	0.30	----	0.65	0.65	0.0
75	1.2 %	-----	Loam	0.35	----	0.24	0.25	0.0
Weight.Av	100.0 %			0.32	4.16	0.37	0.38	6.9

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SV4	0.74	0.15	0.32	4.16	0.38	3.5	28.53

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SV10

S-GRAPH PARAMETERS

Area = 1.72 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.24	270.0	0.204
0.43	80.0	0.032

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

L = 2.67 mi Av.Slope= 128.5 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.34 mi = 50.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 27.83 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	7.5	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	56.3 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
39	32.8 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
43	6.1 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
7	3.1 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
75	1.7 %	-----	Loam	0.35	----	0.24	0.25	0.0
Weight.Av	100.0 %			0.32	3.86	0.32	0.33	15.1

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SV10	1.72	0.15	0.32	3.86	0.33	7.5	27.83

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SV16

Area = 0.48 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.77	60.0	0.088
0.38	60.0	0.030
0.21	60.0	0.012

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

L = 1.36 mi Av.Slope= 109.2 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.59 mi = 43.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 16.26 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	4.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	57.9 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
73	15.8 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	15.6 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
35	7.1 %	-----	Sandy Loam	0.33	----	0.33	0.33	0.0
105	3.6 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
Weight.Av	100.0 %			0.33	4.20	0.44	0.45	8.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SV16	0.48	0.15	0.33	4.20	0.45	4.3	16.26

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SV20

Area = 0.32 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.38	80.0	0.026
1.31	100.0	0.149

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

L = 1.69 mi

Av.Slope= 92.4 ft/mi

Av.slope =(SUM(Li)/I)^2

Lca = 0.86 mi = 51.0 % of "L"

$\overline{Kn}$ = 0.030

Lag = 21.04 min

Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	6.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
74	60.3 %	-----	Sandy Loam	0.29	----	0.32	0.32	0.0
73	39.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.29	3.64	0.28	0.28	11.9

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SV20	0.32	0.15	0.29	3.64	0.28	6.0	21.04

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SV22

S-GRAPH PARAMETERS

Area = 0.19 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.26	45.0	0.020
0.13	60.0	0.006
0.73	80.0	0.069

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

L = 1.12 mi Av.Slope= 137.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.44 mi = 39.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 12.92 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	3.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
35	60.9 %	-----	Sandy Loam	0.33	----	0.33	0.33	0.0
73	20.3 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
39	18.8 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
Weight.Av	100.0 %			0.32	3.79	0.30	0.31	6.7

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SV22	0.19	0.15	0.32	3.79	0.31	3.3	12.92

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SS2

Area = 4.60 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
3.00	700.0	0.196
4.90	440.0	0.517

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

L = 7.90 mi Av.Slope= 122.6 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 4.19 mi = 53.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 65.48 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	8.8	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	20.2 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
31	17.2 %	-----	Sandy Loam	0.34	----	0.37	0.37	35.0
63	16.5 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
94	9.1 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
66	8.6 %	-----	Sandy Loam	0.32	----	0.31	0.31	3.0
74	7.0 %	-----	Sandy Loam	0.29	----	0.32	0.32	0.0
16	6.9 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
39	4.3 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
49	3.7 %	-----	Sandy Clay Loam	0.30	----	0.55	0.58	0.0
98	2.0 %	-----	Sandy Clay Loam	0.30	----	0.23	0.24	0.0
28	2.0 %	-----	Sandy Clay Loam	0.26	----	0.11	0.12	0.0
45	0.9 %	-----	Sandy Clay Loam	0.26	----	0.10	0.11	0.0
13	0.8 %	-----	Clay Loam	0.24	----	0.21	0.22	0.0
48	0.6 %	-----	Sandy Clay Loam	0.30	----	0.54	0.57	0.0
68	0.2 %	-----	Sandy Loam	0.34	----	0.50	0.50	0.0
Weight.Av	100.0 %			0.31	3.69	0.29	0.29	17.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SS2	4.60	0.15	0.31	3.69	0.29	8.8	65.48

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SS6

S-GRAPH PARAMETERS

Area = 1.60 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
3.30	250.0	0.379

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

L = 3.30 mi Av.Slope= 75.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.88 mi = 57.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 37.99 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
47	40.0 %	-----	Sandy Loam	0.30	----	0.65	0.65	0.0
74	21.8 %	-----	Sandy Loam	0.29	----	0.32	0.32	0.0
45	9.3 %	-----	Sandy Clay Loam	0.26	----	0.10	0.11	0.0
98	8.2 %	-----	Sandy Clay Loam	0.30	----	0.23	0.24	0.0
68	7.5 %	-----	Sandy Loam	0.34	----	0.50	0.50	0.0
49	5.3 %	-----	Sandy Clay Loam	0.30	----	0.55	0.58	0.0
48	4.0 %	-----	Sandy Clay Loam	0.30	----	0.54	0.57	0.0
44	3.3 %	-----	Sandy Clay Loam	0.26	----	0.10	0.11	0.0
46	0.6 %	-----	Sandy Clay Loam	0.26	----	0.21	0.22	0.0
Weight.Av	100.0 %			0.30	4.18	0.45	0.46	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SS6	1.60	0.15	0.30	4.18	0.46	0.0	37.99

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SS12

Area = 0.86 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.23	20.0	0.025
1.63	180.0	0.155
0.94	90.0	0.096

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

L = 2.80 mi Av.Slope= 103.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.04 mi = 37.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 26.84 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
74	33.9 %	-----	Sandy Loam	0.29	----	0.32	0.32	0.0
70	28.2 %	-----	Sandy Loam	0.34	----	0.46	0.46	0.0
48	21.3 %	-----	Sandy Clay Loam	0.30	----	0.54	0.57	0.0
47	16.6 %	-----	Sandy Loam	0.30	----	0.65	0.65	0.0
Weight.Av	100.0 %			0.31	4.15	0.46	0.47	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SS12	0.86	0.15	0.31	4.15	0.47	0.0	26.84

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SS14

S-GRAPH PARAMETERS

Area = 1.31 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.51	40.0	0.058
1.17	160.0	0.100
0.41	80.0	0.029

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

L = 2.09 mi Av.Slope= 124.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.67 mi = 32.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 19.61 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
47	68.5 %	-----	Sandy Loam	0.30	----	0.65	0.65	0.0
74	10.9 %	-----	Sandy Loam	0.29	----	0.32	0.32	0.0
44	6.5 %	-----	Sandy Clay Loam	0.26	----	0.10	0.11	0.0
98	5.2 %	-----	Sandy Clay Loam	0.30	----	0.23	0.24	0.0
3	5.1 %	-----	Sandy Loam	0.35	----	1.78	1.78	0.0
70	2.1 %	-----	Sandy Loam	0.34	----	0.46	0.46	0.0
48	1.1 %	-----	Sandy Clay Loam	0.30	----	0.54	0.57	0.0
75	0.4 %	-----	Loam	0.35	----	0.24	0.25	0.0
29	0.2 %	-----	Sandy Loam	0.35	----	0.40	0.40	0.0
Weight.Av	100.0 %			0.30	3.81	0.61	0.61	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SS14	1.31	0.15	0.30	3.81	0.61	0.0	19.61

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SS20

Area = 0.41 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.59	50.0	0.064
0.59	80.0	0.051

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

L = 1.18 mi Av.Slope= 105.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.53 mi = 45.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 14.92 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.0	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
70	78.1 %	-----	Sandy Loam	0.34	----	0.46	0.46	0.0
55	11.6 %	-----	Sandy Loam	0.35	----	0.36	0.36	0.0
3	10.3 %	-----	Sandy Loam	0.35	----	1.78	1.78	0.0
Weight.Av	100.0 %			0.34	3.86	0.58	0.58	0.0

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SS20	0.41	0.15	0.34	3.86	0.58	0.0	14.92

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SF2

S-GRAPH PARAMETERS

Area = 0.24 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.40	70.0	0.030
0.72	100.0	0.061

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

L = 1.12 mi Av.Slope= 150.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.60 mi = 54.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 14.37 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	7.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	45.2 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
94	31.9 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
105	21.7 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
35	1.2 %	-----	Sandy Loam	0.33	----	0.33	0.33	0.0
Weight.Av	100.0 %			0.33	3.98	0.34	0.34	14.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SF2	0.24	0.15	0.33	3.98	0.34	7.2	14.37

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SG2

S-GRAPH PARAMETERS

Area = 0.40 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.42	80.0	0.030
1.14	160.0	0.096

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

L = 1.55 mi Av.Slope= 152.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.75 mi = 48.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 17.58 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	1.4	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	90.3 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
94	7.9 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
7	1.5 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
8	0.3 %	-----	Sandy Loam	0.35	----	0.40	0.40	0.0
Weight.Av	100.0 %			0.34	3.97	0.34	0.34	2.7

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SG2	0.40	0.15	0.34	3.97	0.34	1.4	17.58

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SH2

Area = 1.34 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.88	70.0	0.099
1.20	200.0	0.093
		0.000

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

L = 2.08 mi Av.Slope= 117.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.83 mi = 40.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 21.50 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	18.6	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
105	58.5 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
39	27.3 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
43	8.6 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
73	4.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
7	1.2 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.30	3.88	0.32	0.33	37.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SH2	1.34	0.15	0.30	3.88	0.33	18.6	21.50

SUBBASIN INPUT PARAMETERS

SUBBASIN # : SH6

Area = 0.42 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.40	160.0	0.131

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

L = 1.40 mi
Lca = 0.83 mi = 59.0 % of "L"

Av.Slope= 114.1 ft/mi

Av.slope =(SUM(Li)/I)^2

$\overline{Kn}$ = 0.030

Lag = 18.58 min

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

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.9	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	58.4 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
94	27.3 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
7	14.3 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.34	4.15	0.46	0.48	1.8

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
SH6	0.42	0.15	0.34	4.15	0.48	0.9	18.58

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST2

Area = 4.50 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.70	330.0	0.122
1.31	360.0	0.079
0.55	440.0	0.019

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

L = 3.56 mi Av.Slope= 260.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.53 mi = 43.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 28.59 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	0.5	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CmD	65.9 %	Cellar	Sandy Loam	0.35	----	0.40	0.40	0.0
LkD	29.4 %	Lonti	Sandy Clay Loam	0.25	----	0.10	0.11	0.0
CnF	4.7 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
Weight.Av	100.0 %			0.32	3.82	0.31	0.31	0.9

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST2	4.50	0.15	0.32	3.82	0.31	0.5	28.59

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST6

Area = 3.93 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.17	160.0	0.100
2.35	680.0	0.138
0.34	320.0	0.011

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

L = 3.86 mi Av.Slope= 239.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.16 mi = 30.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 26.94 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	3.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CmD	62.1 %	Cellar	Sandy Loam	0.35	----	0.40	0.40	0.0
CnF	31.5 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
LkD	2.4 %	Lonti	Sandy Clay Loam	0.25	----	0.10	0.11	0.0
16	2.2 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
Le	1.8 %	Lehmans	Clay Loam	0.25	----	0.04	0.04	3.0
Weight.Av	100.0 %			0.34	4.12	0.37	0.37	6.7

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST6	3.93	0.15	0.34	4.12	0.37	3.3	26.94

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST10

S-GRAPH PARAMETERS

Area = 2.70 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.20	310.0	0.185
1.30	560.0	0.063
0.28	90.0	0.016

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

L = 3.78 mi Av.Slope= 205.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.97 mi = 52.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 33.65 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	9.8	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
31	32.4 %	-----	Sandy Loam	0.34	----	0.37	0.37	35.0
CmD	12.5 %	Cellar	Sandy Loam	0.35	----	0.40	0.40	0.0
64	10.5 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
CnF	9.5 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
43	9.5 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
39	8.8 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
73	7.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
16	7.5 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
94	1.6 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
Weight.Av	100.0 %			0.32	3.86	0.32	0.32	19.6

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST10	2.70	0.15	0.32	3.86	0.32	9.8	33.65

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST12

S-GRAPH PARAMETERS

Area = 3.50 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.12	310.0	0.175
1.48	320.0	0.101
0.76	280.0	0.040

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

L = 4.36 mi Av.Slope= 190.9 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 2.49 mi = 57.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 39.39 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	7.3	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
CnF	43.9 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
43	18.0 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
CmD	16.7 %	Cellar	Sandy Loam	0.35	----	0.40	0.40	0.0
64	11.7 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
31	7.4 %	-----	Sandy Loam	0.34	----	0.37	0.37	35.0
17	2.0 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
73	0.3 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
Weight.Av	100.0 %			0.33	4.00	0.34	0.35	14.7

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST12	3.50	0.15	0.33	4.00	0.35	7.3	39.39

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST14

S-GRAPH PARAMETERS

Area = 2.76 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.61	90.0	0.050
2.91	540.0	0.214
0.38	160.0	0.019

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

L = 3.90 mi Av.Slope= 190.8 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.52 mi = 39.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 31.33 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.3

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	10.6	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
73	39.7 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
64	18.2 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
43	15.5 %	-----	Sandy Loam	0.31	----	0.33	0.33	0.0
CmD	10.4 %	Cellar	Sandy Loam	0.35	----	0.40	0.40	0.0
105	6.5 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
94	5.0 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
17	3.5 %	-----	Sandy Loam	0.25	----	0.04	0.04	15.0
31	0.7 %	-----	Sandy Loam	0.34	----	0.37	0.37	35.0
CnC	0.5 %	Cellar	Sandy Loam	0.34	----	0.36	0.36	20.0
Weight.Av	100.0 %			0.30	3.61	0.27	0.28	21.2

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST14	2.76	0.15	0.30	3.61	0.28	10.6	31.33

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST16

S-GRAPH PARAMETERS

Area = 1.35 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
2.69	320.0	0.247
0.19	80.0	0.009

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

L = 2.88 mi Av.Slope= 126.7 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.50 mi = 52.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 30.01 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	15.4	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
64	40.5 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
73	26.4 %	-----	Sandy Clay Loam	0.28	----	0.21	0.22	30.0
105	21.4 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
94	3.9 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
7	3.9 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
35	2.1 %	-----	Sandy Loam	0.33	----	0.33	0.33	0.0
28	1.8 %	-----	Sandy Clay Loam	0.26	----	0.11	0.12	0.0
Weight.Av	100.0 %			0.29	3.78	0.30	0.32	30.9

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST16	1.35	0.15	0.29	3.78	0.32	15.4	30.01

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST20

S-GRAPH PARAMETERS

Area = 0.28 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.02	200.0	0.073

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

L = 1.02 mi Av.Slope= 196.1 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.68 mi = 67.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 13.82 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	3.7	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
7	36.1 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
94	34.6 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
105	11.8 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
39	11.1 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
35	6.4 %	-----	Sandy Loam	0.33	----	0.33	0.33	0.0
Weight.Av	100.0 %			0.34	3.68	0.66	0.69	7.4

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST20	0.28	0.15	0.34	3.68	0.69	3.7	13.82

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST22

Area = 0.72 sq.mi

S-GRAPH PARAMETERS

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
1.12	200.0	0.084
1.32	260.0	0.094
0.17	100.0	0.007

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

L = 2.61 mi Av.Slope= 199.3 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 1.17 mi = 45.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 24.18 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	21.8	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
105	65.2 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
39	18.9 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
64	15.4 %	-----	Sandy Clay Loam	0.30	----	0.27	0.29	25.0
7	0.5 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
Weight.Av	100.0 %			0.29	3.82	0.31	0.33	43.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST22	0.72	0.15	0.29	3.82	0.33	21.8	24.18

SUBBASIN INPUT PARAMETERS

SUBBASIN # : ST26

S-GRAPH PARAMETERS

Area = 0.59 sq.mi

Flow path inc. (mi)	Elevation inc. (ft)	Ii (mi^3/ft)^.5
0.72	50.0	0.086
0.80	160.0	0.057

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

L = 1.52 mi Av.Slope= 113.0 ft/mi Av.slope =(SUM(Li)/I)^2

Lca = 0.64 mi = 42.0 % of "L"

$\overline{Kn}$ = 0.030 Lag = 17.39 min Lag = 20*$\overline{Kn}$*(((1.2)*(L*Lca/S^.5)^.38)

Land Symbol	%	Land use/Land classif. (Tables 4.1 & 5.1)	IA (in)	Average Imp. %	Av. Veget cover %	Ck
HIL	100 %	Hillslope, Alluvial fan	0.15	50%RTIMP	15.0	1.06
Weight.Av	100 %		0.15	6.2	15.0	1.06

Imperv. is taken 50% RTIMP for noncontiguous undeveloped areas

GREEN & AMPT LOSS RATE PARAMETERS

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

Average values

Map Unit	% OF Area	Soil name Series	Textural class (major componets)	DTHETA (dry)	PSIF (in)	XKSAT (in/hr)	Ck*XKSAT (in/hr)	RTIMP (%)
39	51.0 %	-----	Sandy Loam	0.34	----	0.32	0.32	3.0
105	18.2 %	-----	Sandy Clay Loam	0.28	----	0.31	0.33	60.0
7	17.9 %	-----	Loamy Sand	0.35	----	1.20	1.27	0.0
94	12.9 %	-----	Sandy Loam	0.35	----	0.39	0.39	0.0
Weight.Av	100.0 %			0.33	4.10	0.48	0.50	12.5

INPUT VALUES FOR < MCUHP 2 >PROGRAM

SUBBASIN #	Area	IA	DTHETA	PSIF	XKSAT	RTIMP	Lag
ST26	0.59	0.15	0.33	4.10	0.50	6.2	17.39