LAVEEN AREA MASTER DRAINAGE STUDY
PHASE I
HYDROLOGY REPORT
EXISTING CONDITIONS

Prepared for:

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LAVEEN AREA DRAINAGE MASTER STUDY
PHASE I

INTRODUCTION

Cella Barr Associates (CBA) was contracted by the Flood Control District of Maricopa County (the District) to prepare an Area Drainage Master Study (ADMS) for stormwater management in the Laveen area of unincorporated Maricopa County. The Laveen Area Drainage Master Study (Laveen ADMS, Contract No. FCD 89-70) covers a portion of the District's Watershed No. 26. This area is roughly bounded on the north by the Salt River between 83rd Avenue and Central Avenue, on the east by Central Avenue, on the west by the Gila River Indian Reservation, and on the south by the South Mountains (Figures 1.1 and 1.2).

The purpose of this study is to identify flood hazard areas and develop drainage facility solutions for future developed conditions.

The Laveen ADMS will be completed in two (2) phases.

Phase I

Phase I (this phase) of the study consists of the following major tasks:

1. Mapping - Prepare topographic mapping at 1" = 400' scale and 2-foot contour interval with spot elevations at 400 foot intervals on all section line and mid-section line roads.

2. Hydrology - Develop a hydrologic model for the study area using the U.S. Army Corps of Engineers' (ACOE) computer program HEC-1 to estimate existing condition 100-year peak discharges at selected concentration points to be used for floodplain delineation at selected locations.

3. Floodplain Delineation - Using the guidelines established in The Flood Insurance Study Guidelines and Specifications for Study Contractors, delineate 100-year floodplain and floodway limits by detailed methods using the ACOE's computer model HEC-2 for the Champion Drain Area from 43rd Avenue to the Salt River and selected areas at the foothills of the South Mountains by approximate study methods.

Phase II

Phase II of the Laveen ADMS will develop an area drainage master plan for flood mitigation and will start following the review and approval of Phase I by the District and as funding allows.

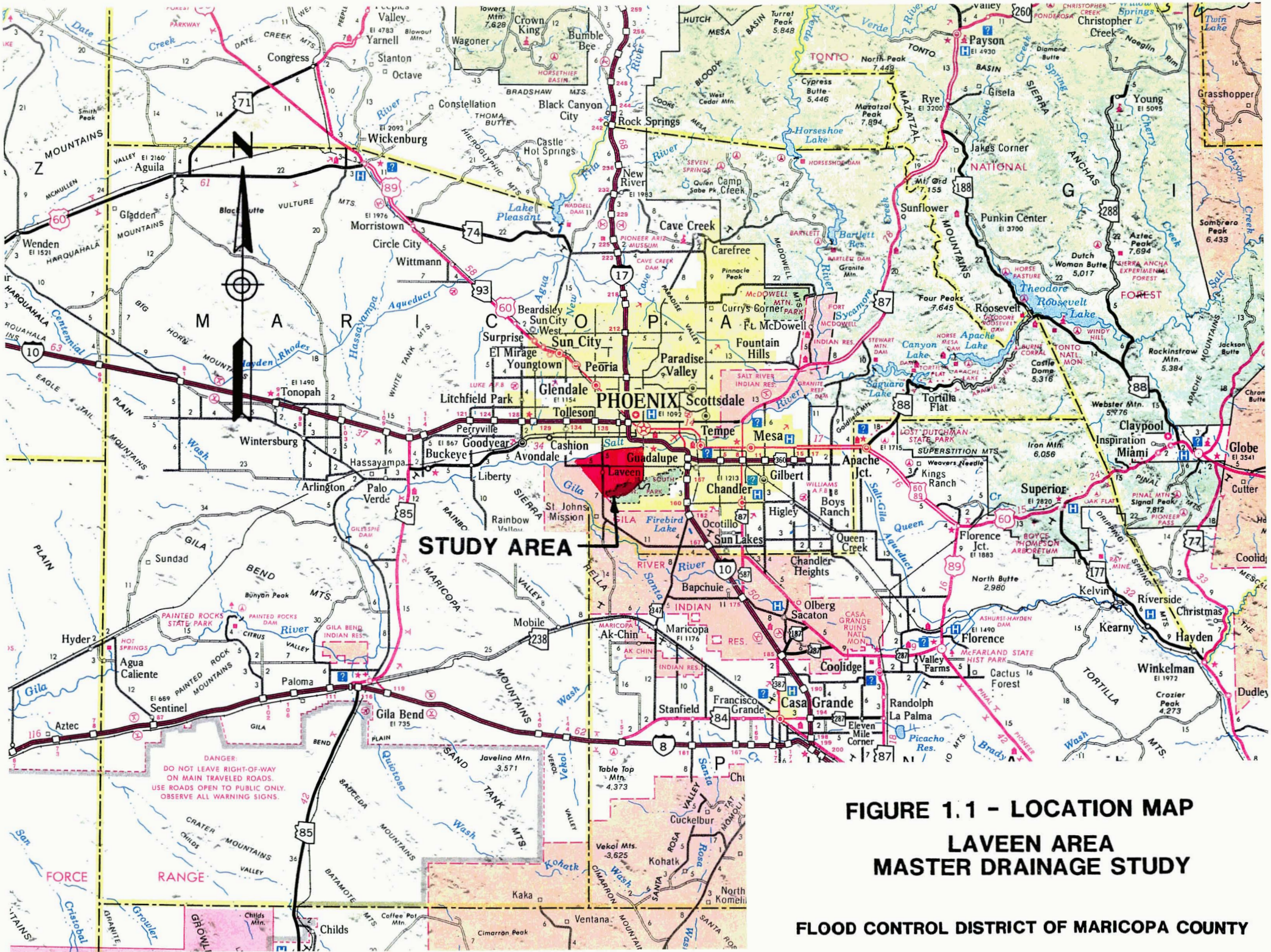

FIGURE 1.1 - LOCATION MAP

LAVEEN AREA MASTER DRAINAGE STUDY

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

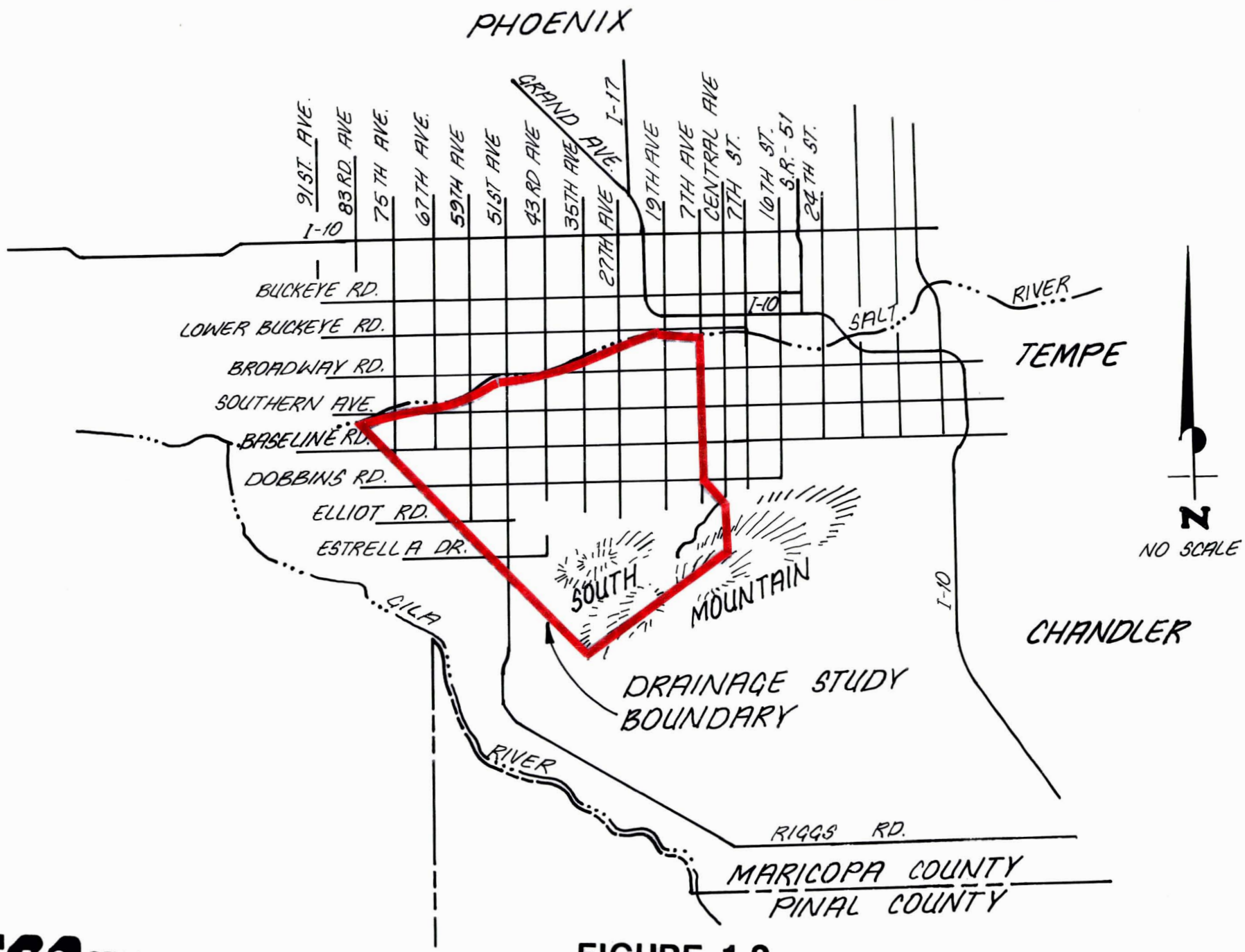

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FIGURE 1.2
VICINITY MAP

DRAINAGE BASIN DESCRIPTION

The study area and associated watersheds and sub-basins of the Laveen ADMS are located in the central portion of Maricopa County. The study area covers an area of approximately 39 square miles and extends from the crest of the South Mountains north to the Salt River and from approximately Central Avenue west to the Gila River Indian Reservation. The highest point in the study area is at 2,699 feet above mean sea level (msl) and the lowest point being 977 feet msl on the south bank of the Salt River at the outfall of the Champion Drain to the Salt River.

The study area consists of mountains, foothills and relatively flat areas and, therefore, the slope of the natural terrain varies widely. The steeper mountain and foothill slopes range from approximately 636 feet per mile to 100 feet per mile. Less steep areas within the study area range from 40 feet per mile to 5 feet per mile.

Vegetative cover at higher elevations consists of desert flora such as cactus, mesquite, palo verde, creosote bush and various grasses. The vegetative cover at the lower elevations is mainly irrigated crops and urban landscape plants .

The study area lies within the arid southwest climatic regime which is characterized by high summer temperature, winter and summer rainfall and extended periods of drought during the spring and fall. Mean annual rainfall in the vicinity of Phoenix is approximately seven (7) inches. Rain storms that occur in Maricopa County are generally one of the three types (Reference 1):

- General Winter Storms: This type of storm normally moves in from the north Pacific Ocean, and produces light to moderate precipitation over relatively large areas. These storms occur between late October and May, producing the heaviest precipitation from December to early March. A storm could last over several days with slight breaks between individual storms. Because of orographic effects, the mountain areas generally receive more precipitation than the lower desert areas. These storms are characterized by low intensity, long duration, and large areal extent, but on occasion, with an additional surge of moisture from the southwest, these storms can contribute to substantial runoff volumes and peak discharges on the major river systems.

- General Summer Storms: The Pacific Ocean north of the equator and south of Mexico is a breeding ground for tropical storms. On the average, about two dozen tropical storms and hurricanes are generated in this area from June through October. Most move in a northwesterly direction. The remnants of these storms can be caught up in the large scale circulation around a low pressure center in southern California and therefore can bring a persistent flow of moist tropical air into Arizona. The storm pattern consists of a band of locally heavy rain cells within a larger area of light to moderate rainfall. Whereas general winter storms can cover much of the state, general summer storms are more localized along a southeast to northwest band of rainfall. They are similar to winter storms in that higher elevations receive greater rainfall because of orographic influences. The period of late September through October may have storm patterns which are similar to both general summer and winter events.

- Local Storms: These storms consist of scattered heavy downpours of rain over areas of up to about 500 square miles for a time period of up to 6 hours. Within the storm area, exceptionally heavy rain usually cover up to 20 square miles and often last for less than 60 minutes. They are typically associated with lightning and thunder, and are referred to as thunderstorms, monsoons or cloudbursts. While they can occur any time during the year, they are more frequent during summer months (July to September) when tropical moisture pushes into the area from the southeast or southwest. These storms turn into longer duration events in late summer and may be associated with general summer storms (see above). Local storms generally produce record peaks for small watersheds. They can result in flash floods and sometimes loss of life and property damages.

Three watersheds were delineated within the Laveen ADMS area. These watersheds have been designated as the Southwest South Mountain watershed, the Hidden Valley watershed and the Champion Drain watershed.

Southwest South Mountain Watershed

The Southwest South Mountain watershed is located in the southwest portion of the study area (Figure 2, Sheet 3 of 3) and it encompasses approximately 4.0 square miles. The watershed is characterized by desert hills and mountains, drainage patterns and sub-basin boundaries are well defined. The watershed was subdivided into 8 sub-basins. Runoff generated within the sub-basins drains to the west ultimately draining out of the study area towards the Gila River Indian Reservation.

Hidden Valley Watershed

The Hidden Valley watershed is located in the southcentral portion of the study area (Figure 2) and encompasses approximately six square miles. The watershed was subdivided into 21 sub-basins characterized by either desert mountains and hillslopes or agricultural land use with minor rural development. Drainage patterns are generally from south to north and from east to west and are well defined by geomorphic features. However, drainage patterns within the sub-basins characterized by agricultural land use are poorly defined due to insignificant grades and mechanical leveling of farm fields. Sub-basin boundaries in agricultural areas are primarily defined by man-made features such as roads and irrigation canals. Stormwater generated within this watershed drains towards the Gila River Indian Reservation with minor spillover into the Champion Drain Watershed.

Champion Drain Watershed

The Champion Drain Watershed comprises approximately 75 percent of the study area, encompassing approximately 29 square miles. The watershed was subdivided into 68 sub-basins characterized by either desert mountains and hillslopes or agricultural land use, and rural or urban development. Drainage patterns are generally from south to north and from east to west. Drainage patterns within sub-basins characterized by desert mountains and hills are well defined by geomorphic features. As in the Hidden Valley watershed, drainage patterns within agricultural land use areas and to some extent developed areas, are poorly defined due to insignificant grades. Sub-basins boundaries in these areas are primarily defined by man-made features such as roads and irrigation canals. Stormwater generated within this watershed drains to the topographic low areas associated with the Champion Drain, ultimately draining to the Salt River.

HYDROLOGY

The U.S. Army Corps of Engineers' computer model "HEC-1 Flood Hydrograph Package", September, 1990 version (Reference 2) was utilized for Phase I of the Laveen ADMS as directed by the District. The HEC-1 computer model develops a runoff hydrograph for individual sub-basins through the input of numerical representations of the sub-basins physical and hydrologic characteristics. The computed hydrographs are then routed and/or combined in a sequence similar to the way runoff occurs within the watershed. The methodology for the selection of input parameters for the HEC-1 program is presented in the following text:

1. Field Reconnaissance

During the past several months, CBA's staff has performed numerous field reconnaissance trips to the study area to observe the general physical and hydrologic characteristics of the watershed. Specifically, the field trips included measuring and taking photographs of the existing drainage structures, assigning "n" values to routing reaches, identifying, verifying and/or locating drainage boundaries on watershed maps, and collecting surface elevation information through field survey in areas where split flow occurs.

2. Drainage Basin Delineation

Aerial photogammetry was used to generate 1"=400' scale topographic mapping having a 2 foot contour interval below elevation 1,250 feet and a 10 foot contour interval above 1,250 feet. It was used in the identification and delineation of watersheds and associated sub-basins. Criteria established to delineate watershed and sub-basin boundaries are:

a. Topographic features (geomorphic and man-made features).

b. Time of Concentration - sub-basins size, where possible, were confined in size so that the time of concentration (Tc) does not exceed fifty five minutes.

c. Concentration Points - drainage concentration points were established at locations of historic and potential flooding (identified by the District).

Watersheds and associated sub-basins are displayed on Figure 2.

3. Rainfall

The depth of rainfall for the study area has been determined from the information and procedures contained in Chapter 2 of the publication entitled Hydrologic Design Manual for Maricopa County, Arizona, dated September 1, 1990 (Reference 1). Depth of rainfall in the above publication is based on the National Oceanic and Atmospheric Administration (NOAA), Atlas 2, Precipitation - Frequency Atlas of the Western United States, Volume VIII - Arizona. The 100-year 6-hour storm distribution as developed by the District is utilized for computing peak discharges to be used in the hydraulic analysis at designated concentration points throughout the watershed in this study. The computed 6-hour, 100-year frequency rainfall depth for the Laveen ADMS area is 3.50 inches. For

runoff volume calculations, the 100-year 24 hour rainfall with the SCS Type II distribution was utilized. The computed 24-hour, 100-year frequency rainfall depth for the Laveen ADMS area is 4.20 inches. Precipitation depth versus return period calculations are included in Appendix A.

The aerial distribution of rainfall in Arizona is not always uniform. Depths of rainfall as contained in NOAA Atlas 2 are point values. It is necessary to adjust (reduce) these point rainfall depths by a given ratio based on the size of the watershed. The Maricopa County Unit Hydrograph Procedure 1 program (MCUHP1) was applied to each watershed to determine depth/area ratio and rainfall temporal distribution used in this study.

4. Watershed Losses

Rainfall excess is that part of the total precipitation depth that appears as surface flow during and after a storm event. Rainfall excess equals the total rainfall depth minus losses due to interception by vegetation, infiltration into the soil, surface depression storage and evaporation.

Watershed losses for this study were modeled using the Green and Ampt procedure as described in Reference 1. The Green and Ampt procedure in HEC-1 utilizes five (5) parameters: surface retention loss (IA); hydraulic conductivity (XKSAT); wetting front capillary suction (PSIF); volumetric soil moisture deficit (DTHETA); and percent impervious area (RTIMP). These parameters are derived from soil texture classification and land-use. Parameters for the Green and Ampt procedure were estimated using detailed Soil Conservation Service (SCS) soil maps (Reference 3) for the central part of Maricopa County, Arizona, to identify the soil texture classification (Figure 3).

Weighted Green and Ampt parameters for each sub-basin were calculated utilizing the following procedures:

a. The percent of a particular soil type occuring in a sub-basin was visually estimated from the SCS soil maps (Figure 3).

b. Weighted values for XKSAT and DTHETA parameters, associated with soil types within a sub-basin, were calculated using Table 1 values.

c. The value for the parameter PSIF was determined utilizing Table 1 values. The PSIF value was selected based on the weighted XKSAT value. If the XKSAT value was between two different classifications, the PSIF value was determined by interpolation.

d. An adjustment to the XKSAT value was made utilizing Figure 4. The following assumptions concerning vegetative cover were made.

   1) Vegetative cover for undeveloped desert areas is approximately 20% of the area.

Table 1

Green and Ampt Loss Rate Parameter Values to Bare Ground

Soil Texture Classification (1)	XKSAT inches/hour (2)	PSIF inches (3)	DTHETA[1]		
			Dry (4)	Normal (5)	Saturated (6)
sand	4.6	1.9	0.35	0.30	0
loamy sand	1.2	2.4	0.35	0.30	0
sandy loam	0.40	4.3	0.35	0.25	0
loam	0.25	3.5	0.35	0.25	0
silty loam	0.15	6.6	0.40	0.25	0
silt	0.10	7.5	0.35	0.15	0
sandy clay loam	0.06	8.6	0.25	0.15	0
clay loam	0.04	8.2	0.25	0.15	0
silty clay loam	0.04	10.8	0.30	0.15	0
sandy clay	0.02	9.4	0.20	0.10	0
silty clay	0.02	11.5	0.20	0.10	0
clay	0.01	12.4	0.15	0.05	0

[1]Selection of DTHETA

Dry = Nonirrigated lands, such as desert and rangeland

Normal = Irrigated lawn, turf, and permanent pasture;

Saturated = Irrigated agricultural land

Table taken from Hydrologic Design Manual for Maricopa County, Arizona (Reference 1).

Table 2

Surface Retention Loss for Various Land Surfaces in Maricopa County

Land-use and/or Surface Cover (1)	Surface Retention Loss IA, Inches (2)
Natural	
Desert and rangeland, flat slope	0.35
Hillslopes, Sonoran Desert	0.15
Mountain, with vegetated surface	0.25
Developed (Residential and Commercial)	
Lawn and turf	0.20
Desert landscape	0.10
Pavement	0.05
Agricultural	
Tilled fields and irrigated pasture	0.50

Table taken from Hydrologic Design Manual for Maricopa County, Arizona (Reference 1).

2) Vegetative cover for agriculture land use areas and rural development land use areas is approximately 80% of the area.

3) Vegetative cover for urban areas is approximately 45% of the area.

4) In sub-basins that are characterized by multiple land use, a weighted vegetative cover adjustment value was calculated, (Appendix B).

5) As outlined in Reference 1, adjustment for vegetative cover was applied to all soil textures, except sand and loamy sand.

e. Surface retention loss (IA) for specific land use or surface cover were obtained from Table 2 (Reference 1). For sub-basins that are characterized by multiple land use or surface cover, a weighted IA value was calculated.

f. Percent impervious for each sub-basin was estimated by the following methods:

1) The percent of impervious area for sub-basins that are partially underlain by rock was estimated from SCS soil maps (Figure 2).

2) For sub-basins that contain urbanized areas the percent of impervious area was estimated utilizing data from the City of Phoenix Storm Drain Design Manual, Revised: July, 1987, that relates percent impervious to zoning types (Reference 4).

Land classification for each sub-basin is presented in Appendix B. The estimated percent of a particular soil texture occuring in a sub-basin and the associated weighted or calculated Green and Ampt loss rate value for each sub-basin are presented in Appendix C.

5. Unit Hydrograph

The Clark Unit Hydrograph procedure was used in this study. Parameters required for the Clark Unit Hydrograph are: time of concentration (Tc); storage constant (R); and a time-area relationship for each sub-basin. The following procedures were utilized to estimate the required parameters.

a. The Maricopa County Unit Hydrograph Procedure 1 (MCUHP 1 computer program) was utilized to estimate Tc and R for the Clark Unit Hydrograph. Input data required to calculate Tc and R are; basin area, flow path length, resistance coefficient (Kb), slope of flow path, and loss rate parameters.

Basin area, flow path length and slope of flow path were measured from the 1" = 400' scale topographic maps.

The resistance coefficient (Kb) for agricultural and urban land use areas, were estimated using procedures and equations outlined in Reference 1.

Table 3
Equation for Estimating Kb in the Tc Equation

Kb = m log A + b Where A is drainage area, in acres		
Land Classification (1)	Equation Parameters	
	m (2)	b (3)
Urban	-0.00625	0.04
Bare or nearly bare ground (bare, agricultural land, desert rangeland)	-0.01375	0.08
Rough and/or moderate vegetation (hillslopes, alluvial fan)	-0.025	0.15
Very rough and/or dense vegetation (mountains)	-0.030	0.20

Table taken from Hydrologic Design Manual for Maricopa County, Arizona (September1, 1990)

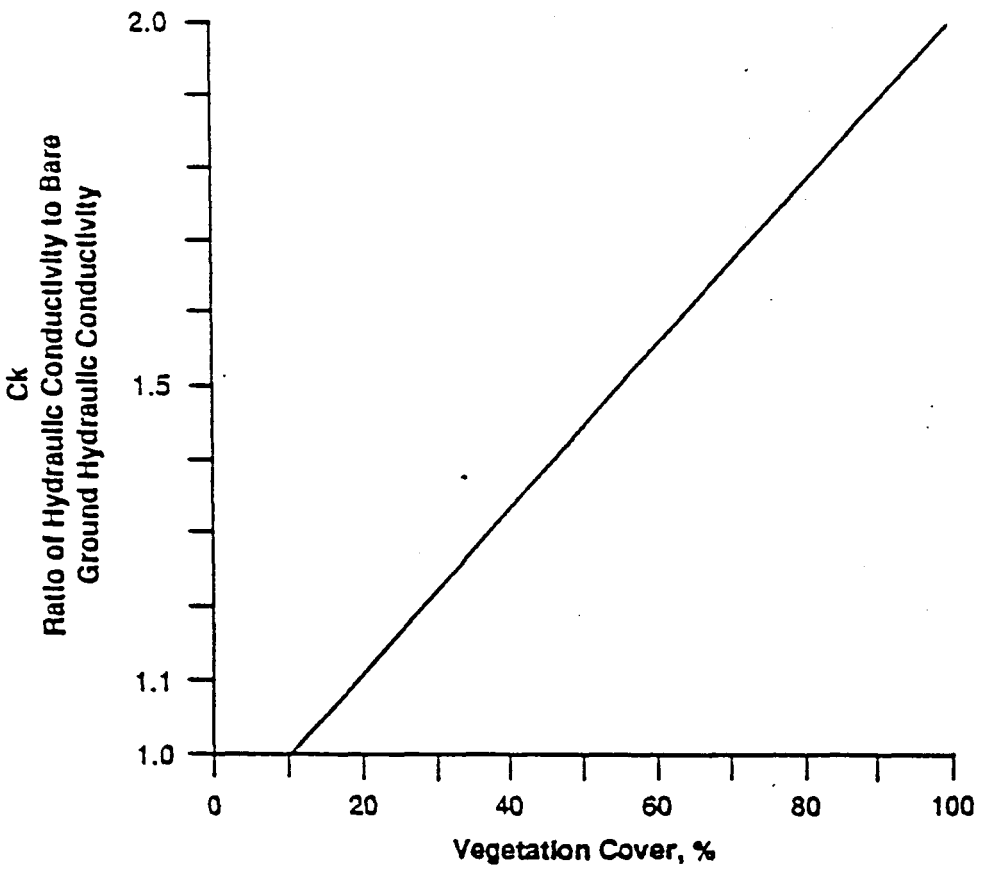


Figure 4
Effect of Vegetation Cover on Hydraulic Conductivity For Hydraulic Soil Groups, C, and D, and for all Soil Textures other than Sand and Loamy Sand

Figure taken from Hydrologic Design Manual for Maricopa County, Arizona (September 1, 1990)

The resistance coefficient to be used for sub-basins characterized by desert mountains and/or foothills were calibrated to available runoff gauge data. The following procedures/data were utilized in the calibration model.

1) Data from USGS gauge station 09512200 located at the concentration point in sub-basin SM1C was used.

2) Flood Flow Frequency Analysis utilizing gauged data was obtained from the Flood Control District of Maricopa County (Appendix D).

3) A range of equation parameters (parameters m and b, see Table 3 and Appendix D) for estimating Kb were utilized to estimate Tc and R values for sub-basin SM1C. The incremental range of equation parameters falls in the land classification range between rough and/or moderate vegetation (hillslopes) and midway between bare or nearly bare ground (agricultural land, desert rangeland).

4) A HEC-1 model for sub-basin SM1C (Appendix D) was developed so that 100-year peak discharges for a range of resistance coefficients could be compared to the 100-year peak discharge estimated from the Flood Flow Frequency Analysis.

It was determined that equation parameters of m = -0.0194 and b = 0.11 for estimating Kb gave runoff results (3036 CFS) that most closely approximates the discharge estimated by the frequency analysis (3020 CFS) from the gauge data and were used to calculate Kb in the mountainous sub-basins.

Weighted resistance coefficients based on land classification for each sub-basin are presented in Appendix B.

Input parameters to calculate Tc and R utilizing MCUHP1 are presented in Appendix C.

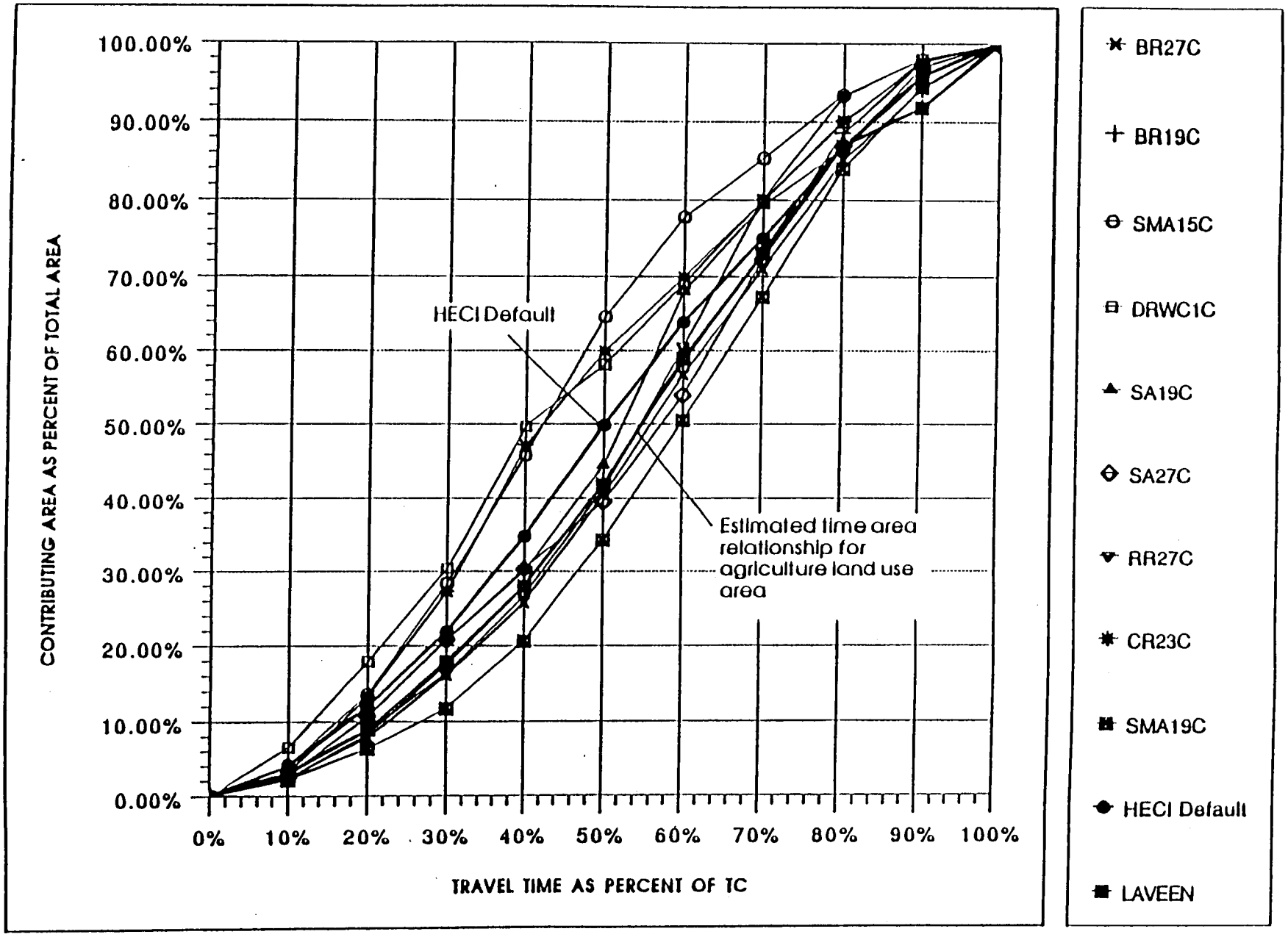
As a quality control check, TC and R for five percent (5%) of the sub-basin areas were calculated utilizing the procedure outlined in Reference 1 (Appendix E).

b. The Unit Hydrograph Procedures outlined in Reference 1 utilizes a time-area relationship to develop a unit hydrograph. Synthetic time-area relationships for urban and natural watersheds are provided in Reference 1. At the direction of the District, a time-area relationship for agricultural land use was developed for the Laveen ADMS. The following procedure and assumptions were used to develop the time-area relationship for agricultural land use areas.

1) Isochrones representing equal travel times to the outflow point were delineated for nine sub-basins on the 1" = 400' scale topographic maps.

Figure 5

SYNTHETIC TIME AREA RELATIONSHIPS FOR AGRICULTURE LAND USE AREAS (LAVEEN ADMS)



409 16-02-32/SS500061 MAC/Laveen Graph

2) The incremental areas were measured and tabulated along with the travel time for each area.

3) A graph relating travel time as a percent of time of concentration to contributing area as a percent of total area were plotted for each sub-basin (Figure 5).

4) Runoff is predominantly sheet flow.

5) A synthetic time-area relationship can be inferred from interpretation of plotted data.

The synthetic time-area relations estimated for agricultural land use in the Laveen ADMS are displayed on Figure 5.

6. Flow Routing Methods

Channel routing of flood flows was performed utilizing the Normal Depth Method as directed by the District (Reference 5). Reservoir routing methods were used to route flows through major detention basins and areas of significant ponding (topographically depressed areas greater than 2 feet). Flow path cross-section data for the HEC-1 routing component was obtained from flow paths identified on the 1" = 400' scale topographic maps. Storage capacities of detention areas (e.g., ponding behind the Champion Drain in sub-basin CD2C) were also determined from the 1" = 400' scale topographic maps.

Manning's roughness coefficients for routing reachs were estimated from field observations and aerial photographs. Roughness coefficients "n" used for this study are:

a.	0.020	Flow within streets.
b.	0.030 - 0.055	Flow within established or defined channels, high "n" values reflect dense vegetation.
c.	0.065	Flow through rural developed areas, undefined channel.
d.	0.070	Flow through agriculture fields, undefined channel.
e.	0.100	Flow through urban development.

7. Diversion Methods

The diversion component of the HEC-1 program was used to model split flow. Criteria used to establish the existence of split flow and the procedures used to develop rating curves that relate diverted outflow to upstream inflow are presented in Appendix F.

8. HEC-1 Computer Models

Seven HEC-1 computer models were developed to estimate 100-year 6-hour and 100-year 24-hour peak discharges at key points of concentration. The 100-year 6-hour discharges are to be utilized for subsequent hydraulic analysis that will determine water surface elevations and/or flood hazard areas. Each model represents a separate computer run in which a specific area was analyzed. The seven models are:

a. **Champion** - Drainage area analyzed is the area impacting the Champion Drain and associated topographic low areas (Appendix G).

b. **West.Ca** - Each sub-basin above the Western Canal is analyzed separately to obtain a discharge at the outfall (Appendix H).

c. **PMWEST1** - Model estimates discharges along an unnamed wash selected by the District for a hydraulic evaluation (Appendix I).

d. **PMEAST1** - Model estimates discharges along an unnamed wash selected by the District for a hydraulic evaluation (Appendix J).

e. **SWSM.NEW** - Southwest South Mountain model - Drainage area analyzed is the area within the South Mountains that drains to the Gila Indian Reservation (Appendix K).

f. **CHAMPION24** - Same as item(a) with the exception that the 100-year 24-hour SCS Type II rainfall distribution was used instead of the 100-year 6-hour FCD rainfall distribution (Appendix L).

g. **SWSM.NEW24** - Same as item(e) with the exception that the 100-year 24-hour SCS Type II rainfall distribution was used instead of the 100-year 6-hour FCD rainfall distribution (Appendix M).

RESULTS

The 100-year peak discharges for Phase I of the Laveen ADMS at designated concentration points were computed utilizing the HEC-1 computer model for 6-hour rainfall duration and the 24-hour rainfall duration storms. For the 100-year 6-hour duration storm, the rainfall distribution pattern as developed by the FCD was used to compute peak discharges. Results of the HEC-1 hydrologic modeling utilizing the 100-year 6-hour rainfall distribution are presented in the runoff summary of the HEC-1 computer programs located in Appendices G, H, I, J and K. Estimated 100-year peak discharges at key points of concentration for the 100-year 6-hour storm event to be utilized in the hydraulic analysis are listed on Tables 4, 5, 6 and 7. For the 24-hour rainfall duration, the Soil Conservation Service's (SCS) Type II rainfall distribution was utilized to compute peak volume at key concentration points within the study area. Results of the HEC-1 hydrologic modeling utilizing the 100-year 24-hour rainfall distribution are presented in the runoff summary of the HEC-1 computer programs located in Appendices L and M. A schematic diagram for the drainage models representing the Champion Drain, Hidden Valley and South West South Mountain watershed is presented on Figure 6.

Comparison Of Results With Other Studies

The results of the hydrologic analysis performed by CBA for Phase I of the Laveen ADMS were compared with studies conducted by the U.S. Army Corps of Engineers (ACOE) and by HDR Infrastructure (HDR).

Army Corps of Engineers

The ACOE study entitled "Gila River Basin Flood Hydrology Report, Phoenix, Urban Study, February 1977" utilized the following procedures to estimate rainfall-run-off relationships.

1. For sub-areas within the South Mountains, Phoenix Mountain "S" graphs were used in conjunction with estimated lag times to develop sub-area unit hydrographs.

2. For valley areas, a single linear reservoir model for sheet flow was used to perform cursory estimates of discharges at selected concentration points. The model relates basin storage to outflow and a proportionality factor. The proportionality factor relates time of concentration to rainfall intensity, basin slope, length and roughness.

3. Peak discharges for the SPF, 100, 50 and 25-year storm event were estimated for existing and future conditions. A standard project storm with a 7-hour duration with large portions of the total rainfall occurring within 1 to 3 hours was developed for the study.

Only one concentration point (concentration point 2001) in the ACOE study was comparable in drainage area size and location to a concentration point (CSM2) in CBA's study. The contributing drainage area for Concentration Point 2001 in the ACOE study

Table 4

Summary of Discharges
HEC-1 Model Champion

LOCATION	100-YEAR PEAK DISCHARGE CFS
CPR27C	545
CPR35C	1691
CPS37C	1770
CAV43C	2175
CVR47C	3089
CB51C	2976
CB159C	2795
CB259C	868
CB163C	3231
CPCD1C	3154
CCD2C	3104
RPOND	2960
DIBASE	1125
CPCD3C	1159

CPR27C - Location at intersection of Roeser Road alignment and 27th Avenue.
CPR35C - Location at intersection of Roeser Road and 35th Avenue.
CPS37C - Location at intersection of Southern Avenue and 37th Avenue.
CAV43C - Location at intersection of Alta Vista Road and 43rd Avenue.
CVR47C - Location at intersection of Vineyard Road alignment and 47th Avenue alignment.
CB51C - Location approximately 600 feet north of the intersection of Baseline Road and 51st Avenue.
CB159C - Location approximately 200 feet north of the intersection of Baseline Road and 59th Avenue.
CB259C - Location approximately 200 feet south of the intersection of Baseline Road and 59th Avenue.
CB163C - Location approximately 200 feet south of the intersection of Baseline Road and 63rd Avenue.
CPCD1C - Location approximately 2000 feet south of the intersection of Baseline Road and 67th Avenue.
D1BASE - Location at the intersection of Baseline Road and Chapion Drain.

Table 5
Summary of Discharges
HEC-1 Model WEST.CA

SUB-BASIN	100-YEAR PEAK DISCHARGE CFS
WC1A	549
WC4A	863
WC5A	869
WC8A	742
WC11A	699
WC12A	697
WC15A	1061
WC18B	144
WC19B	683

Points of concentration are located along Western Canal between 19th Avenue and 43rd Avenue.

Table 6
Summary of Discharges
HEC-1 Model PMWEST1

SUB-BASIN	100-YEAR PEAK DISCHARGE CFS
CPHV1	101
CPHV2	796
CPHV3	810
CPHV4	1062
CPHV5	1075
CPHV6	1954
CPHV7	2037

Points of concentration are located within Section 15 Wash.

Table 7
Summary of Discharges
HEC-1 Model PMEAST1

SUB-BASIN	100-YEAR PEAK DISCHARGE CFS
CD35.9	1241
CD35.8	1065

CD35.8 - Location at intersection of Section 22 Wash and 35th Avenue.

CD35.9 - Location approximately 1500 feet downstream of CD35.8.

is 4.25 square miles. The contributing drainage area for CBA's concentration point CSM2 is 4.31 square miles. The ACOE reported an estimated 100-year peak discharge of 3900 cfs (7-hour rainfall duration), where as CBA determined 100-year peak discharges of 3990 cfs for the 6-hour rainfall duration. Two additional CBA concentration points, WC1A and CPR35C, had similar concentration points as the ACOE study but the size of the drainage areas are significantly different. CBA performed a comparison of peak discharge generated per square mile in each study. While there is some variability in the results of this comparison, the order of magnitude of the resultant values are consistant. Sub-basins delineated in the remainder of the ACOE study (only included an eastern portion of the Laveen ADMS study) did not match in size, sub-basin delineation or concentration point location and, therefore, are not appropriate for comparison. Table 8 lists the 100-year peak discharges and contributing drainage areas for selected sub-basins between the CBA and ACOE studies.

HDR Engineering, Inc.

The hydrologic study performed by HDR Engineering, Inc., for the Arizona Department of Transportation, entitled "Southwest Loop Highway (S.R. 218) Drainage Design Concept Report", dated September 1988, utilized the following procedures to estimate 100-year peak discharges.

1. A HEC-1 computer model was developed utilizing the SCS curve number and unit hydrograph.

2. The 100-year 24-hour storm event is based on duration/depth of precipitation tables provided in the City of Phoenix "Storm Drain Design Manual Subdivision Drainage Design" manual.

HDR's report addresses the surface water drainage conditions impacting ADOT's proposed Southwest Loop Highway between I-10 at 51st Avenue and I-10 at Pecos Road. Segment II and III of the proposed highway, in part, is coincidental with the west boundary of the Laveen ADMS hydrology study boundary. The 100-year peak discharges contained in the HDR report are compared with 100-year peak discharges computed by CBA for sub-basins that are equivalent in location and type of drainage basin characteristics (i.e., land use - Desert Mountain, Agriculture, etc.) in Table 9.

A review of the data presented in Tables 8 and 9 indicates some variability in the peak discharges determined in the ACOE and HDR studies versus those determined in the CBA study. For areas characterized by desert mountains or desert hills, discharges developed by CBA for the 100-year 6-hour event ranged from 0.89 times less to 1.4 times greater to the discharges reported by ACOE and HDR. For sub-basins in which the land use is primarily agriculture discharges developed by CBA for the 100-year 6-hour event ranged from 0.64 times less to 3.6 times greater to the discharges reported by ACOE and HDR. The following items are offered to explain the differences between CBA's study, and the ACOE's and HDR's studies.

1. USGS topographic quadrangles formed the basis for watershed/sub-basin delineation and determination of some sub-basins characteristics for the ACOE

Table 8

Comparison of Reported 100-Year Peak Discharge Values for Selected Sub-Basins within the Laveen Study with Similar Concentration Points

ACOE STUDY				CBA STUDY					
Sub-Basin or Concentration Point	Drainage Area Mile²	Q100 cfs	cfs/Mile²	Sub-Basin or Concentration Point	Drainage Area Mile²	Q100 6-Hr cfs	cfs/Mile² 6-Hr	Q100 24-Hr cfs	cfs/Mile² 24-Hr
2020[1]	0.57	1100	1930	WC1A[1]	0.25	549	2196	--	--
2001[1]	4.25	3900	918	CSM2[1]	4.31	3990	925	5481	1271
2040[2]	9.63	2100	218	CPR35C[2]	12.08	1696	140	1723	143

1. Sub-basin characterized by desert mountains.
2. Sub-basin lies within agricultural land use and desert mountains.
3. Not modeled in this study.

and HDR studies whereas detailed mapping (scale 1"=400', CI=2") was developed and used in the CBA study.

2. Methods and procedures used to estimate rainfall/runoff relationships between the studies are significantly different and, therefore, different results should be expected. Table 10 summarizes the methods used in each study.

3. Sub-basin delineations were slightly to considerably different between the studies. The major difference between CBA's study, and the ACOE's and HDR's studies is the size of the sub-basin analyzed. Sub-basins within agriculture land use areas identified in CBA's study are typically 2 to 4 times smaller than sub-basins delineated in the ACOE's and HDR's studies.

The comparison of the results of CBA's study with previous studies is difficult in that it is not an apples to apples comparison. Each study utilized a different methodology for determining rainfall runoff relationships in its prospective study area. Also, each study employed a different degree of detail. The level of detail in CBA study concerning basin delineation, rainfall distribution and rainfall losses is greater than that employed in the other studies. With the exception of two comparison points (discharge/mile^2 for HDR's sub-basins BR159C and BR51C as compared to CBA's sub-basins BR159C and BR51C) the comparison is reasonable in that the comparison is within an order of magnitude.

In conclusion, the peak discharge estimates in this study are reasonable approximations for the rainfall/runoff relationships of the Laveen ADMS area and are presented to establish values to be used for floodplain managment, flood hazard identification and floodplain mapping purposes.

Table 10

Procedures Used to Estimate Rainfall Runoff Relationships

STUDY	METHOD USED
ACOE	1. Discharge Frequency Curve (for Mountain Areas) 2. Single Linear Reservoir Model (for Valley Areas) 3. 100-Year Discharge based on Standard Project Storm developed for area
HDR	1. HEC1 Computer Program utilized 2. SCS methods utilized: - SCS Unit Hydrograph - SCS Curve Numbers 3. 100-Year 24-Hour Discharges based on Duration/Depth of Precipitation Tables provided in the City of Phoenix "Storm Drain Design Manual Subdivision Drainage Design"
CBA	1. HEC1 Computer Program utilized 2. FCD procedures utilized: - Clark Unit Hydrograph - Green and Ampt Loss Rate Method - Papadakis and Kazan Method for Estimating Time of Concentration - 100-Year 6-Hour Rainfall Distribution - Depth-Area Adjustment 3. 100-Year 24-Hour Discharges based on SCS Type II Rainfall Distribution

Table 9

Comparison of Reported 100-Year Peak Discharge Values for Selected Sub-Basins within the Laveen Study with Similar Concentration Points

HDR STUDY				CBA STUDY					
Sub-Basin	Drainage Area Mile²	Q100 cfs	cfs/Mile²	Sub-Basin	Drainage Area Mile²	Q100 6-Hr cfs	cfs/Mile² 6-Hr	Q100 24-Hr cfs	cfs/Mile² 24-Hr
BAB1B[1]	1.30	399	306	IRDC[1]	0.52	256	492	235	452
BA6[1]	4.69	1024	218	BR159C[1]	0.68	442	650	468	688
BA5[1]	9.50	1997	210	BRS1C[1]	0.70	535	764	605	864
SW8A[2]	0.14	465	3320	SWSM8[2]	0.03	101	3366	43	1433
SW6[2]	0.48	880	1833	SWSM6[2]	0.95	1532	1612	1044	1099
SW9[2]	0.35	306	874	SWSM4[2]	0.34	315	926	289	850
SW4[2]	0.25	355	1420	SWSM2[2]	0.44	866	1968	421	957

1. Sub-basin lies within agricultural land use area.
2. Sub-basin characterized by desert mountains.

REFERENCES

1. Flood Control District of Maricopa County, "Hydrologic Design Manual for Maricopa County, Arizona", September, 1990.

2. U.S. Army Corps of Engineers, "HEC-1 Flood Hydrograph Package", January, 1985, Revised September, 1990.

3. U.S. Soil Conservation Service, "Soil Survey of Maricopa County, Arizona, Central Part", 1977.

4. City of Phoenix, "Storm Drain Design Manual, Storm Drains with Paving of Major Streets", August 1975, Revised July 1987.

5. Flood Control District of Maricopa County, Letter Dated August 22, 1990.

6. U.S. Army Corps of Engineers, "Gila River Basin, Flood Hydrology Report, Phoenix Arizona", February, 1977.

7. HDR Engineering, Inc., "Southwest Loop Highway (S.R. 218) Drainage Design Concept Report", September, 1988.

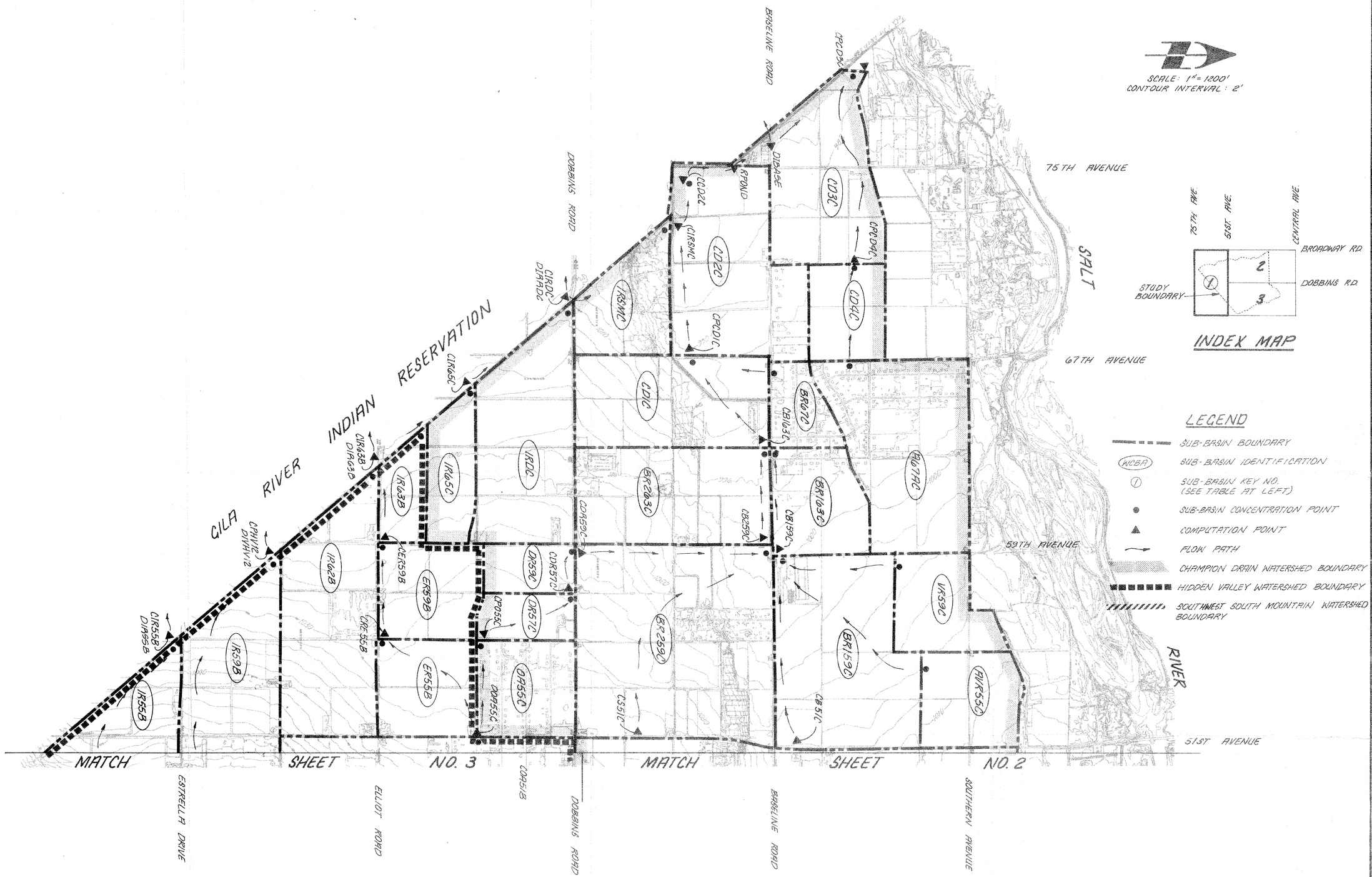


FIGURE 2

REVISED 7-23-91	LAVEEN A.D.M.S. DRAINAGE BASIN MAP	Horiz. 1"=1200' Vert. Fld.Bk. Pg. Design PJE Drwn. DAL Chkd. SSS Date APR., 1991
	CBA CELLA BARR ASSOCIATES 3062 N. 19th Avenue, Phoenix, Arizona 85015 (602) 242-2999	SHT. 1 OF 3 Job No. 29816-02-30

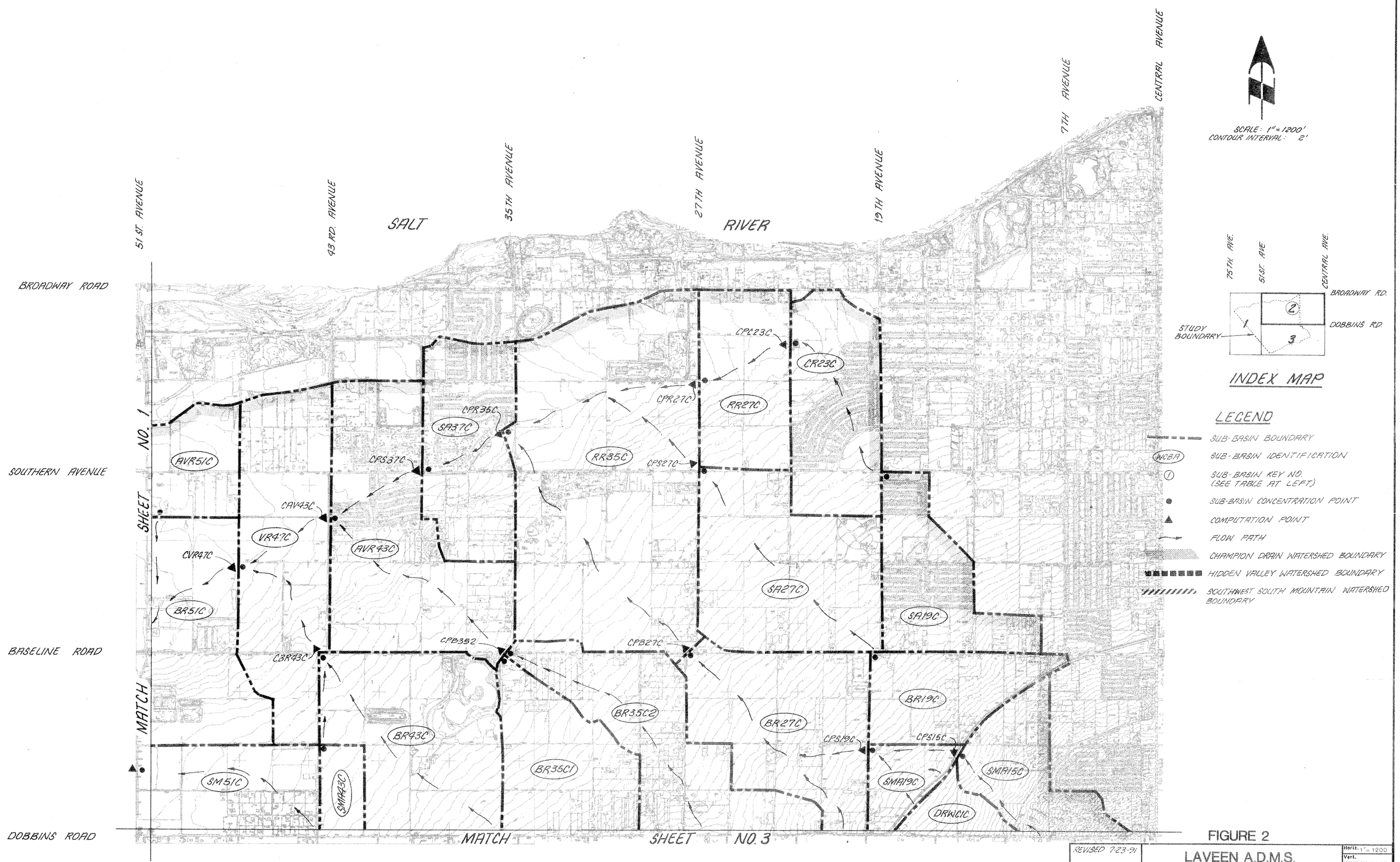


FIGURE 2

REVISED 7-23-91

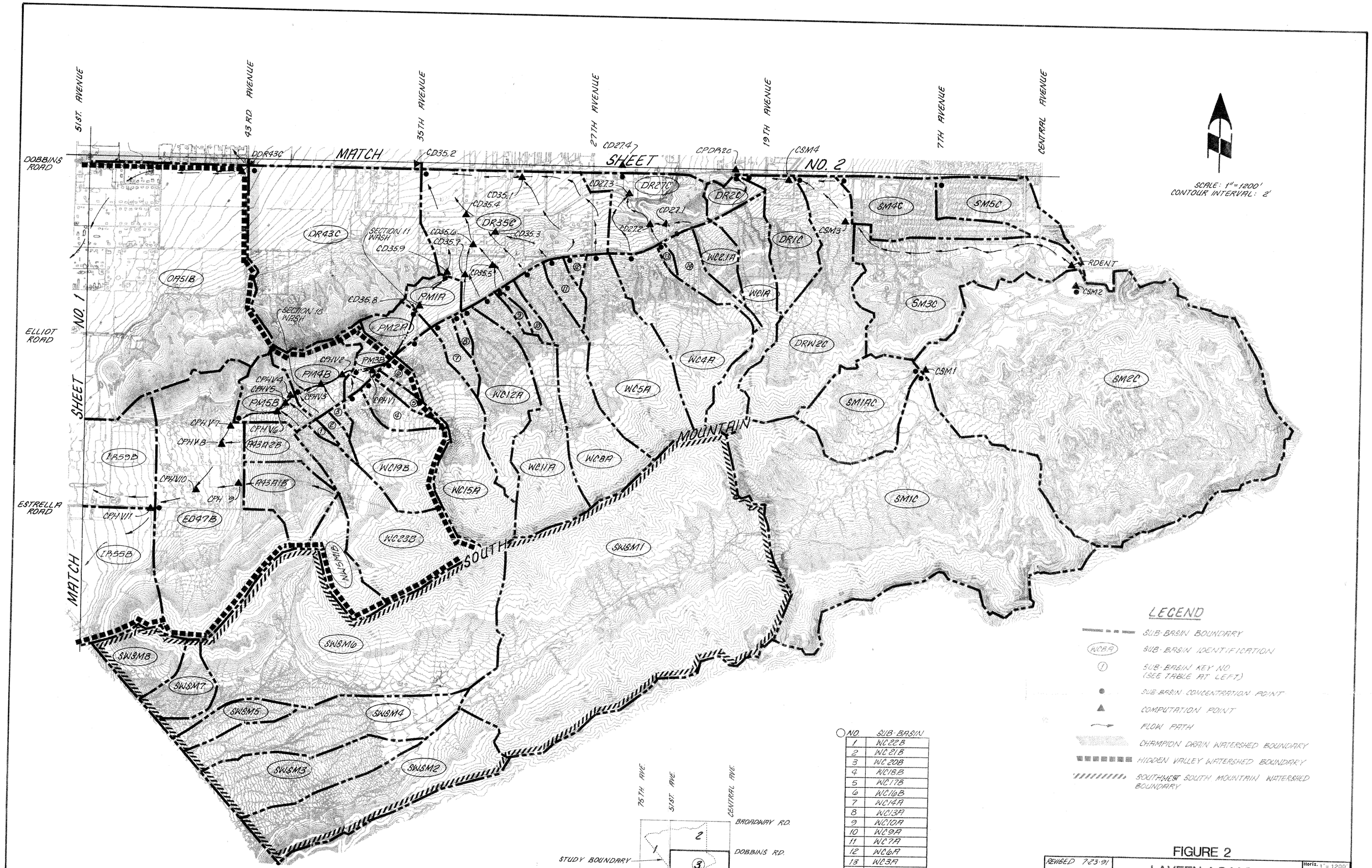
LAVEEN A.D.M.S.

DRAINAGE BASIN MAP

Horiz.	1" = 1200'
Vert.	
Fld.Bk.	Pg.
Design	PJE
Drwn.	DAL
Chkd.	SSS
Date	APR., 1991
Job No.	40916-02-30

CELLA BARR ASSOCIATES 5062 N. 19th Avenue, Phoenix, Arizona 85015 (602)242-2999

SHT. 2 OF 3



NO	SUB-BASIN
1	WC22B
2	WC21B
3	WC20B
4	WC18B
5	WC17B
6	WC16B
7	WC14A
8	WC13A
9	WC10A
10	WC9A
11	WC7A
12	WC6A
13	WC3A
14	WC2A

FIGURE 2

REVISED 7-23-91

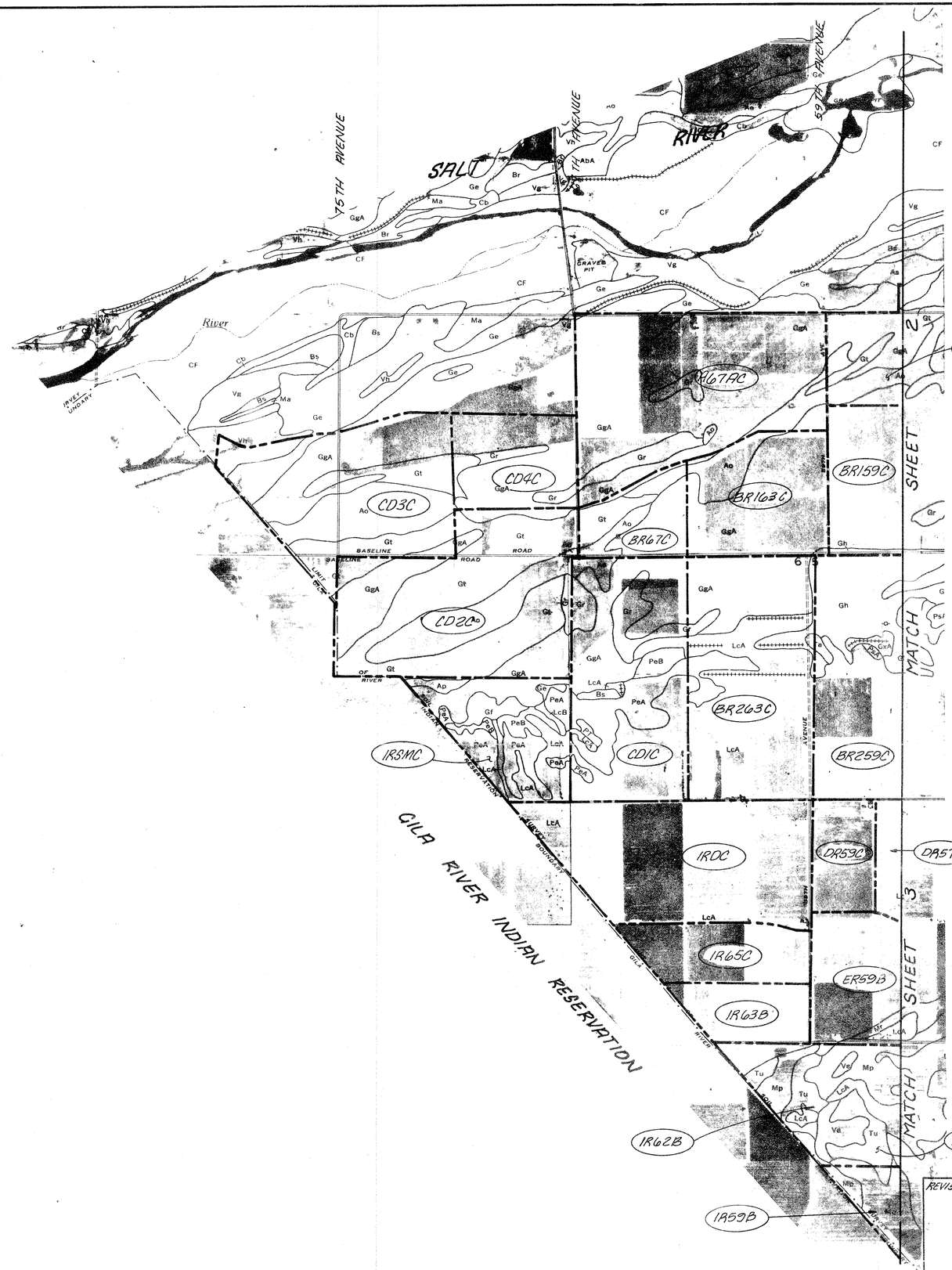
LAVEEN A.D.M.S.

DRAINAGE BASIN MAP

CELLA BARR ASSOCIATES
5062 N. 19th Avenue,
Phoenix, Arizona 85015
(602) 242-9896

SHT. 3 OF 3

Horiz.	1"=1200'
Vert.	
Fld.Bk.	Pg.
Design	PJE
Drwn.	DAL
Chkd.	SSS
Date	APR., 1991
Job No.	

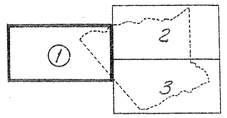


1" = 1200'

LEGEND

SUB-BASIN BOUNDARY

(WCBA) SUB-BASIN IDENTIFICATION



INDEX MAP

FIGURE 3

REVISED 7-23-91

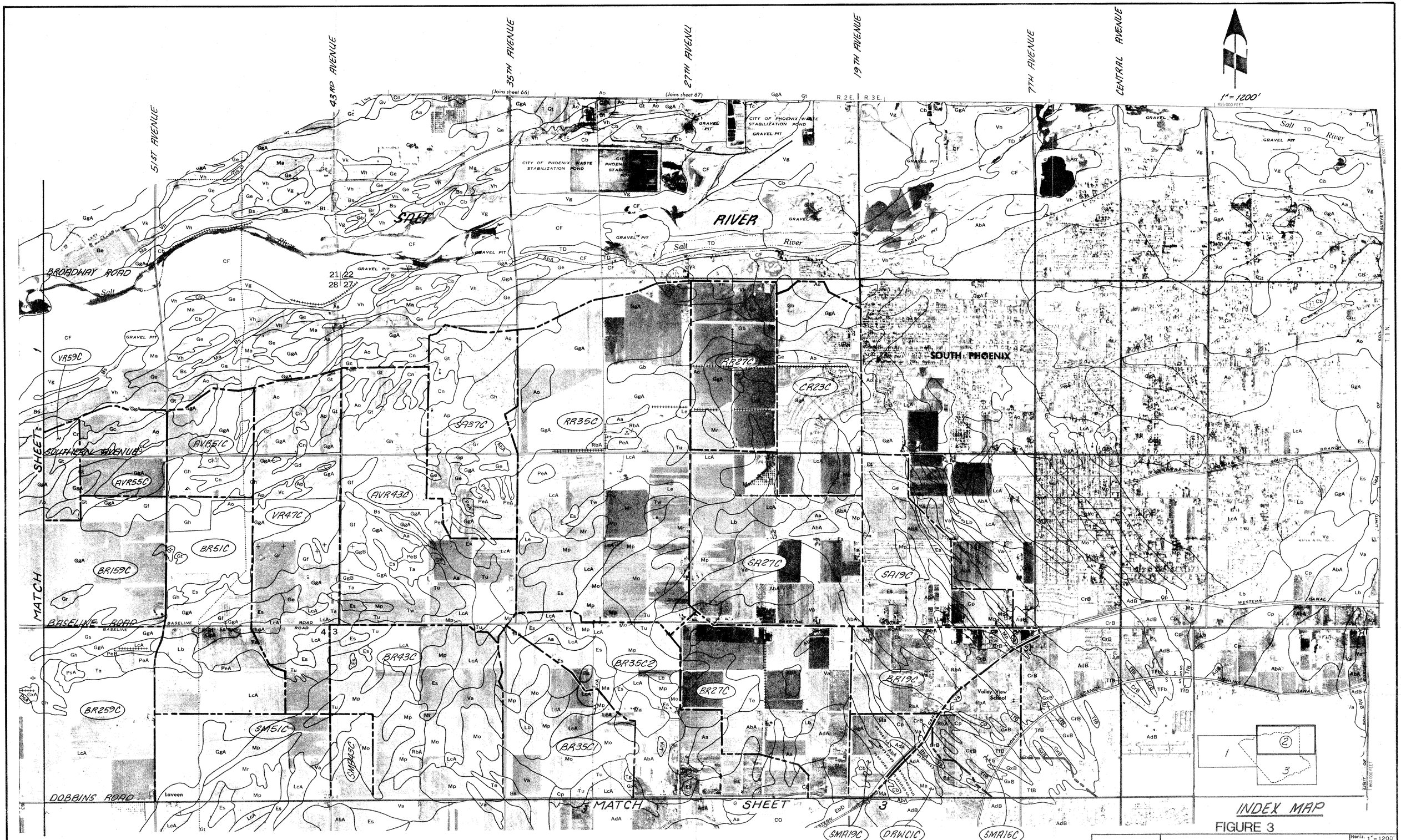
LAVEEN A.D.M.S. SOIL MAP

TAKEN FROM SEPT. 1977 SOIL SURVEY BY
UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

CELLA BARR ASSOCIATES
5052 N. 19th Avenue, Phoenix, Arizona 85015
(602) 242-2999

SHT. 1 OF 3

Horiz.	1" = 1200'
Vert.	
Fld.Bk.	Pg.
Design	PJE
Drwn.	DAL
Chkd.	SSS
Date	APR., 1991
Job No.	40916-02-30



INDEX MAP

FIGURE 3

LEGEND

SUB-BASIN BOUNDARY

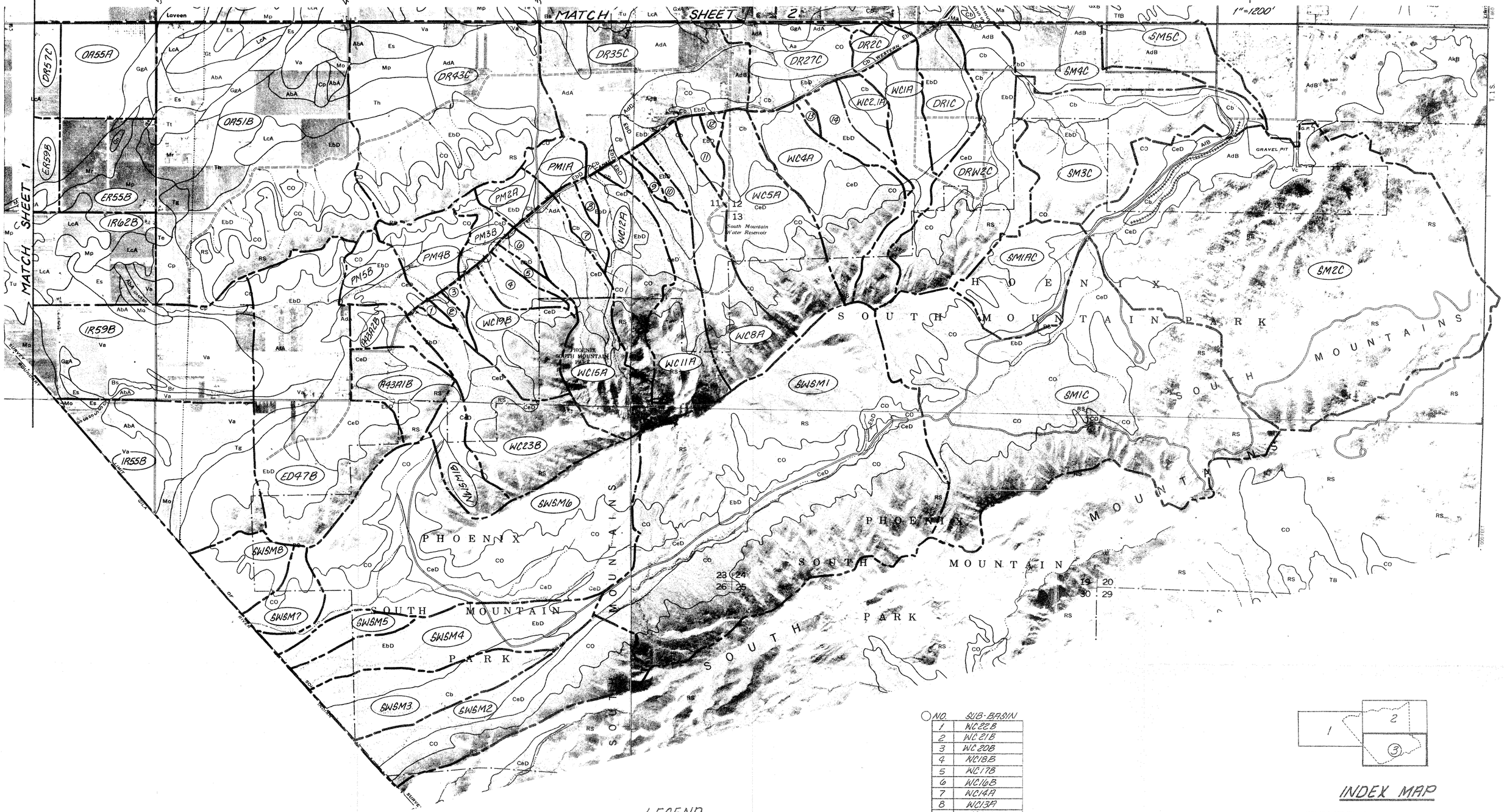
(WCBA) SUB-BASIN IDENTIFICATION

LAVEEN A.D.M.S. SOIL MAP

TAKEN FROM SEPT. 1977 SOIL SURVEY BY UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

CELLA BARR ASSOCIATES
5062 N. 19th Avenue, Phoenix, Arizona 85015
(602) 242-7999

Horiz.	1" = 1200'
Vert.	
Fld. Bk.	Pg.
Design	PJE
Drwn.	DAL
Chkd.	SSS
Date	APR., 1991
Job No.	40916-02-30
SHT.	2
OF	3



NO.	SUB-BASIN
1	WC22B
2	WC21B
3	WC20B
4	WC18B
5	WC17B
6	WC16B
7	WC14A
8	WC13A
9	WC10A
10	WC9A
11	WC7A
12	WC6A
13	WC3A
14	WC2A

LEGEND

SUB-BASIN BOUNDARY

(WC8A) SUB-BASIN IDENTIFICATION

(1) SUB-BASIN KEY NO. (SEE TABLE AT LEFT)

INDEX MAP

FIGURE 3

REVISED 7-23-91

LAVEEN A.D.M.S. SOIL MAP

TAKEN FROM SEPT. 1977 SOIL SURVEY BY UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

CELLA BARR ASSOCIATES
5062 N. 19th Avenue, Phoenix, Arizona 85015
(602) 242-2999

SHT. 3 OF 3

Horiz.	1" = 1200'
Vert.	
Fld.Bk.	Pg.
Design	PJE
Drwn.	DAL
Chkd.	SSS
Date	APR., 1991
Job No.	40916-02-30

Clouse Engineering, Inc.

ENGINEERS ▪ SURVEYORS

From the desk of

506-1501

LAUREN ADMS A117.301

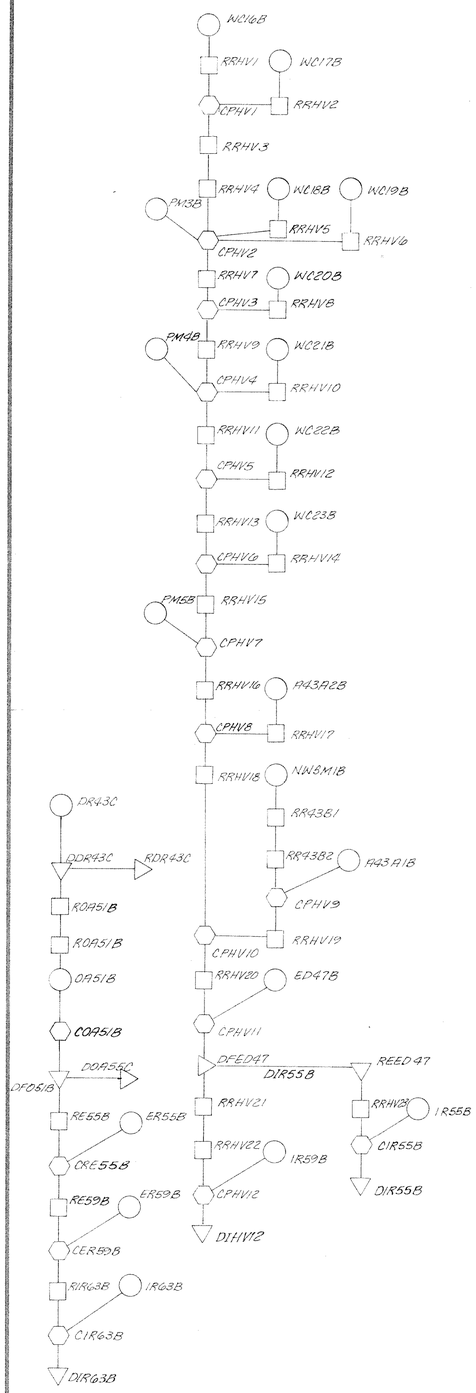
LAUREN ADMP A117.910

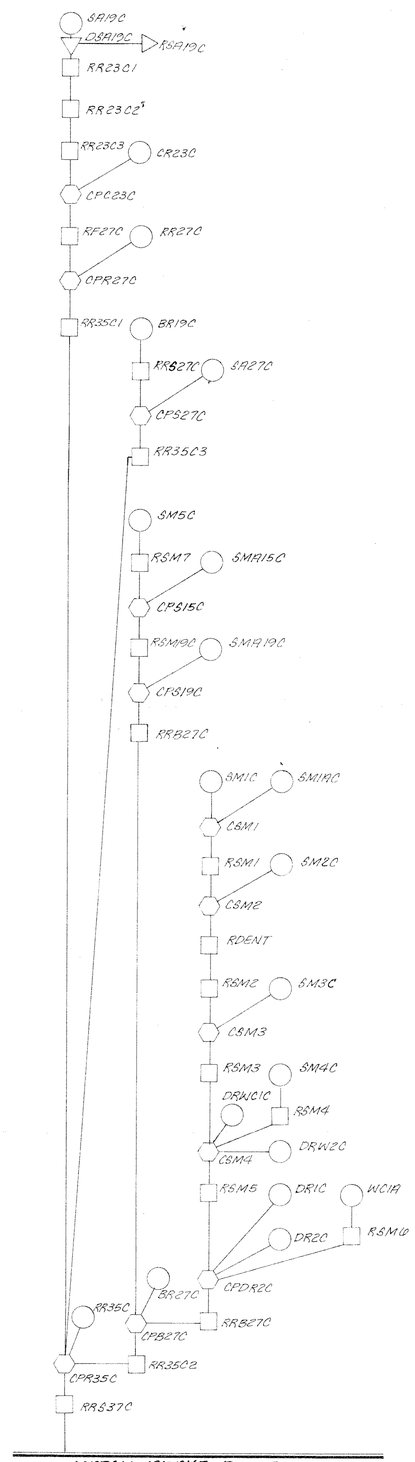
LAUREN HYDROLOGY REPORT CDA 117.1

1642 E. Orangewood Ave. ▪ Phoenix, Arizona 85020 ▪ TEL (602) 395-9300 ▪ FAX (602) 395-9310

CHAMPION DRAIN WATERSHED

HIDDEN VALLEY WATERSHED





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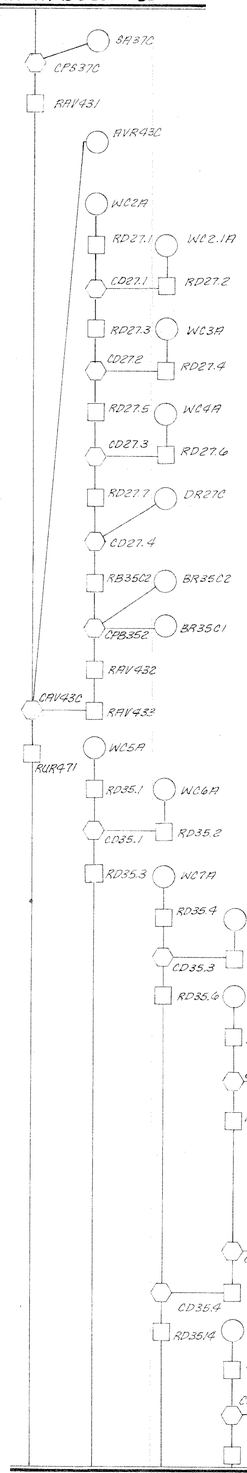
MATCH BELOW LEFT



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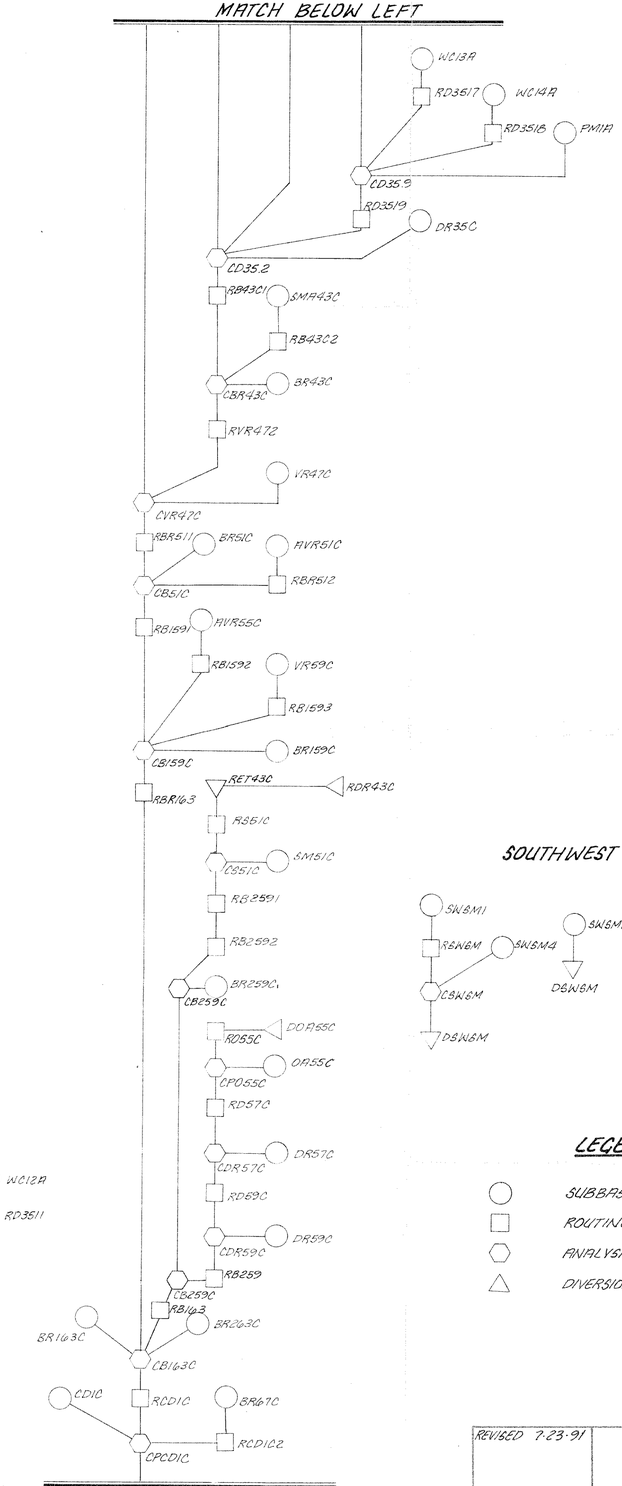

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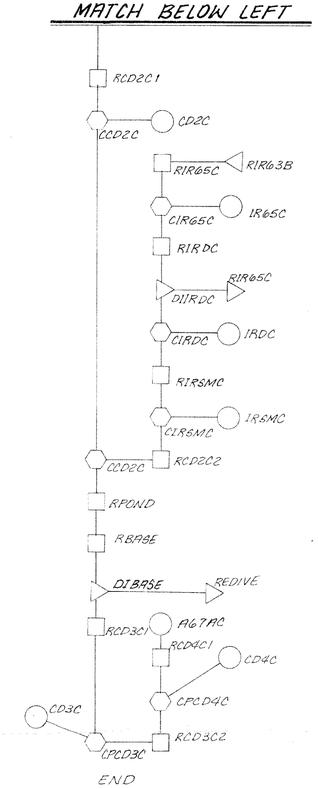

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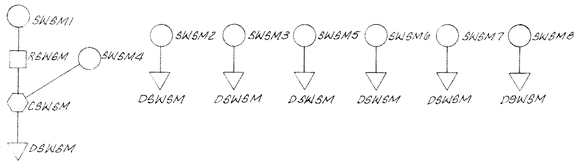


LEGEND

- ○ SUBBASIN RUNOFF COMPONENT
- □ ROUTING COMPONENT
- ⬡ ANALYSIS POINT AND HYDROGRAPH COMBINATION
- △ DIVERSION COMPONENT

FIGURE 6

REVISED 7-23-91

LAVEEN A.D.M.S.

DRAINAGE MODEL SCHEMATIC DIAGRAM

Horiz.	N/A
Vert.	N/A
Fld.Bk.	Pg.
Design	PJE
Drwn.	DAL
Chkd.	SSS
Date	MAY, 1991
Job No.	40916-02-3D
SHT.	1
OF	1

CBA CELLA BARR ASSOCIATES
5062 N 19th Avenue
Phoenix, Arizona 85015
(602) 242-2999

APPENDIX A

PRECIPITATION DATA

SUBJECT: LAVEEN ADMS

JOB NO.: 40916-02-30

6-HOUR MAP VALUES

Return Frequency	2-Yr.	5-Yr.	10-Yr	25-Yr	50-Yr	100-Yr
LOW	1.20	1.75	2.15	2.60	3.10	3.5
HIGH	1.25	1.75	2.15	2.70	3.10	3.5
AVG.	1.22	1.75	2.15	265	3.10	3.5

$$2\text{-Yr (1-hour)} = -0.011 + 0.942\left((1.22)^2/1.6\right)$$
$$= 0.87 \text{ IN}$$

24-HOUR MAP VALUES

Return Frequency	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr.
LOW	1.60	2.10	2.60	3.20	3.60	4.20
HIGH	1.60	2.10	2.70	3.40	3.80	4.20
AVG.	1.60	2.10	2.65	3.30	3.70	4.20

$$100\text{-Yr (1-hour)} = 0.494 + 0.755\left((3.5)^2/4.2\right)$$
$$= 2.70$$

PREPARED BY: SA DATE: 8/21/90 CHECKED BY: PJE SHEET NO.: OF

CELLA BARR ASSOCIATES
5062 North 19th Avenue
Phoenix, Arizona 85015
(602) 242-2999

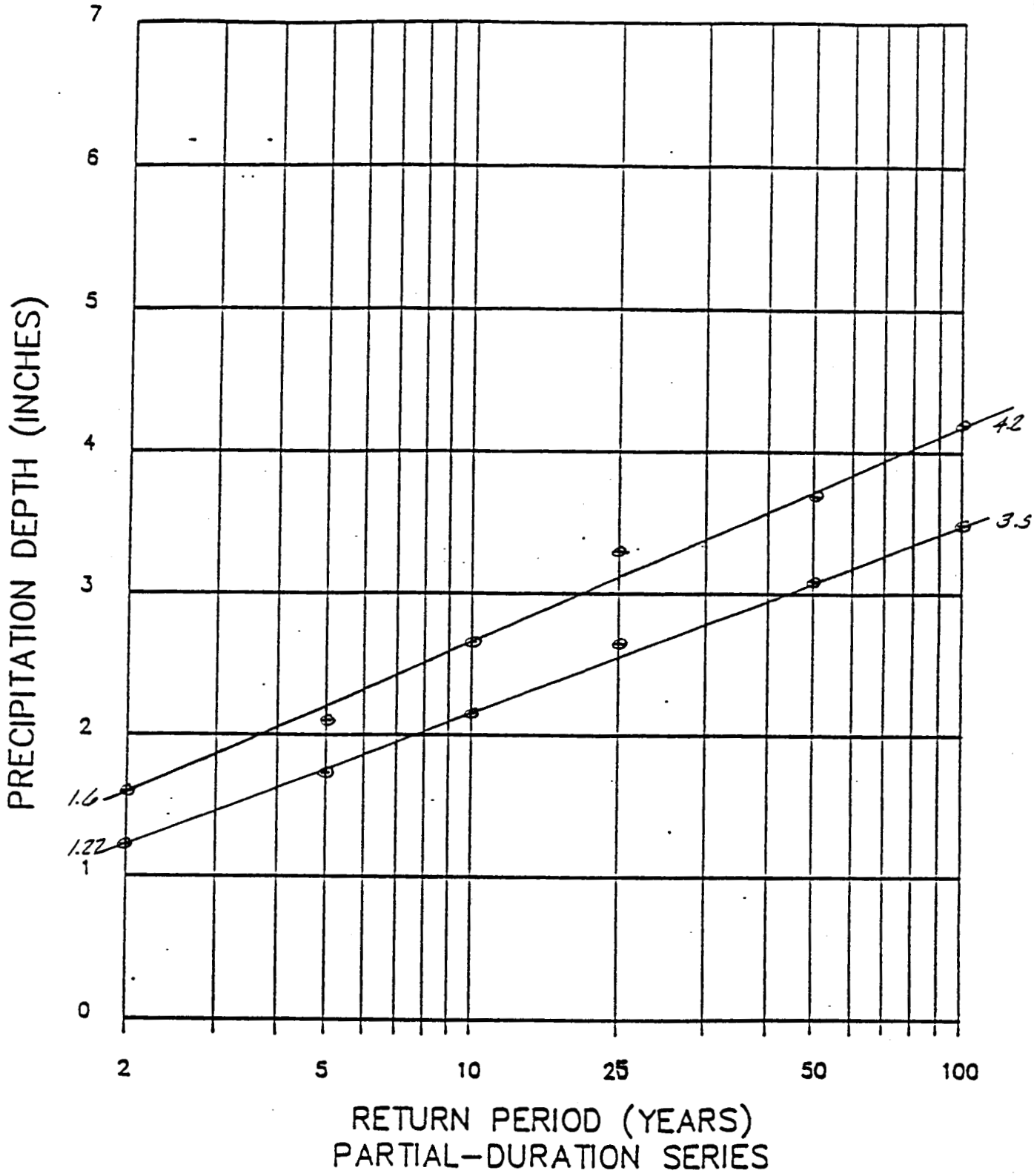
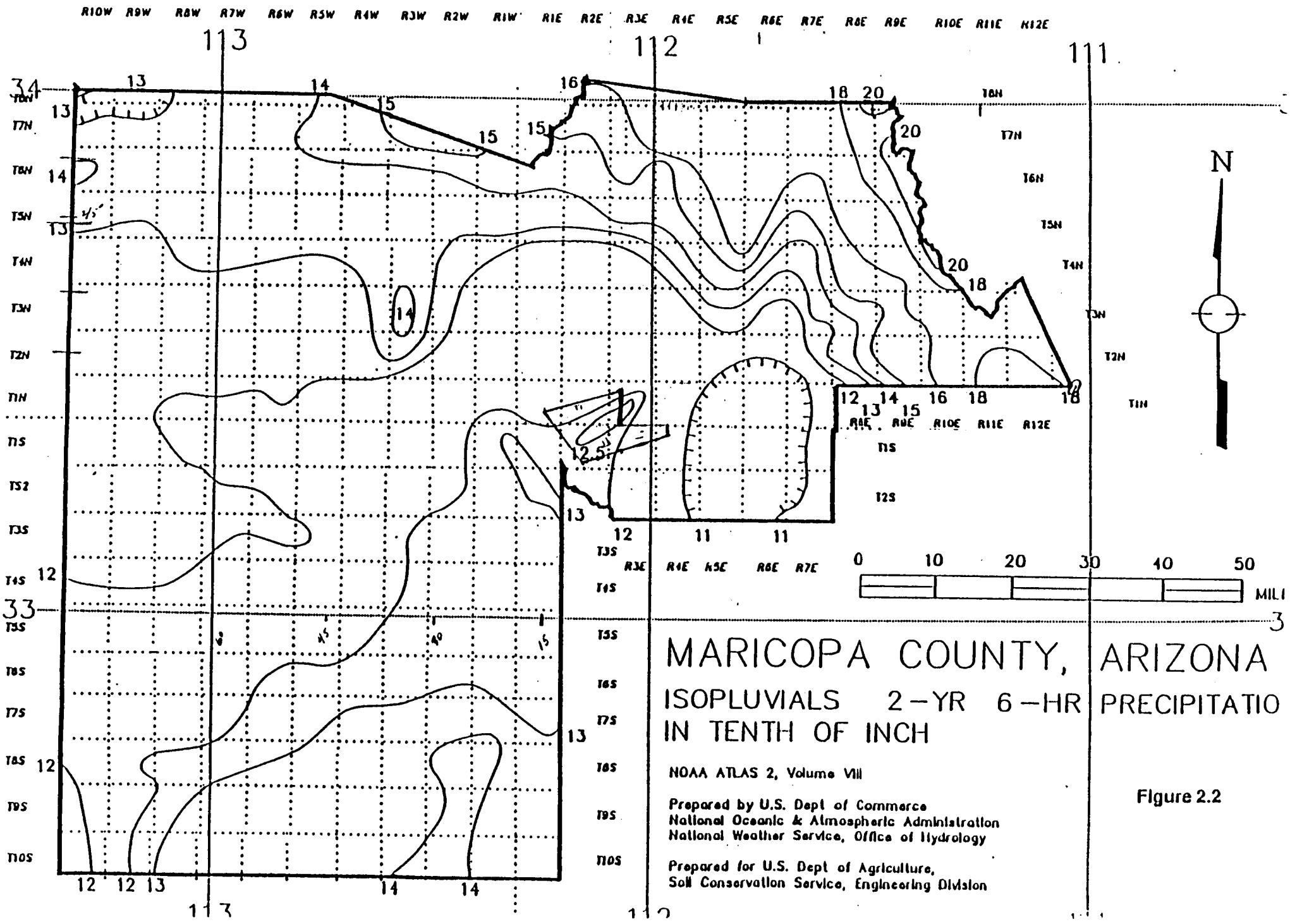


Figure 2.14
Percipitation Depth versus Return Period for Partial-Duration Series

LAVEEN ADMS
40916-02-30

8/21/90 PJE


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 2-YR 6-HR PRECIPITATIO
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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0 10 20 30 40 50
MILI
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S
113
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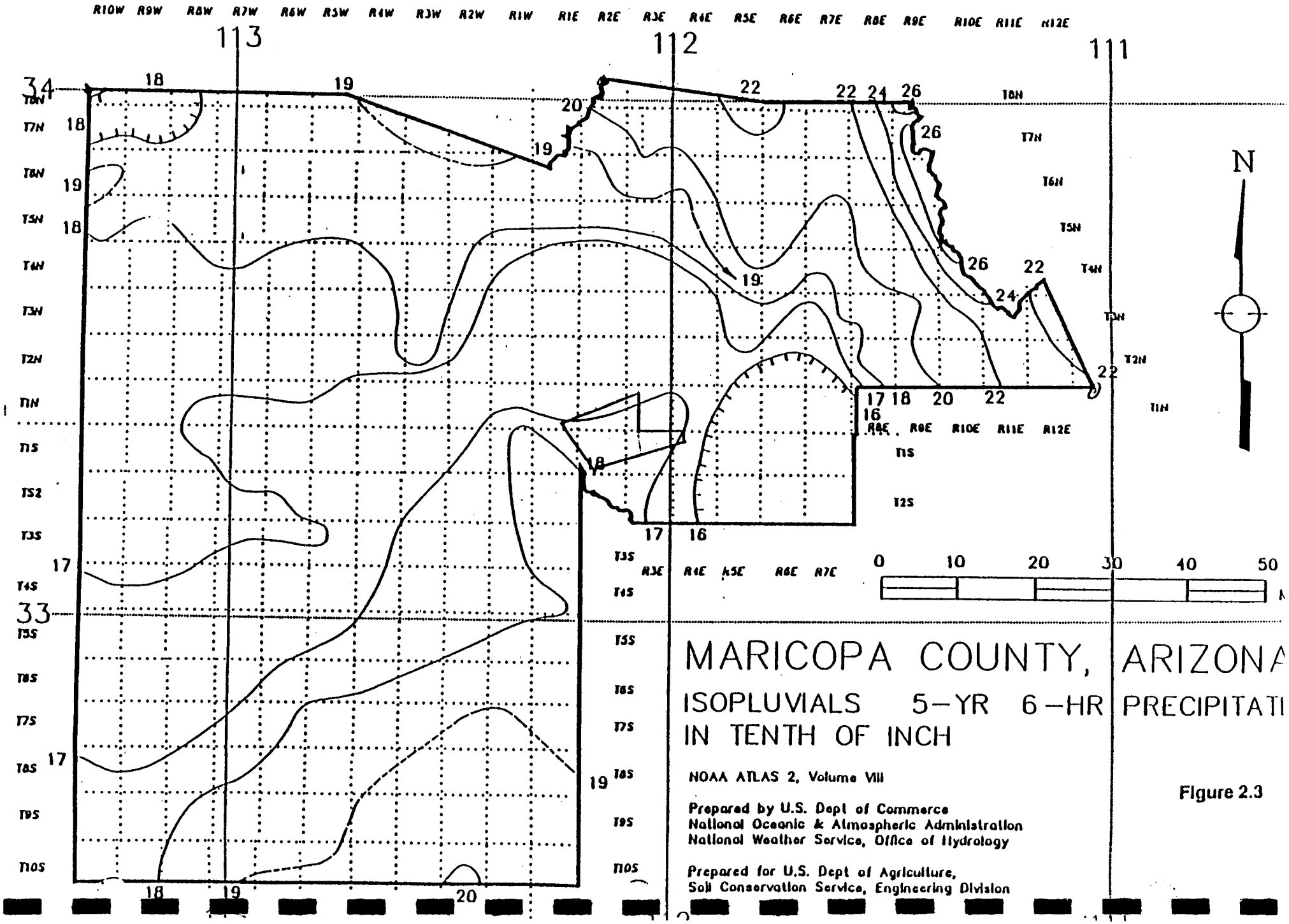
Figure 2.2



MARICOPA COUNTY, ARIZONA

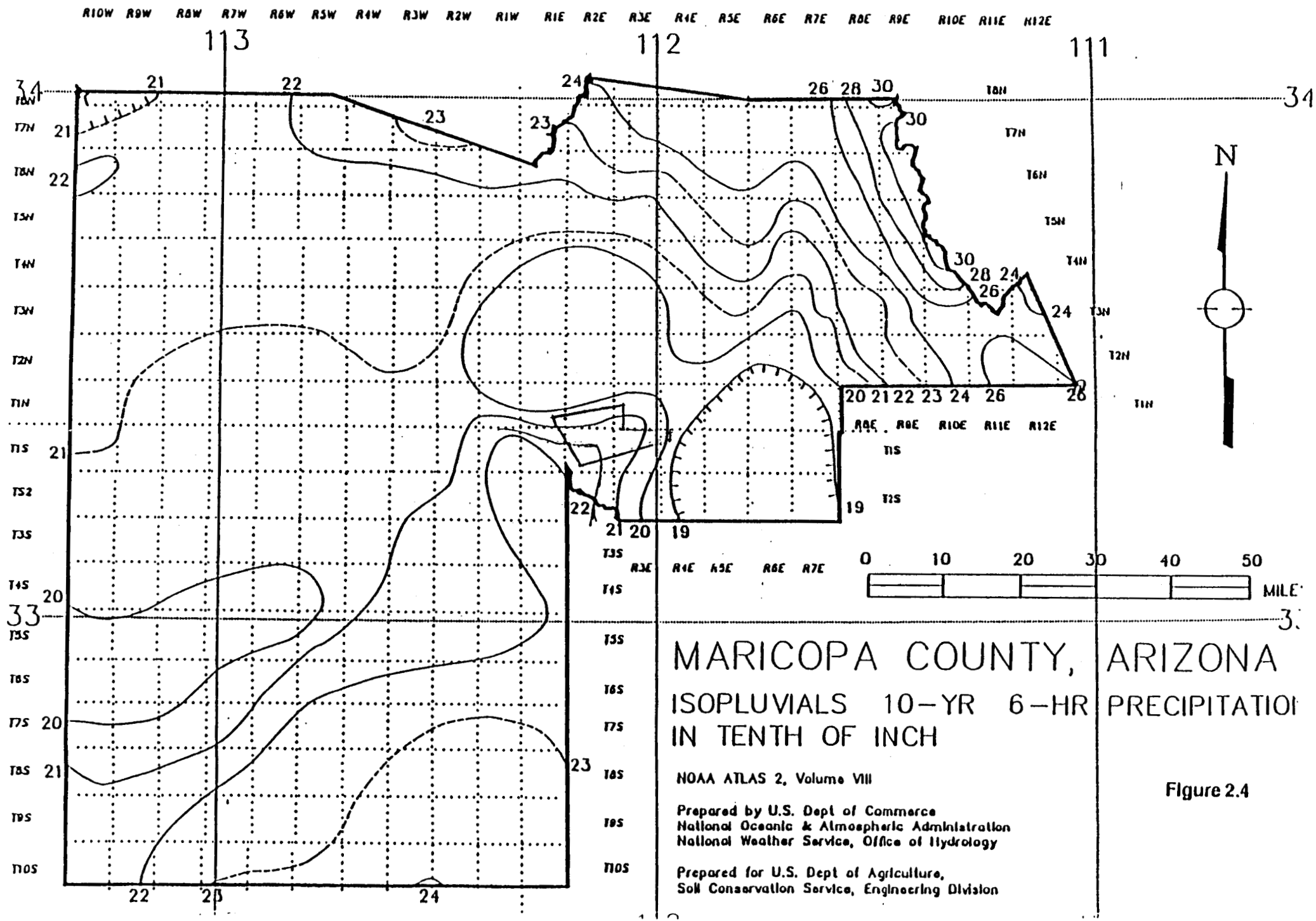
ISOPLUVIALS 5-YR 6-HR PRECIPITATI
IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.3


MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 10-YR 6-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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34
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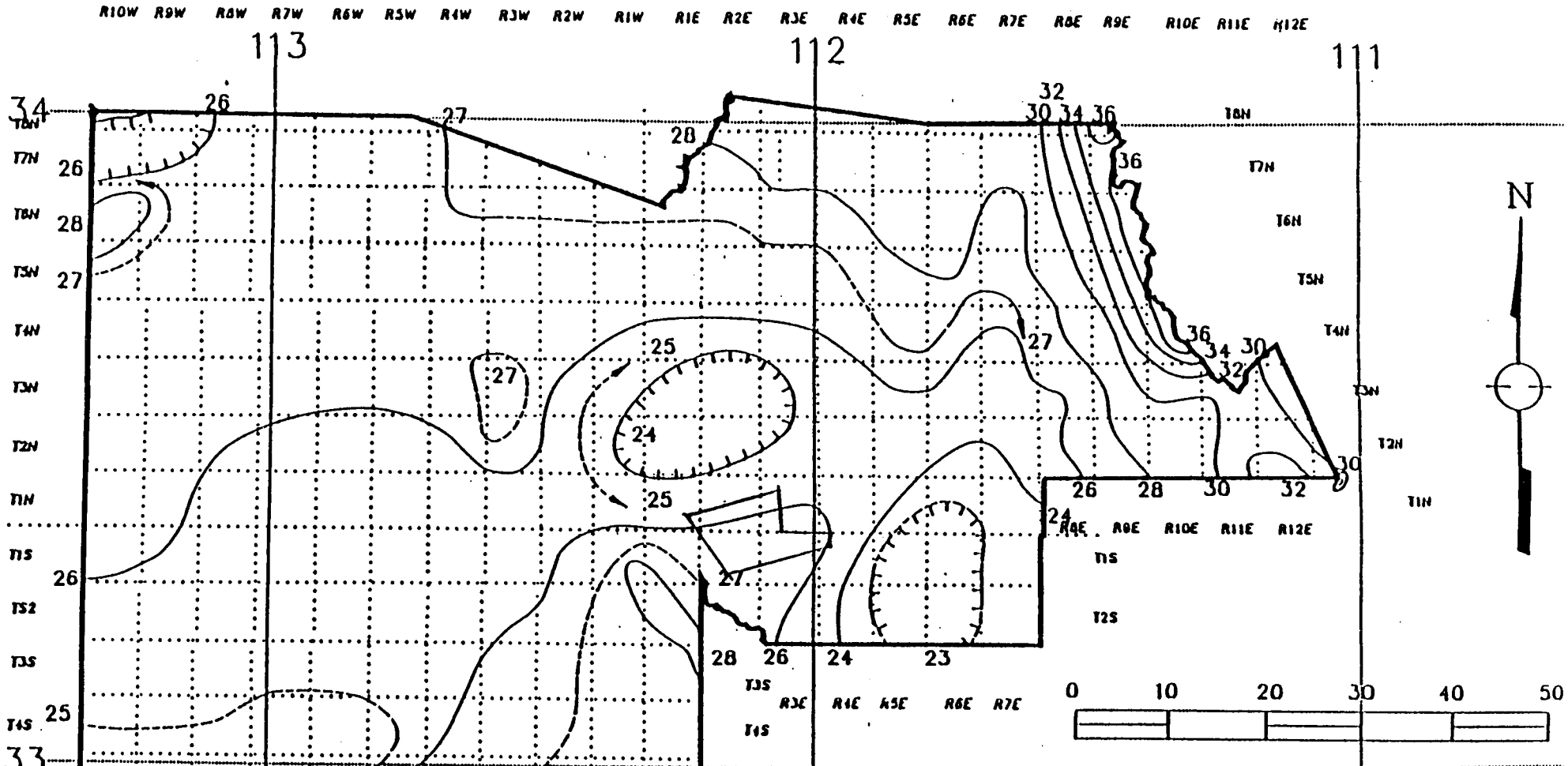
Figure 2.4



MARICOPA COUNTY, ARIZONA

ISOPLUVIALS 25-YR 6-HR PRECIPITATION IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.5

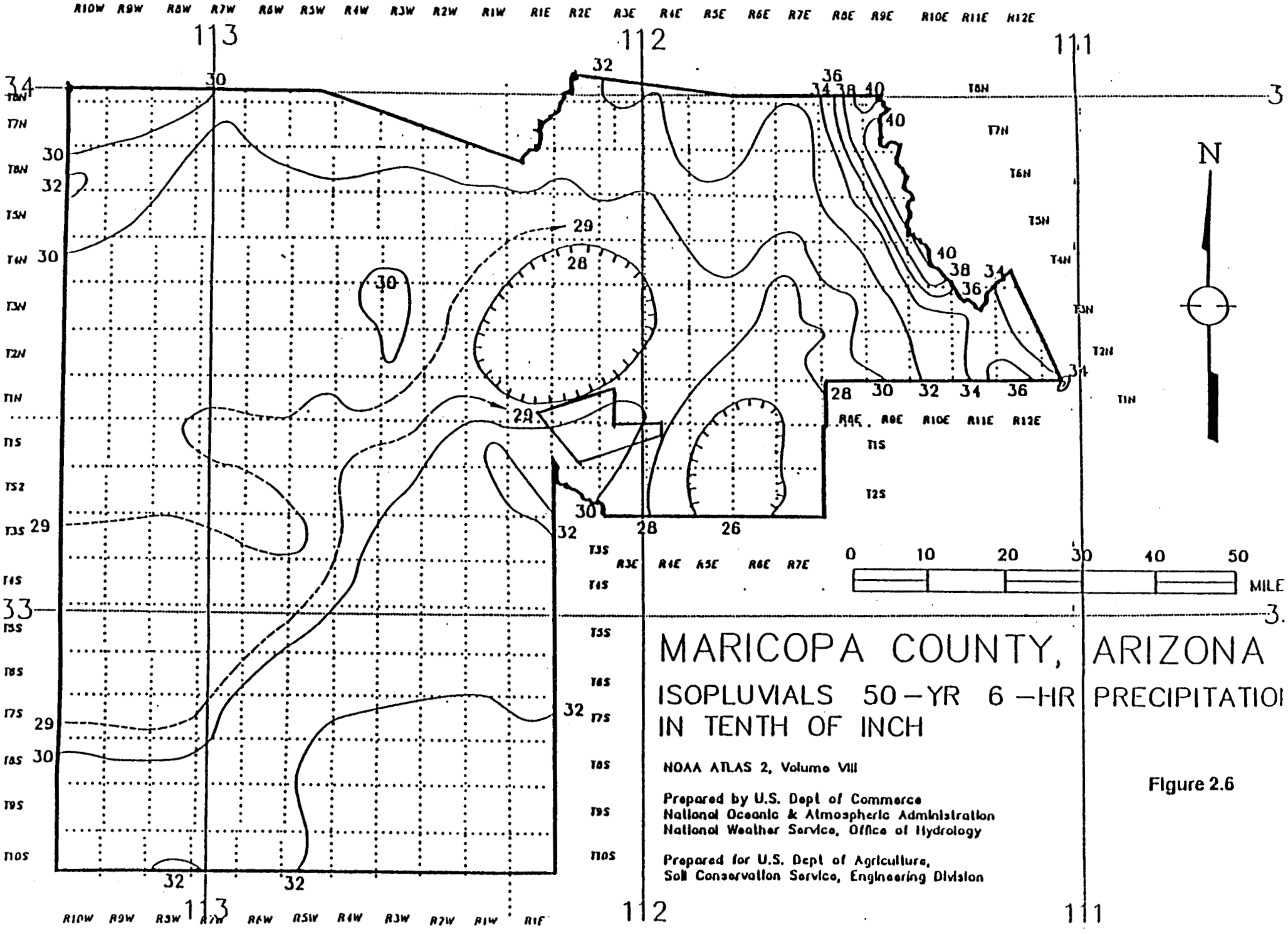
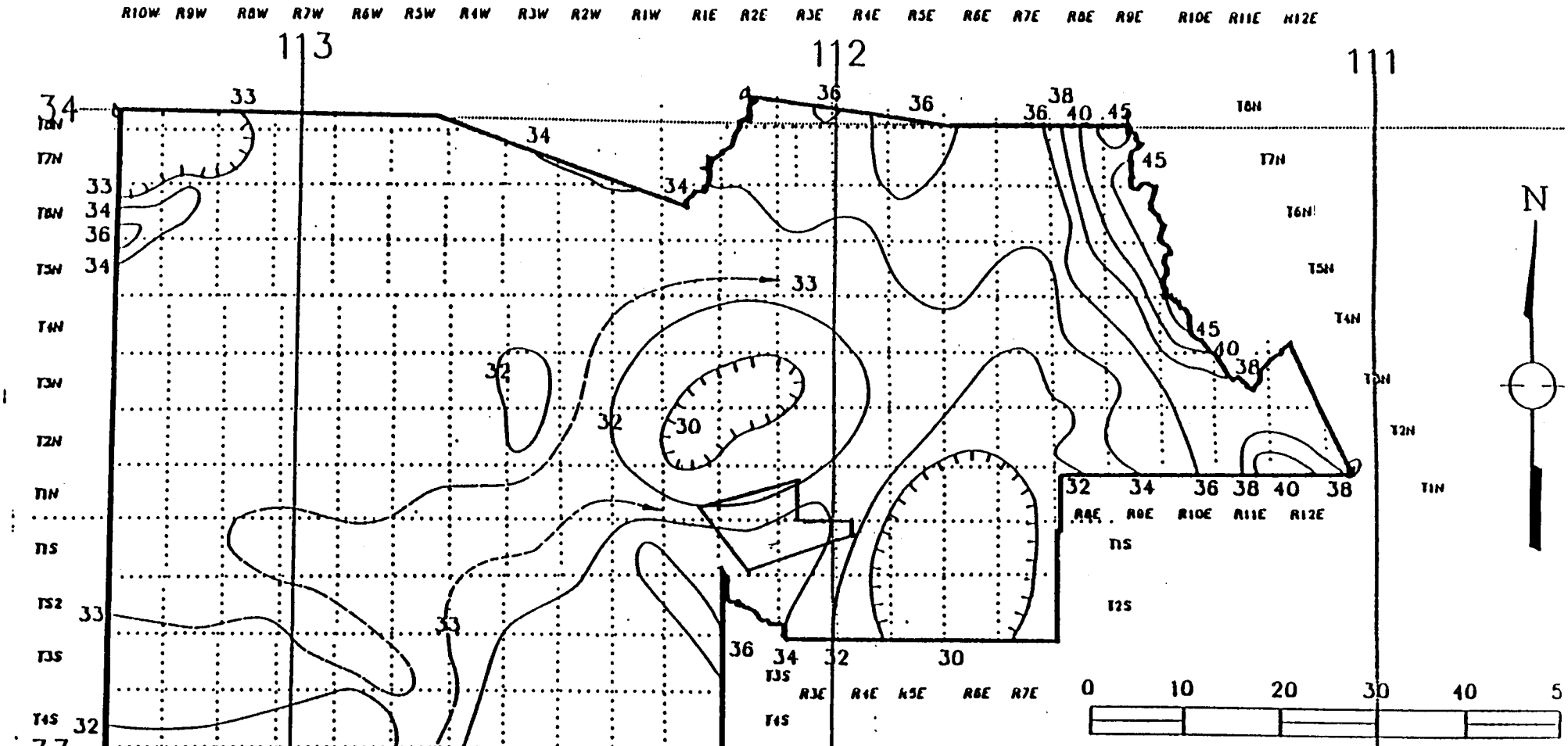

MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 50-YR 6-HR PRECIPITATIOI
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
N
0 10 20 30 40 50
MILE
113
112
111
34
33
R10W R9W R8W R7W R6W R5W R4W R3W R2W R1W R1E R2E R3E R4E R5E R6E R7E R8E R9E R10E R11E R12E
T8N T7N T6N T5N T4N T3N T2N T1N T1S T2S T3S T4S T5S T6S T7S T8S T9S T10S

Figure 2.6



MARICOPA COUNTY, ARIZON

ISOPLUVIALS 100-YR 6-HR PRECIPITA IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.7

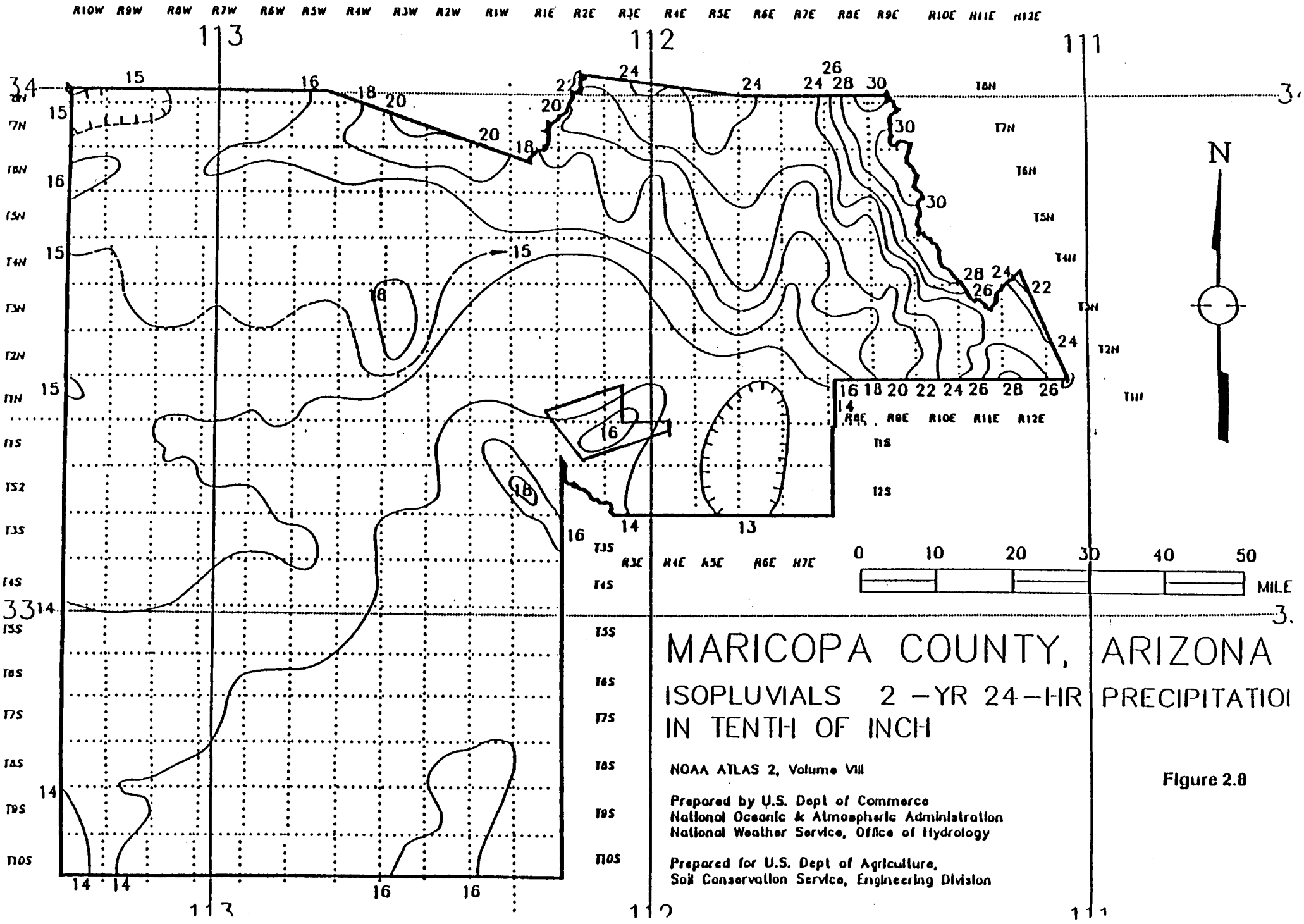

MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 2 -YR 24-HR PRECIPITATIOI
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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Figure 2.8

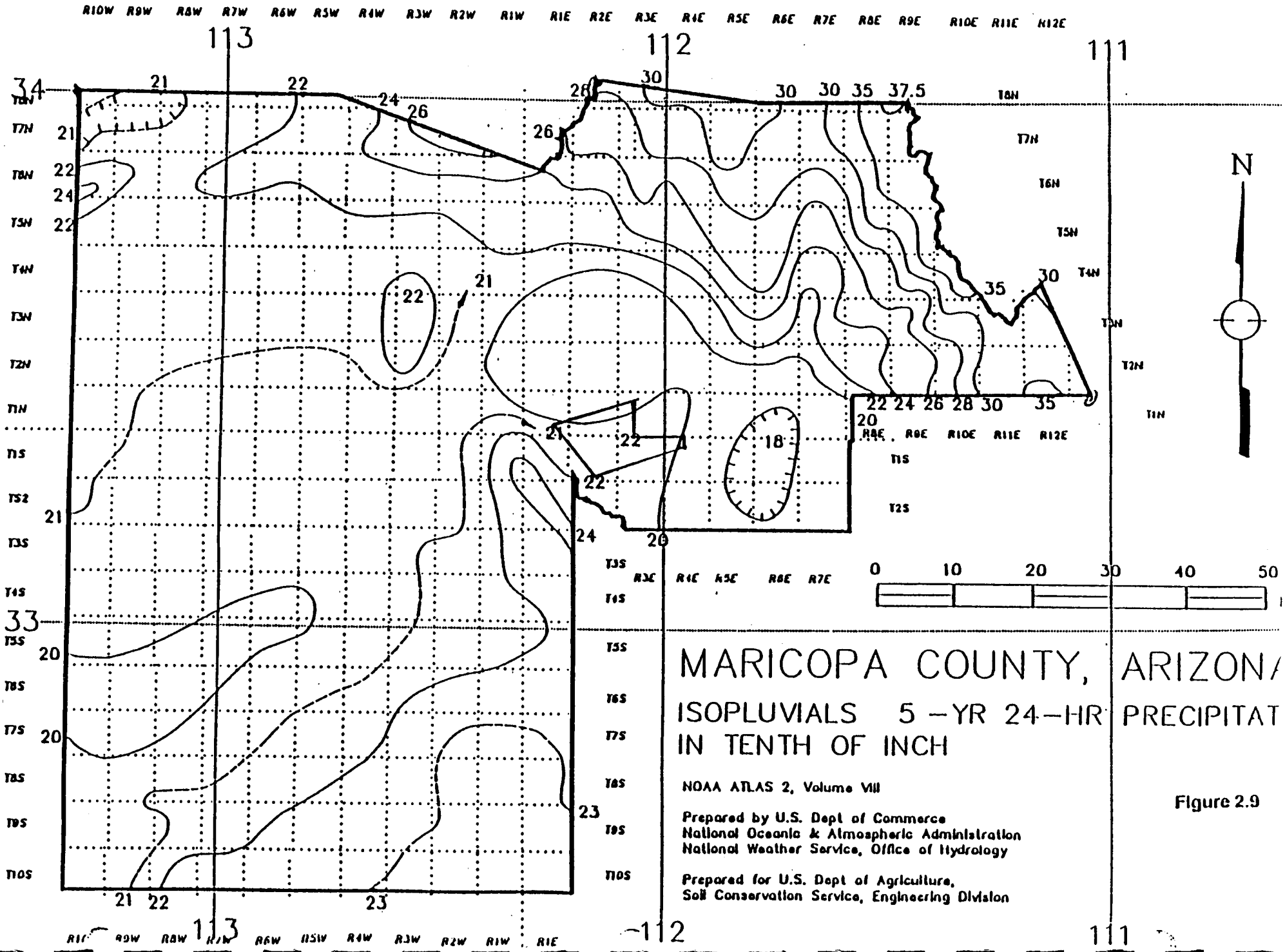
MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 5 –YR 24–HR PRECIPITAT
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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Figure 2.9

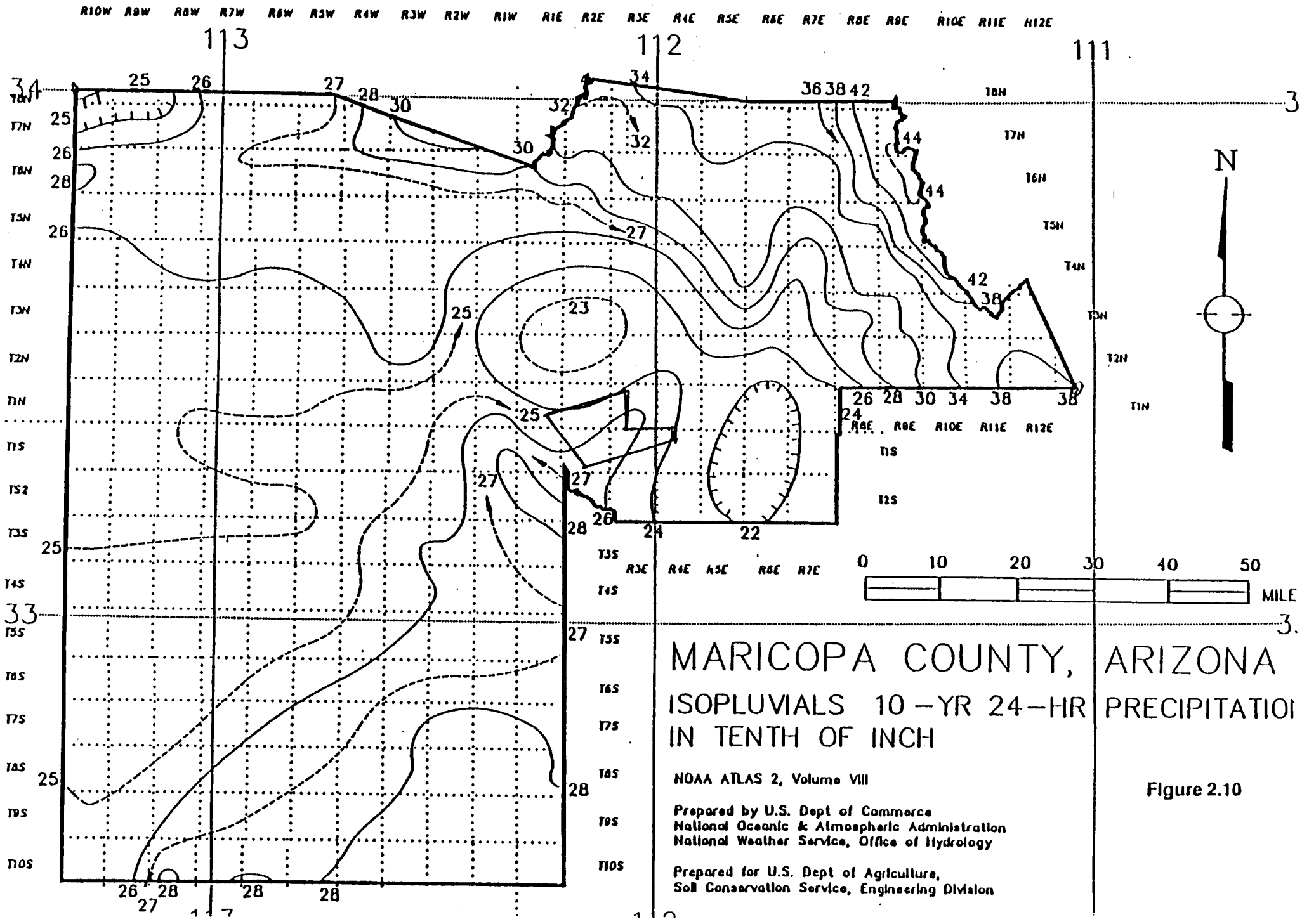
MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 10-YR 24-HR PRECIPITATION
IN TENTH OF INCH
NOAA ATLAS 2, Volume VIII
Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division
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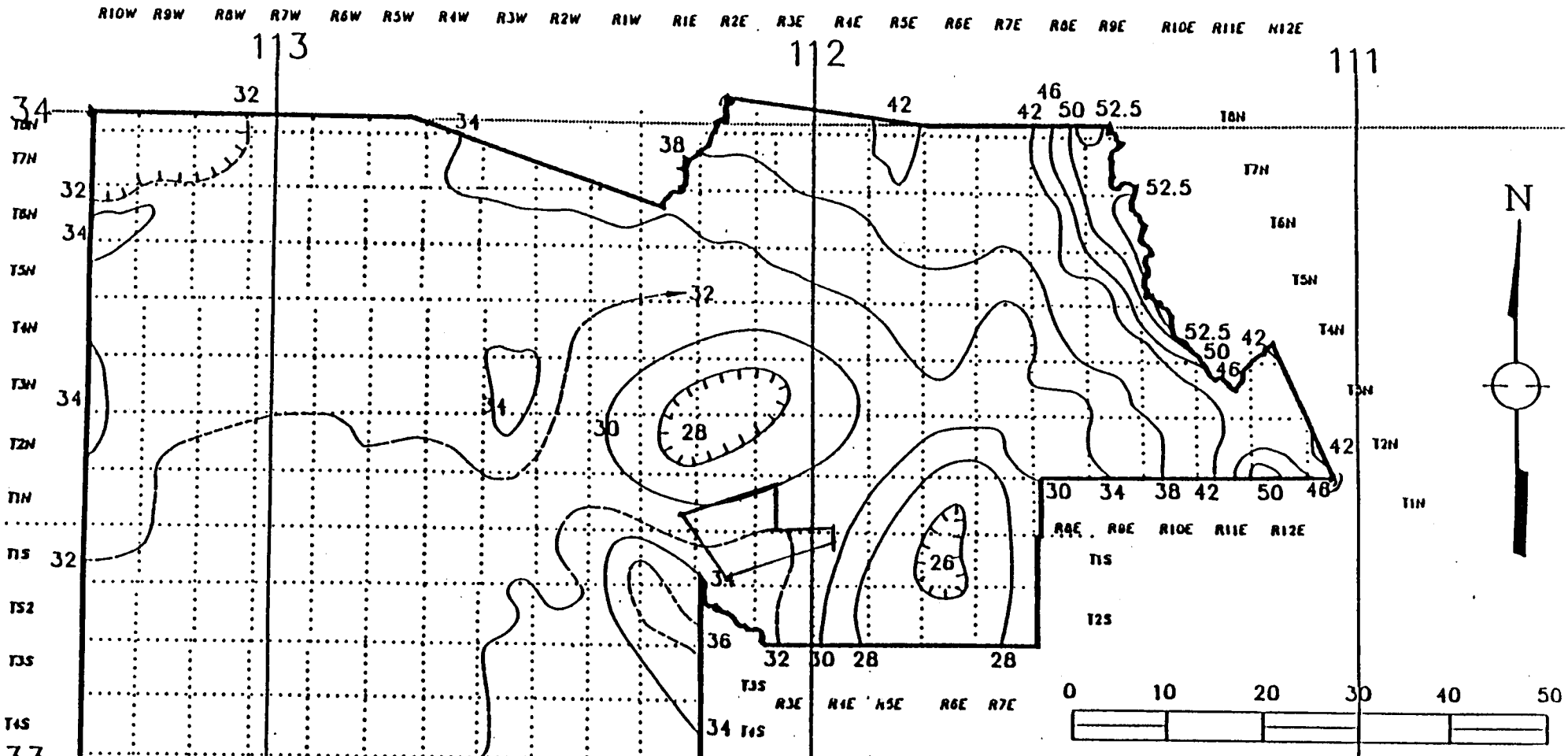
Figure 2.10



MARICOPA COUNTY, ARIZONA

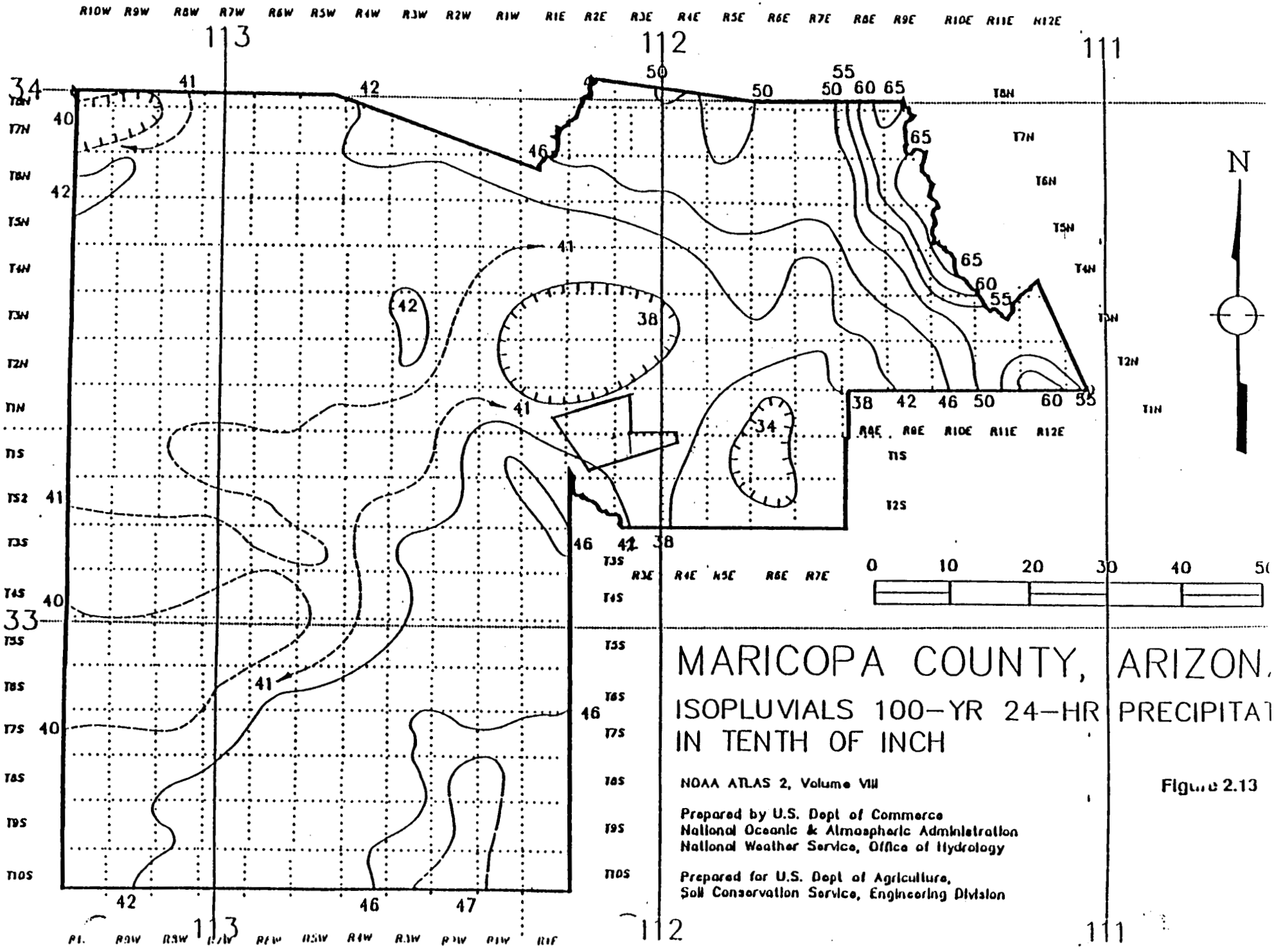
ISOPLUVIALS 25-YR 24-HR PRECIPITATION IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.11



MARICOPA COUNTY, ARIZONA

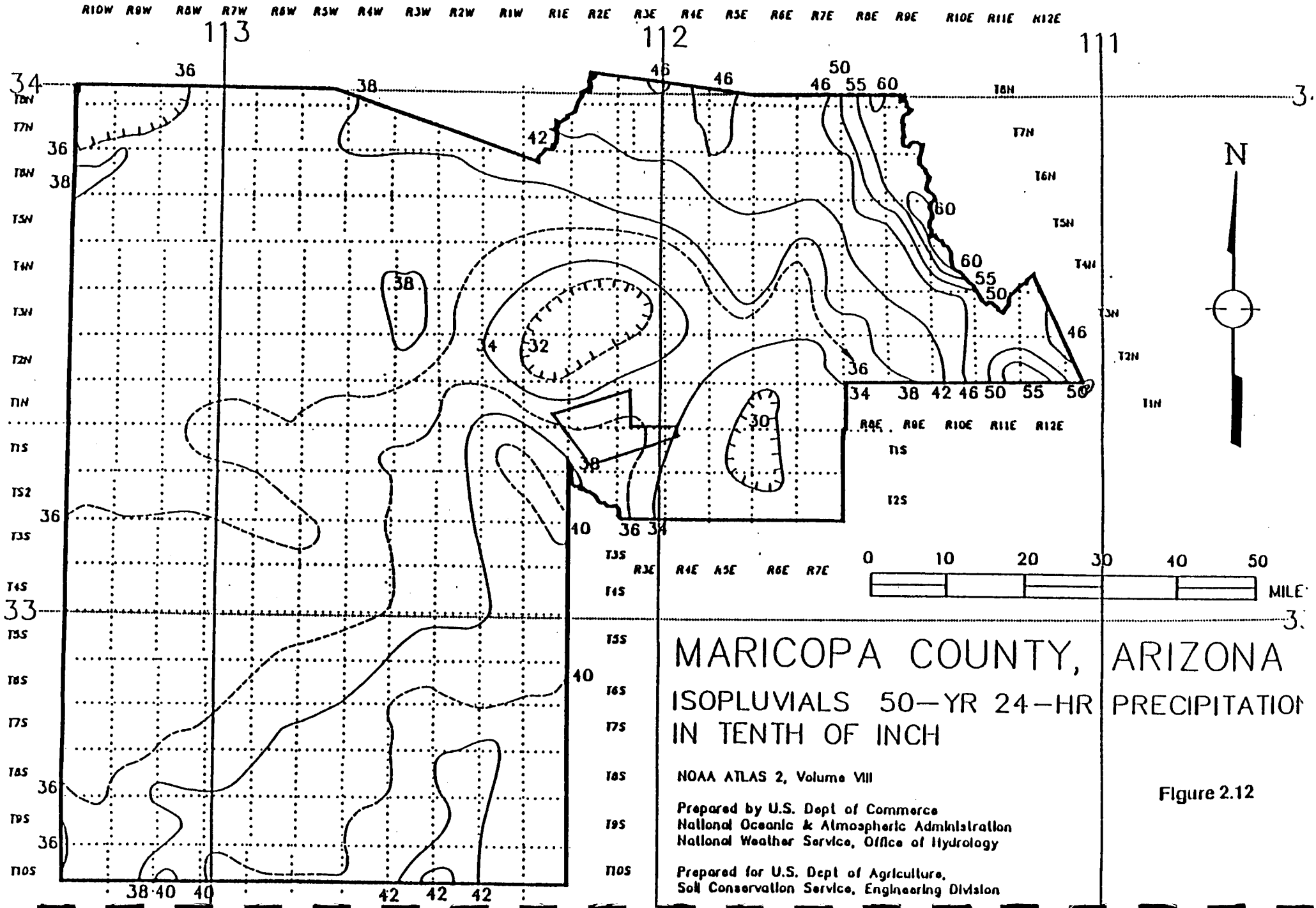
ISOPLUVIALS 100-YR 24-HR PRECIPITATION IN TENTH OF INCH

NOAA ATLAS 2, Volume VIII

Prepared by U.S. Dept of Commerce
National Oceanic & Atmospheric Administration
National Weather Service, Office of Hydrology

Prepared for U.S. Dept of Agriculture,
Soil Conservation Service, Engineering Division

Figure 2.13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MARICOPA COUNTY, ARIZONA
ISOPLUVIALS 50—YR 24—HR PRECIPITATION
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Figure 2.12

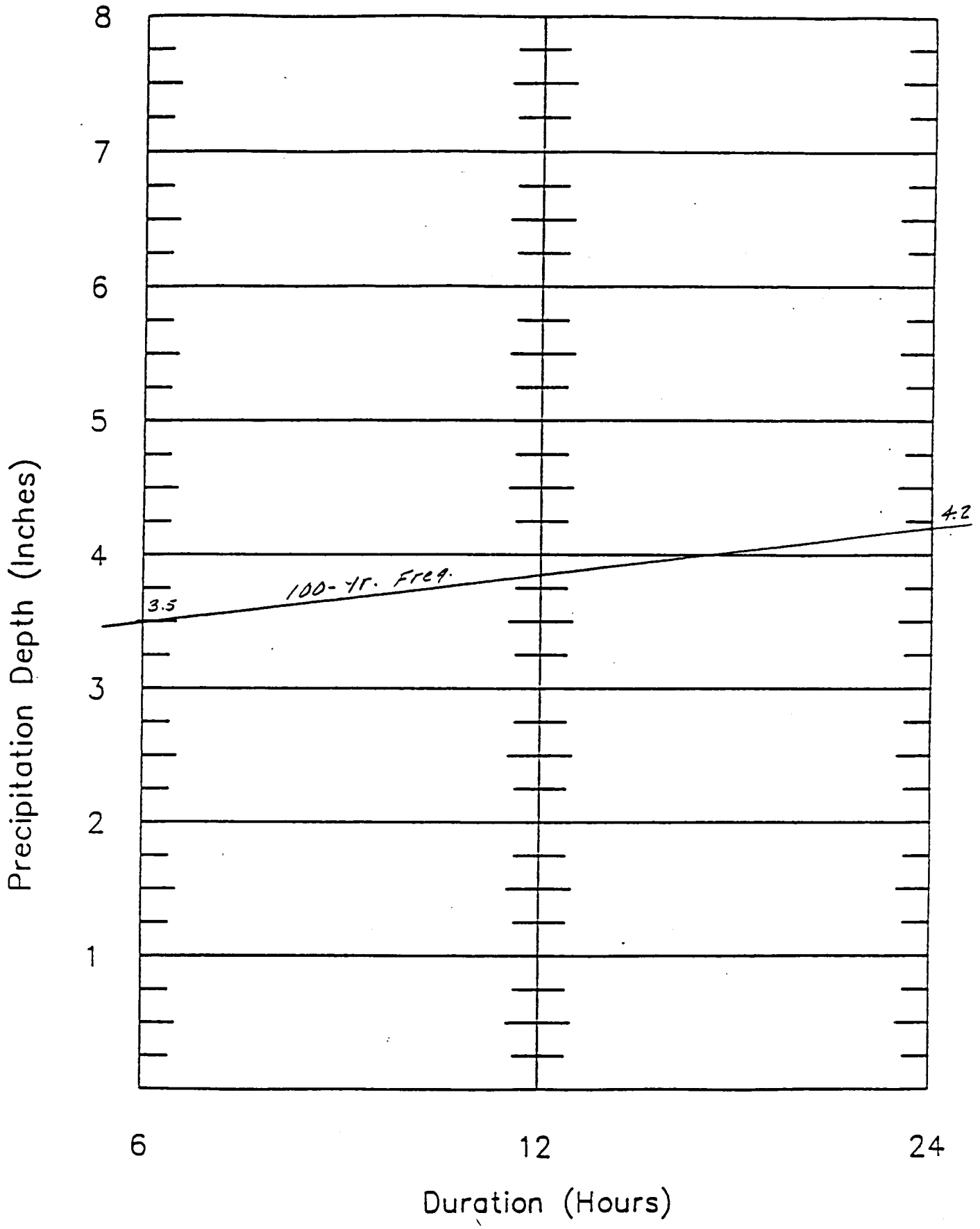

Figure 2.15
Percipitation Depth-Duration Diagram (6 to 24 hour)

 LAVEEN ADMS 40916-02-30

APPENDIX B

Sub-basins Land Classification

Weighted Resistance Coefficient

Weighted Surface Retention Loss

HIDDEN VALLEY WATERSHED

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC16B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC17B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC18B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC19B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC22B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC21B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC20B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC23B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
PM3B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
PM4B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
PM5B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
NWSM1B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
A43A1B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
A43A2B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
ED47B	RURAL (RESIDENTIAL)	25%	-0.01	0.06	-0.00250	0.015	0.50	0.13
	AGRICULTURE	25%	-0.01375	0.08	-0.00344	0.020	0.50	0.13
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	50%	-0.0194	0.11	-0.00970	0.055	0.15	0.08
	TOTAL WEIGHTED VALUES:				-0.01564	0.090		0.33

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
IR59B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
IRSSB	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	95%	-0.01375	0.08	-0.01306	0.076	0.50	0.48
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	5%	-0.0194	0.11	-0.00097	0.006	0.15	0.01
	TOTAL WEIGHTED VALUES:				-0.01403	0.082		0.48

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
OASIB	RURAL (RESIDENTIAL)	15%	-0.01	0.06	-0.00150	0.009	0.50	0.08
	AGRICULTURE	45%	-0.01375	0.08	-0.00619	0.036	0.50	0.23
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	40%	-0.0194	0.11	-0.00776	0.044	0.15	0.06
	TOTAL WEIGHTED VALUES:				-0.01545	0.089		0.36

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
ERASSB	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
ERSPB	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
IR63B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
IR62B	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				0.00000	0.000		0.00

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				0.00000	0.000		0.00

CHAMPION DRAIN WATERSHED

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	32%	-0.00625	0.04	-0.00200	0.01	0.20	0.06
SA19C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	68%	-0.01375	0.08	-0.00935	0.05	0.50	0.34
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.00	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01135	0.07		0.40

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	45%	-0.00625	0.04	-0.00281	0.02	0.20	0.09
CR23C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	55%	-0.01375	0.08	-0.00756	0.04	0.42	0.23
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.00	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01038	0.06		0.32

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	10%	-0.00625	0.04	-0.00063	0.00	0.10	0.01
RR27C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	90%	-0.01375	0.08	-0.01238	0.07	0.50	0.45
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	.0%	-0.0194	0.11	0.00000	0.00	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01300	0.08		0.46

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	22%	-0.00625	0.04	-0.00138	0.01	0.20	0.04
BR19C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	78%	-0.01375	0.08	-0.01073	0.06	0.50	0.39
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.00	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01210	0.07		0.43

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.00	0.20	0.00
SA27C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.08	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.00	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.08		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	100%	-0.00625	0.04	-0.00625	0.04	0.20	0.20
SM5C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.00	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.00	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.00625	0.04		0.20

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	30%	-0.00625	0.04	-0.00188	0.01	0.17	0.05
SMA15C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	70%	-0.01375	0.08	-0.00963	0.06	0.50	0.35
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.00	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01150	0.07		0.40

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.00	0.20	0.00
SMA19C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.08	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.00	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.08		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.00	0.20	0.00
SM1C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.00	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.11	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.11		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.00	0.20	0.00
SM1AC	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.00	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.11	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.11		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.00	0.20	0.00
SM2C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.00	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.00	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.11	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.11		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	10%	-0.00625	0.04	-0.00063	0.004	0.20	0.02
SM3C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	90%	-0.0194	0.11	-0.01746	0.099	0.15	0.14
	TOTAL WEIGHTED VALUES:				-0.01809	0.103		0.16

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	80%	-0.00625	0.04	-0.00500	0.032	0.20	0.16
SM4C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	20%	-0.01375	0.08	-0.00275	0.016	0.50	0.10
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.00775	0.048		0.26

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DRW2C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGTICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DRWC1C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DR1C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.09	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC1A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DR2C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR27C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR35C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	60%	-0.00625	0.04	-0.00375	0.024	0.20	0.12
SA37C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	40%	-0.01375	0.08	-0.00550	0.032	0.50	0.20
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.00925	0.056		0.32

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	25%	-0.00625	0.04	-0.00156	0.010	0.20	0.05
AVR43C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	75%	-0.01375	0.08	-0.01031	0.060	0.50	0.38
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01188	0.070		0.43

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC2A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC2.1A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC3A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC4A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DR27C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	40%	-0.01375	0.08	-0.00550	0.032	0.29	0.12
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	60%	-0.0194	0.11	-0.01164	0.066	0.15	0.09
	TOTAL WEIGHTED VALUES:				-0.01714	0.098		0.21

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR35C2	RURAL (RESIDENTIAL)	28%	-0.01	0.06	-0.00280	0.017	0.50	0.14
	AGRICULTURE	72%	-0.01375	0.08	-0.00990	0.058	0.50	0.36
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01270	0.074		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
3R35C1	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC5A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC6A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC7A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC9A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC7A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC10A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC11A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC12A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC15A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
PM2A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC13A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
WC14A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
PM1A	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	65%	-0.01375	0.08	-0.00894	0.052	0.50	0.33
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	35%	-0.0194	0.11	-0.00679	0.039	0.15	0.05
	TOTAL WEIGHTED VALUES:				-0.01573	0.091		0.38

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DR3BC	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	60%	-0.01375	0.08	-0.00825	0.048	0.50	0.30
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	40%	-0.0194	0.11	-0.00776	0.044	0.15	0.06
	TOTAL WEIGHTED VALUES:	.			-0.01601	0.092		0.36

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SM44C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR43C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
VR47C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
AVR51C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR51C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURRE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
AVR55C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
VR59C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR159C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DR43C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	60%	-0.01375	0.08	-0.00825	0.048	0.50	0.30
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	40%	-0.0194	0.11	-0.00776	0.044	0.15	0.06
	TOTAL WEIGHTED VALUES:				-0.01601	0.092		0.36

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SM51C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR259C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DA55C	RURAL (RESIDENTIAL)	100%	-0.01	0.06	-0.01000	0.060	0.50	0.50
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01000	0.060		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DR57C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
DR59C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR163C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR263C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
BR67C	RURAL (RESIDENTIAL)	100%	-0.01	0.06	-0.01000	0.060	0.50	0.50
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01000	0.060		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
CD1C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
CD2C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
IR65C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
IRDC	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
IRSMC	DESERT RANGELAND	60%	-0.01375	0.08	-0.00825	0.048	0.15	0.09
	AGRICULTURE	40%	-0.01375	0.08	-0.00550	0.032	0.50	0.20
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.29

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
A67AC	RURAL (RESIDENTIAL)	40%	-0.01	0.06	-0.00400	0.024	0.50	0.20
	AGRICULTURE	60%	-0.01375	0.08	-0.00825	0.048	0.50	0.30
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01225	0.072		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
CD4C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
CD3C	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	100%	-0.01375	0.08	-0.01375	0.080	0.50	0.50
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	0%	-0.0194	0.11	0.00000	0.000	0.15	0.00
	TOTAL WEIGHTED VALUES:				-0.01375	0.080		0.50

SOUTHWEST SOUTH MOUNTAIN WATERSHED

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SWSM1	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SWSM2	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SWSM3	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SWSM4	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE, DESERT RANGELAND	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SWSM5	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SWSM6	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SWSM7	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

DRAINAGE BASIN	LAND CLASSIFICATION	%	a	b	WEIGHTED a AND b % x a	% x b	IA	WEIGHTED IA % x IA
	URBAN (RESIDENTIAL/INDUSTRIAL)	0%	-0.00625	0.04	0.00000	0.000	0.20	0.00
SWSM8	RURAL (RESIDENTIAL)	0%	-0.01	0.06	0.00000	0.000	0.50	0.00
	AGRICULTURE	0%	-0.01375	0.08	0.00000	0.000	0.50	0.00
	NATURAL DESERT (HILLSLOPES AND MOUNTIANS)	100%	-0.0194	0.11	-0.01940	0.110	0.15	0.15
	TOTAL WEIGHTED VALUES:				-0.01940	0.110		0.15

APPENDIX C

Green and Ampt Loss Rate Parameters

Input Parameters for MCUHP1

APPENDIX C

The following information is contained in Appendix C:

1. Appendix C from "Hydrologic Design Manual for Maricopa County, Arizona", September 1990, listing soil map symbols and associated textural class and loss rate parameters used in the Laveen Study.

2. Weighted Green and Ampt loss rate parameters.

3. Input parameters utilized in the MCUHP1 program.

Maricopa County–Central Part Loss Rate Parameters

Map Symbol	Soil Name	U.S.D.A. Soil Texture (Control Horizon)	Fragments >0.0074 mm, %	Clay, %	Textural Class (Appendix)	XKSAT/ CNSTL (in/hr)	PSIF (in)	DTHETA (Dry)	DTHETA (Normal)	IL (in) (Dry) (Top Horizon)	IL (in) (Normal) (Top Horizon)	H.S.G.
Aa	Agualt	Loam (0-27)	40	–	Loam	0.25	3.5	0.35	0.25	0.6	0.5	B
AbA, AbB, AdA, AdB, Ae, AIA, AIB, AGB, AHC, AkB, AL, AM, Ac	Antho	Sandy Loam, Gravelly Sandy Loam (0-60)	77.5	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B
An	Avonda	Clay Loam (0-13)	25	–	Clay Loam	0.04	8.2	0.25	0.15	0.5	0.4	B*
Ao, Ap	Avondale	Clay Loam (0-12)	25	–	Clay Loam	0.04	8.2	0.25	0.15	0.5	0.4	B*
BE	Beardsley	Clay Loam (0-10)	25	–	Clay Loam	0.04	8.2	0.25	0.15	0.5	0.4	C
Br, Bs, Bt	Brios	Sandy Loam (0-14)	70	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	A*
CA2	Calciorthids	Loamy Sand To Clay Loam	–	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B
Cb, CeD, CF	Carrizo	Gravelly Sandy Loam (0-5)	75	–	Loamy Sand	1.20	2.4	0.35	0.30	0.8	0.8	A
Cg, Ch, Ck, Cm	Casa Grande	Clay Loam (1-22)	49	15	Loam	0.25	3.5	0.35	0.25	0.6	0.5	C
Cn	Cashion	Clay (0-27)	12.5	–	Clay	0.01	12.4	0.15	0.05	0.3	0.2	D

Map Symbol	Soil Name	U.S.D.A. Soil Texture (Control Horizon)	Fragments >0.0074 mm, %	Clay, %	Textural Class (Appendix)	XKSAT/ CNSTL (in/hr)	PSIF (in)	DTHETA (Dry)	DTHETA (Normal)	IL (in) (Dry) (Top Horizon)	IL (in) (Normal) (Top Horizon)	H.S.G.
CO	Cherioni	Very Gravelly Loam (1-6)	77.5	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	D*
Cp, CrB, Cs, CV	Coolidge	Sandy Loam (0-13)	70	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B
Dn	Dune Land	—	–	–	Sand	4.60	1.9	0.35	0.30	1.3	1.3	A
EbD, EPD	Ebon	Very Cobbly Clay Loam (2-13)	62.5	–	Sandy Clay Loam	0.06	8.6	0.25	0.15	0.6	0.5	C
Es, Et	Estrella	Loam (0-24)	30	–	Loam	0.25	3.5	0.35	0.25	0.6	0.5	B
GA	Gachado	Very Gravelly Clay Loam (0-1)	67.5	–	Sandy Clay Loam	0.06	8.6	0.25	0.15	0.6	0.5	D*
Gb, Gc, Gd	Gadsden	Clay (0-10)	15	–	Clay	0.01	12.4	0.15	0.05	0.3	0.2	D
Ge, GgA, GgB, GM, GN, Gf, Gh, GL, Go3	Gilman	Loam (0-36)	52.6	10.6	Loam	0.25	3.5	0.35	0.25	0.6	0.5	B
Gp	Gilman Variant	Loam (0-3)	30	–	Loam	0.25	3.5	0.35	0.25	0.6	0.5	C
Gr, Gt, Gv, Gs, Gu	Glenbar	Clay Loam (0-15)	30	–	Silty Loam	0.15	6.6	0.40	0.25	0.8	0.7	B

Map Symbol	Soil Name	U.S.D.A. Soil Texture (Control Horizon)	Fragments >0.0074 mm, %	Clay, %	Textural Class (Appendix)	XKSAT/ CNSTL (in/hr)	PSIF (in)	DTHETA (Dry)	DTHETA (Normal)	IL (in) (Dry) (Top Horizon)	IL (in) (Normal) (Top Horizon)	H.S.G.
GWD, GxA, GxB, GYD	Gunsight	Gravelly Loam (0-60)	82.5	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B
HAB, HAC, HLC, HM, HrB	Harqua	Gravelly Clay Loam (0-14)	37	37	Clay Loam	0.04	8.2	0.25	0.15	0.5	0.4	C
La	La Palma	Very Fine Sandy Loam (0-7)	41	6	Silty Loam	0.15	6.6	0.40	0.25	0.8	0.7	C
Lb, LcA, Le, Ld, Lf	Laveen	Loam (0-6)	52	13	Loam	0.25	3.5	0.35	0.25	0.6	0.5	B
Ma	Maripo	Sandy Loam (0-13)	65	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B
Mo, Mp, Mr, Ms, MTB, MV	Mohall	Clay Loam (0-12)	25	–	Clay Loam	0.04	8.2	0.25	0.15	0.5	0.4	B*
Pa, PeA, Pb, PeB, PRB	Perryville	Gravelly Loam (0-9)	63	18	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B

Map Symbol	Soil Name	U.S.D.A. Soil Texture (Control Horizon)	Fragments >0.0074 mm, %	Clay, %	Textural Class (Appendix)	XKSAT/ CNSTL (in/hr)	PSIF (in)	DTHETA (Dry)	DTHETA (Normal)	IL (in) (Dry) (Top Horizon)	IL (in) (Normal) (Top Horizon)	H.S.G.
PsA, PsB, PT, PvB, PWB	Pinal	Loam (0-8)	50	–	Loam	0.25	3.5	0.35	0.25	0.6	0.5	D*
PYD	Pinami	Very Gravelly Sand Loam (2-6)	77.5	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B
RaA, RaB, RbA, RbB, RhB, RpE	Rillito	Gravelly Loam (0-60)	65	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B
——	Sun City	Clay Loam (0-13)	35	–	Clay Loam	0.04	8.2	0.25	0.15	0.5	0.4	D*
Ta	Toltec	Loam (0-28)	32.5	–	Loam	0.25	3.5	0.35	0.25	0.6	0.5	C
Tc, TB, TD	Torri-	Cobby Sandy Loam	–	–	Loamy Sand	1.20	2.4	0.35	0.30	0.8	0.8	A
Te, TIA, TIB, Tg, Th, TPB, TrA, TrB, TSC	Tremant	Clay Loam (1-8)	57.5	–	Sandy Clay Loam	0.06	8.6	0.25	0.15	0.6	0.5	B*
Tt	Trix	Clay Loam (0-10)	22.5	–	Clay Loam	0.04	8.2	0.25	0.15	0.5	0.4	B*
Tu, Tw	Tucson	Loam (0-14)	32.5	–	Loam	0.25	3.5	0.35	0.25	0.6	0.5	B

Map Symbol	Soil Name	U.S.D.A. Soil Texture (Control Horizon)	Fragments >0.0074 mm, %	Clay, %	Textural Class (Appendix)	XKSAT/ CNSTL (in/hr)	PSIF (in)	DTHETA (Dry)	DTHETA (Normal)	IL (in) (Dry) (Top Horizon)	IL (in) (Normal) (Top Horizon)	H.S.G.
Va, Vb, Vc	Valencia	Sandy Loam (0-10)	70	–	Sandy Loam	0.40	4.3	0.35	0.25	0.7	0.6	B
Ve, Vf	Veconi	Clay (0-15)	17.5	–	Clay	0.01	12.4	0.15	0.05	0.3	0.2	D
Vg, Vh, Vk, Vn, Vr	Vint	Loamy Fine Sand (0-27)	80	–	Loamy Sand	1.20	2.4	0.35	0.30	0.8	0.8	B*
Wg	Wintersburg	Clay Loam (0-12)	25	–	Clay Loam	0.04	8.2	0.25	0.15	0.5	0.4	C

* WARNING: Hydrologic soil group does not accurately represent soil texture characteristics. Check soil description for rock outcrop, cemented hardpan, soil group associations, percent course fraction, etc.

HIDDEN VALLEY WATERSHED

SUB-BASIN NUMBER: WC16B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	95	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	5	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.238	0.063
	0.000	0.000
	0.000	0.000
	0.018	0.060
	0.000	0.000
WEIGHTED TOTAL	0.255	0.123

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.023	0.34	220.0	0.09	-0.0194	1.17	0.11	0.15	0.255	7.200	0.123	0.00

SUB-BASIN NUMBER: WC17B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	74	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	26	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	5	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.185	0.049
	0.000	0.000
	0.000	0.000
	0.091	0.312
	0.000	0.000
WEIGHTED TOTAL	0.276	0.361

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.035	0.68	447.0	0.09	-0.0194	1.35	0.11	0.15	0.276	4.050	0.361	5.00

SUB-BASIN NUMBER: WC19B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	85	8.60	0.25	0.15	0.25	0.06	1.88	0.11
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	15	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	40	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.213	0.096
	0.000	0.000
	0.000	0.000
	0.053	0.180
	0.000	0.000
WEIGHTED TOTAL	0.265	0.276

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	IA	GREEN AND AMPT LOSS RATE PARAMETERS DTHETA	PSIF	XKSAT	RTIMP
0.21	0.98	1160.0	0.07	-0.0194	2.13	0.11	0.15	0.265	3.520	0.276	40.00

SUB-BASIN NUMBER: WC188

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	85	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	15	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.213	0.056
	0.000	0.000
	0.000	0.000
	0.053	0.180
	0.000	0.000
WEIGHTED TOTAL	0.265	0.236

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.06	0.54	258.0	0.08	-0.0194	1.58	0.11	0.15	0.265	4.100	0.236	0.00

SUB-BASIN NUMBER: WC22B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	90	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	10	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.225	0.059
	0.000	0.000
	0.000	0.000
	0.035	0.120
	0.000	0.000
WEIGHTED TOTAL	0.260	0.179

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.007	0.19	148.0	0.10	-0.0194	0.65	0.11	0.15	0.260	5.800	0.179	0.00

SUB-BASIN NUMBER: WC21B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	85	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	15	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.213	0.056
	0.000	0.000
	0.000	0.000
	0.053	0.180
	0.000	0.000
WEIGHTED TOTAL	0.265	0.236

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.024	0.42	187.0	0.09	-0.0194	1.19	0.11	0.15	0.265	4.100	0.236	0.00

SUB-BASIN NUMBER: WC208

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	100	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.250	0.066
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.250	0.066

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.014	0.23	123.0	0.09	-0.0194	0.95	0.11	0.15	0.250	8.600	0.066	0.00

SUB-BASIN NUMBER: WC23B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	50	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	50	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	50	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.125	0.033
	0.175	0.220
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.300	0.253

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.40	1.67	853.0	0.06	-0.0194	2.40	0.11	0.15	0.300	4.120	0.253	60.00

SUB-BASIN NUMBER: PM3B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	5	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	26	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	69	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	5	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.013	0.003
	0.091	0.114
	0.000	0.000
	0.242	0.828
	0.000	0.000
WEIGHTED TOTAL	0.345	0.946

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.06	0.53	436.0	0.09	-0.0194	1.58	0.11	0.15	0.345	3.100	0.946	5.00

SUB-BASIN NUMBER: PM48

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	23	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	23	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	54	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	15	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.058	0.015
	0.081	0.101
	0.000	0.000
	0.189	0.648
	0.000	0.000
WEIGHTED TOTAL	0.327	0.764

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.14	0.61	403.0	0.07	-0.0194	1.95	0.11	0.15	0.327	3.450	0.764	15.00

SUB-BASIN NUMBER: PMSB

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	40	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	30	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	30	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	15	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.100	0.026
	0.105	0.132
	0.000	0.000
	0.105	0.360
	0.000	0.000
WEIGHTED TOTAL	0.310	0.518

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.13	0.59	68.9	0.07	-0.0194	1.92	0.11	0.15	0.310	4.200	0.518	15.00

SUB-BASIN NUMBER: NWSM18

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	5	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	95	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	60	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.013	0.003
	0.000	0.000
	0.000	0.000
	0.333	1.140
	0.000	0.000
WEIGHTED TOTAL	0.345	1.143

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.13	0.79	987.0	0.07	-0.0194	1.92	0.11	0.15	0.345	2.500	1.143	60.00

SUB-BASIN NUMBER: A43A18

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	65	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	35	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	15	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.163	0.043
	0.000	0.000
	0.000	0.000
	0.123	0.420
	0.000	0.000
WEIGHTED TOTAL	0.285	0.463

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.17	0.53	217.0	0.07	-0.0194	2.04	0.11	0.15	0.285	4.100	0.463	15.00

SUB-BASIN NUMBER: A43A28

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	71	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	29	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	30	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.178	0.047
	0.102	0.128
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.279	0.174

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.09	0.61	215.0	0.08	-0.0194	1.76	0.11	0.15	0.279	6.300	0.174	30.00

SUB-BASIN NUMBER: ED47B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	33	8.60	0.25	0.15	0.23	0.06	1.10	0.07
SANDY LOAM	44	4.30	0.35	0.25	0.04	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	23	2.40	0.35	0.30	0.02	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	10	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.074	0.022
	0.015	0.331
	0.000	0.000
	0.004	0.276
	0.000	0.000
WEIGHTED TOTAL	0.094	0.629

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.81	1.14	470.0	0.048	-0.01564	2.71	0.09	0.33	0.094	4.100	0.629	10.00

SUB-BASIN NUMBER: IRS98

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	5	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	15	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	80	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.024
	0.000	0.011
	0.000	0.000
	0.000	0.000
	0.000	0.602
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.636

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	e	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.66	1.65	29.0	0.04	-0.0138	2.63	0.08	0.50	0.000	3.990	0.636	1.00

SUB-BASIN NUMBER: IR553

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	1	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	2	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	34	8.60	0.25	0.15	0.00	0.06	1.10	0.07
SANDY LOAM	63	4.30	0.35	0.25	0.13	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	5	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.005
	0.000	0.002
	0.000	0.000
	0.000	0.022
	0.079	0.474
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.079	0.502

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.53	1.32	26.4	0.05	-0.01403	2.53	0.08	0.48	0.079	3.650	0.502	5.00

SUB-BASIN NUMBER: 0A518

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	17	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	11	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	5	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	39	8.60	0.25	0.15	0.13	0.06	1.55	0.09
SANDY LOAM	28	4.30	0.35	0.25	0.18	0.40	1.55	0.62
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	10	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.080
	0.000	0.008
	0.000	0.014
	0.049	0.036
	0.049	0.174
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.098	0.312

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
1.37	1.24	13.7	0.04	-0.0154	2.94	0.09	0.36	0.098	5.300	0.312	10.00

SUB-BASIN NUMBER: ERA55B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	19	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	80	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	1	12.40	0.15	0.05	0.00	0.01	1.88	0.02
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.089
	0.000	0.060
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.150

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.25	0.80	6.5	0.05	-0.01375	2.20	0.08	0.50	0.000	7.800	0.150	0.00

SUB-BASIN NUMBER: ER59B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	96	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	4	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.451
	0.000	0.003
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.454

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE FT./M.	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.28	0.79	8.8	0.05	-0.01375	2.25	0.08	0.50	0.000	3.790	0.454	0.00

SUB-BASIN NUMBER: IR63B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	100	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.470
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.470

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	IA	GREEN AND AMPT LOSS RATE PARAMETERS DTHETA	PSIF	XKSAT	RTIMP
0.13	0.69	12.9	0.05	-0.01375	1.92	0.08	0.50	0.000	3.500	0.470	0.00

SUB-BASIN NUMBER: IR52B

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	50	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	30	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	15	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	5	12.40	0.15	0.05	0.00	0.01	1.88	0.02
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.235
	0.000	0.023
	0.000	0.000
	0.000	0.000
	0.000	0.113
	0.000	0.001
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.371

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.55	1.48	19.0	0.04	-0.01375	2.55	0.08	0.50	0.000	5.000	0.371	0.00

CHAMPION DRAIN WATERSHED

SUB-BASIN NUMBER: SA19C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	65	3.50	0.35	0.25	0.13	0.25	1.70	0.43
CLAY LOAM	5	8.20	0.25	0.15	0.08	0.04	1.70	0.07
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	30	4.30	0.35	0.25	0.03	0.40	1.70	0.68
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	0.00	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.081	0.276
	0.004	0.003
	0.000	0.000
	0.000	0.000
	0.008	0.204
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.093	0.484

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.46	1.63	43.3	0.04	-0.01135	2.49	0.067	0.40	0.093	3.750	0.484	5.800

SUB-BASIN NUMBER: CRZ3C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	70	3.50	0.35	0.25	0.13	0.25	1.28	0.32
CLAY LOAM	15	8.20	0.25	0.15	0.15	0.04	1.28	0.05
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	15	12.40	0.15	0.05	0.03	0.01	1.28	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.088	0.224
	0.023	0.008
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.004	0.002
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.114	0.234

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	IA	GREEN AND AMPT LOSS RATE PARAMETERS DTHETA	PSIF	XKSAT	RTIMP
0.58	1.09	36.7	0.03	-0.0104	2.57	0.06	0.32	0.114	5.550	0.234	3.30

SUB-BASIN NUMBER: AR27C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	60	3.50	0.35	0.25	0.00	0.25	1.85	0.46
CLAY LOAM	10	8.20	0.25	0.15	0.00	0.04	1.85	0.07
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	18	12.40	0.15	0.05	0.00	0.01	1.85	0.02
LOAMY SAND	12	2.40	0.35	0.30	0.30	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.278
	0.000	0.007
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.003
	0.036	0.144
	0.000	0.000
WEIGHTED TOTAL	0.036	0.432

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.48	0.91	28.7	0.05	-0.013	2.49	0.08	0.46	0.036	3.780	0.432	0.00

SUB-BASIN NUMBER: CR23C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	70	3.50	0.35	0.25	0.13	0.25	1.28	0.32
CLAY LOAM	15	8.20	0.25	0.15	0.15	0.04	1.28	0.05
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	15	12.40	0.15	0.05	0.03	0.01	1.28	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.088	0.224
	0.023	0.008
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.004	0.002
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.114	0.234

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.59	1.09	36.7	0.03	-0.0104	2.57	0.06	0.32	0.114	5.550	0.234	3.30

SUB-BASIN NUMBER: SA27C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	50	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	20	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	30	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.235
	0.000	0.015
	0.000	0.000
	0.000	0.000
	0.000	0.226
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.476

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.623	1.52	37.0	0.04	-0.01375	2.60	0.08	0.50	0.000	3.520	0.476	0.00

SUB-BASIN NUMBER: SM5C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	1	8.60	0.25	0.15	0.25	0.06	1.40	0.08
SANDY LOAM	99	4.30	0.35	0.25	0.35	0.40	1.40	0.56
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.003	0.001
	0.347	0.554
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.349	0.555

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	n	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.20	1.14	98.0	0.03	-0.00625	2.11	0.04	0.20	0.349	4.280	0.555	18.00

SUB-BASIN NUMBER: SMA15C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	30	8.60	0.25	0.15	0.15	0.06	1.17	0.07
SANDY LOAM	70	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.045	0.021
	0.000	0.526
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.045	0.547

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.36	1.21	52.6	0.04	-0.0115	2.36	0.07	0.40	0.045	3.700	0.547	0.00

SUB-BASIN NUMBER: SMA19C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	7	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	90	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	3	2.40	0.35	0.30	0.00	1.20	1.88	2.26
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.033
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.677
	0.000	0.000
	0.000	0.068
	0.000	0.000
WEIGHTED TOTAL	0.000	0.777

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.16	1.51	41.0	0.05	-0.01375	2.00	0.09	0.50	0.000	4.200	0.777	0.00

SUB-BASIN NUMBER: SM1C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	IKSAT (IN/HR)	IKSAT ADJUST. FACTOR	ADJUSTED IKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	4	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	70	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	26	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	50	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	IKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.010	0.003
	0.245	0.308
	0.000	0.000
	0.091	0.312
	0.000	0.000
WEIGHTED TOTAL	0.346	0.623

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	IKSAT	RTIMP
1.84	2.35	462.0	0.05	-0.0194	3.07	0.11	0.15	0.346	3.800	0.623	50.00

SUB-BASIN NUMBER: SM1AC

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	7	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	78	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	15	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	10	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.018	0.005
	0.273	0.343
	0.000	0.000
	0.053	0.180
	0.000	0.000
WEIGHTED TOTAL	0.343	0.528

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.28	1.19	519.0	0.07	-0.0194	2.25	0.11	0.15	0.343	4.050	0.528	10.00

SUB-BASIN NUMBER: SM2C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.25	0.06	1.00	0.06
SANDY LOAM	50	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	50	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	86	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.175	0.220
	0.000	0.000
	0.175	0.600
	0.000	0.000
WEIGHTED TOTAL	0.350	0.820

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
2.19	1.86	636.0	0.05	-0.0194	3.15	0.11	0.15	0.350	3.310	0.820	86.00

SUB-BASIN NUMBER: SM3C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	2	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	75	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	23	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.005	0.001
	0.263	0.330
	0.000	0.000
	0.081	0.276
	0.000	0.000
WEIGHTED TOTAL	0.348	0.607

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.48	0.95	321.0	0.06	-0.01809	2.49	0.10	0.16	0.348	3.850	0.607	1.50

SUB-BASIN NUMBER: SM4C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.25	0.06	1.00	0.06
SANDY LOAM	95	4.30	0.35	0.25	0.35	0.40	1.40	0.56
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	5	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.333	0.532
	0.000	0.000
	0.018	0.060
	0.000	0.000
WEIGHTED TOTAL	0.350	0.592

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.24	1.29	95.0	0.03	-0.00775	2.19	0.05	0.26	0.350	4.600	0.592	14.40

SUB-BASIN NUMBER: DRW2C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	10	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	30	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	60	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	30	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.025	0.007
	0.105	0.132
	0.000	0.000
	0.210	0.720
	0.000	0.000
WEIGHTED TOTAL	0.340	0.859

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.53	1.63	325.0	0.06	-0.0194	2.53	0.11	0.15	0.340	3.250	0.859	30.00

SUB-BASIN NUMBER: DRWC1C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	2	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	3	8.60	0.25	0.15	0.00	0.06	1.88	0.11
SANDY LOAM	95	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.009
	0.000	0.000
	0.000	0.000
	0.000	0.003
	0.000	0.714
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.727

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.12	1.03	44.7	0.05	-0.01375	1.99	0.08	0.50	0.000	4.250	0.727	0.00

SUB-BASIN NUMBER: DR1C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	85	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	5	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	10	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.213	0.056
	0.018	0.022
	0.000	0.000
	0.035	0.120
	0.000	0.000
WEIGHTED TOTAL	0.265	0.198

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.16	1.14	198.0	0.07	-0.0194	2.01	0.11	0.15	0.265	5.300	0.198	0.00

SUB-BASIN NUMBER: WC1A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	86	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	1	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	13	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	40	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.215	0.057
	0.004	0.004
	0.000	0.000
	0.046	0.156
	0.000	0.000
WEIGHTED TOTAL	0.264	0.217

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.25	1.48	330.0	0.07	-0.0194	2.20	0.11	0.15	0.264	4.680	0.217	40.00

SUB-BASIN NUMBER: DF2D

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	25	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	65	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	10	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.063	0.017
	0.228	0.286
	0.000	0.000
	0.035	0.120
	0.000	0.000
WEIGHTED TOTAL	0.325	0.423

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.05	0.42	108.0	0.08	-0.0194	1.51	0.110	0.15	0.325	4.250	0.423	0.00

SUB-BASIN NUMBER: BR27C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	25	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	6	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	1	8.60	0.25	0.15	0.00	0.06	1.88	0.11
SANDY LOAM	64	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	4	2.40	0.35	0.30	0.00	1.20	1.88	2.26
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.118
	0.000	0.005
	0.000	0.000
	0.000	0.001
	0.000	0.481
	0.000	0.000
	0.000	0.090
	0.000	0.000
WEIGHTED TOTAL	0.000	0.695

INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.78	1.59	42.7	0.04	-0.01375	2.70	0.08	0.50	0.000	4.150	0.695	0.00

SUB-BASIN NUMBER: RR35C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	66	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	30	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	2	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	2	12.40	0.15	0.05	0.00	0.01	1.88	0.02
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.310
	0.000	0.023
	0.000	0.000
	0.000	0.000
	0.000	0.015
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.348

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
1.89	1.29	14.7	0.04	-0.01375	3.08	0.08	0.50	0.000	5.500	0.348	0.00

SUB-BASIN NUMBER: SA37C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	75	3.50	0.35	0.25	0.13	0.25	1.60	0.40
CLAY LOAM	12	8.20	0.25	0.15	0.15	0.04	1.30	0.05
SILTY LOAM	6	6.60	0.40	0.25	0.25	0.15	1.30	0.20
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.15	0.06	1.30	0.08
SANDY LOAM	1	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	6	12.40	0.15	0.05	0.05	0.01	1.30	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.30	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.30	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.094	0.300
	0.018	0.006
	0.015	0.012
	0.000	0.000
	0.000	0.004
	0.003	0.001
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.130	0.323

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.59	0.91	14.1	0.04	-0.00925	2.58	0.060	0.320	0.130	4.900	0.323	15.00

SUB-BASIN NUMBER: AVR43C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	85	3.50	0.35	0.25	0.05	0.25	1.76	0.44
CLAY LOAM	4	8.20	0.25	0.15	0.15	0.04	1.30	0.05
SILTY LOAM	4	6.60	0.40	0.25	0.20	0.15	1.30	0.20
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	3	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	4	12.40	0.15	0.05	0.05	0.01	1.30	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.043	0.374
	0.006	0.002
	0.008	0.008
	0.000	0.000
	0.000	0.012
	0.002	0.001
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.059	0.396

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
1.03	1.36	29.4	0.04	-0.01167	2.82	0.070	0.43	0.059	4.000	0.396	6.25

SUB-BASIN NUMBER: WC2A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	99	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	1	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.248	0.065
	0.004	0.004
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.251	0.070

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.08	0.98	240.0	0.08	-0.0194	1.71	0.11	0.15	0.251	8.600	0.070	0.00

SUB-BASIN NUMBER: WC2.1A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	60	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.35	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	40	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.150	0.040
	0.000	0.000
	0.000	0.000
	0.140	0.480
	0.000	0.000
WEIGHTED TOTAL	0.290	0.520

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.08	0.57	216.0	0.08	-0.0194	1.71	0.11	0.15	0.290	4.000	0.520	0.00

SUB-BASIN NUMBER: WC3A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	100	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.35	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.250	0.066
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.250	0.066

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	m	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.014	0.34	112.0	0.09	-0.0194	0.95	0.11	0.15	0.250	8.600	0.066	0.00

SUB-BASIN NUMBER: WC4A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	53	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	7	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	40	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	25	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.133	0.035
	0.025	0.031
	0.000	0.000
	0.140	0.480
	0.000	0.000
WEIGHTED TOTAL	0.297	0.546

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.36	1.25	340.0	0.06	-0.0194	2.36	0.11	0.15	0.297	3.950	0.546	25.00

SUB-BASIN NUMBER: DR27C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	10	3.50	0.35	0.25	0.35	0.25	1.33	0.33
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	5	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	65	4.30	0.35	0.25	0.35	0.40	1.28	0.51
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	20	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.035	0.033
	0.000	0.000
	0.000	0.000
	0.013	0.003
	0.228	0.333
	0.000	0.000
	0.070	0.240
	0.000	0.000
WEIGHTED TOTAL	0.345	0.609

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.23	0.95	101.0	0.05	-0.01714	2.17	0.09	0.21	0.345	3.996	0.609	0.00

SUB-BASIN NUMBER: DA35C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	3	3.50	0.35	0.25	0.00	0.25	1.10	0.28
CLAY LOAM	3	8.20	0.25	0.15	0.00	0.04	1.10	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	90	4.30	0.35	0.25	0.23	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	4	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.008
	0.000	0.001
	0.000	0.000
	0.000	0.000
	0.207	0.396
	0.000	0.000
	0.014	0.048
	0.000	0.000
WEIGHTED TOTAL	0.221	0.454

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.60	1.38	52.8	0.05	-0.01601	2.58	0.09	0.36	0.221	4.200	0.454	0.00

SUB-BASIN NUMBER: BR35C1

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	40	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	40	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	1	8.60	0.25	0.15	0.00	0.06	1.88	0.11
SANDY LOAM	19	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.188
	0.000	0.030
	0.000	0.000
	0.000	0.001
	0.000	0.143
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.362

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.55	1.51	31.1	0.05	-0.01375	2.54	0.08	0.50	0.000	5.200	0.362	0.00

SUB-BASIN NUMBER: WC5A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	4	8.60	0.25	0.15	0.25	0.06	1.00	0.06
SANDY LOAM	13	4.30	0.35	0.25	0.35	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	83	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	28	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.010	0.002
	0.046	0.052
	0.000	0.000
	0.291	0.996
	0.000	0.000
WEIGHTED TOTAL	0.346	1.050

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.42	1.36	335.0	0.06	-0.0194	2.43	0.11	0.15	0.346	2.880	1.050	28.00

SUB-BASIN NUMBER: WC6A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	80	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.35	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	20	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.200	0.053
	0.000	0.000
	0.000	0.000
	0.070	0.240
	0.000	0.000
WEIGHTED TOTAL	0.270	0.293

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.014	0.23	148.0	0.09	-0.0194	0.95	0.11	0.15	0.270	3.750	0.293	0.00

SUB-BASIN NUMBER: WC7A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	80	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	20	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.200	0.053
	0.070	0.088
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.270	0.141

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.05	0.51	162.0	0.08	-0.0194	1.51	0.110	0.15	0.270	7.000	0.141	0.00

SUB-BASIN NUMBER: WC8A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	29	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	29	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	42	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	30	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.073	0.019
	0.102	0.128
	0.000	0.000
	0.147	0.504
	0.000	0.000
WEIGHTED TOTAL	0.321	0.651

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.35	1.49	328.0	0.06	-0.0194	2.35	0.110	0.15	0.321	3.710	0.651	30.00

SUB-BASIN NUMBER: WC9A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	100	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.35	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.250	0.066
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.250	0.066

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.025	0.45	186.0	0.09	-0.0194	1.20	0.11	0.15	0.250	8.600	0.066	0.00

SUB-BASIN NUMBER: WC10A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.35	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.25	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.40	0.15	1.00	0.15
SANDY CLAY LOAM	90	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.35	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.15	0.01	1.00	0.01
LOAMY SAND	10	2.40	0.35	0.30	0.35	1.20	0.00	0.00
SAND	0	1.90	0.35	0.30	0.35	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.225	0.059
	0.000	0.000
	0.000	0.000
	0.035	0.000
	0.000	0.000
WEIGHTED TOTAL	0.260	0.059

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.02	0.34	250.0	0.09	-0.0194	1.11	0.11	0.15	0.260	5.800	0.059	0.00

SUB-BASIN NUMBER: WC11A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	15	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	43	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	42	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	53	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.038	0.010
	0.151	0.189
	0.000	0.000
	0.147	0.504
	0.000	0.000
WEIGHTED TOTAL	0.335	0.703

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	n	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.29	1.59	920.0	0.07	-0.0194	2.27	0.11	0.15	0.335	3.600	0.703	53.00

SUB-BASIN NUMBER: WC12A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	30	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	30	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	40	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	28	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.075	0.020
	0.105	0.132
	0.000	0.000
	0.140	0.480
	0.000	0.000
WEIGHTED TOTAL	0.320	0.632

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.26	1.19	753.0	0.07	-0.0194	2.22	0.11	0.15	0.320	3.800	0.632	28.00

SUB-BASIN NUMBER: WC15A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	30	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	10	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	60	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	50	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.075	0.020
	0.035	0.044
	0.000	0.000
	0.210	0.720
	0.000	0.000
WEIGHTED TOTAL	0.320	0.784

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	n	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.36	1.42	1016.0	0.06	-0.0194	2.36	0.11	0.15	0.320	3.350	0.784	50.00

SUB-BASIN NUMBER: PM2A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	18	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	65	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	17	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	15	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	IKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.045	0.012
	0.228	0.286
	0.000	0.000
	0.060	0.204
	0.000	0.000
WEIGHTED TOTAL	0.332	0.502

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	n	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.07	0.57	320.0	0.08	-0.0194	1.65	0.11	0.15	0.332	4.100	0.502	15.00

SUB-BASIN NUMBER: WC13A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	100	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.250	0.066
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.250	0.066

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.013	0.28	141.0	0.09	-0.0194	0.92	0.11	0.15	0.250	8.600	0.066	0.00

SUB-BASIN NUMBER: WC14A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	60	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	40	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.150	0.040
	0.000	0.000
	0.000	0.000
	0.140	0.480
	0.000	0.000
WEIGHTED TOTAL	0.290	0.520

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.05	0.57	185.0	0.08	-0.0194	1.51	0.11	0.15	0.290	4.000	0.520	0.00

SUB-BASIN NUMBER: PM1A

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	10	8.60	0.25	0.15	0.00	0.06	1.88	0.11
SANDY LOAM	88	4.30	0.35	0.25	0.11	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	2	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	2	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.011
	0.097	0.662
	0.000	0.000
	0.000	0.024
	0.000	0.000
WEIGHTED TOTAL	0.097	0.697

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.07	0.40	70.4	0.07	-0.01573	1.65	0.09	0.38	0.097	4.210	0.697	2.00

SUB-BASIN NUMBER: BR3502

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	35	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	35	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	25	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	5	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.165
	0.000	0.026
	0.000	0.000
	0.000	0.000
	0.000	0.188
	0.000	0.000
	0.000	0.060
	0.000	0.000
WEIGHTED TOTAL	0.000	0.439

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.73	2.12	38.2	0.04	-0.0127	2.67	0.07	0.50	0.000	3.550	0.439	0.00

SUB-BASIN NUMBER: SMA43C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	75	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	25	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.056
	0.000	0.000
	0.000	0.000
	0.000	0.188
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.244

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.13	0.54	35.0	0.05	-0.01375	1.90	0.08	0.50	0.000	3.960	0.244	0.00

SUB-BASIN NUMBER: BR43C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	35	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	50	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	1	8.60	0.25	0.15	0.00	0.06	1.88	0.11
SANDY LOAM	14	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.165
	0.000	0.038
	0.000	0.000
	0.000	0.001
	0.000	0.056
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.259

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	n	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.85	1.69	27.3	0.04	-0.01375	2.74	0.05	0.50	0.000	6.350	0.259	0.00

SUB-BASIN NUMBER: VR47C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	65	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	10	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	20	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	2	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	3	12.40	0.15	0.05	0.00	0.01	1.88	0.02
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.306
	0.000	0.008
	0.000	0.056
	0.000	0.000
	0.000	0.015
	0.000	0.001
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.385

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.39	1.14	11.4	0.04	-0.0138	2.76	0.08	0.50	0.000	4.550	0.385	0.00

SUB-BASIN NUMBER: AVR51C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	60	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	25	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	15	12.40	0.15	0.05	0.00	0.01	1.88	0.02
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.282
	0.000	0.019
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.003
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.304

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.28	0.76	13.1	0.05	-0.01375	2.25	0.08	0.50	0.000	6.200	0.304	0.00

SUB-BASIN NUMBER: BR51C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	90	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	3	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	4	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	3	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.423
	0.000	0.002
	0.000	0.011
	0.000	0.000
	0.000	0.023
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.459

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.70	0.76	5.6	0.04	-0.01375	2.65	0.09	0.50	0.000	3.650	0.459	0.00

SUB-BASIN NUMBER: AVR55C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	50	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	20	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	15	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	15	12.40	0.15	0.05	0.00	0.01	1.88	0.02
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.235
	0.000	0.015
	0.000	0.042
	0.000	0.000
	0.000	0.000
	0.000	0.003
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.295

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.23	0.76	10.5	0.05	-0.01375	2.17	0.09	0.50	0.000	6.330	0.295	0.00

SUB-BASIN NUMBER: VR59C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	50	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	25	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	15	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	10	12.40	0.15	0.05	0.00	0.01	1.88	0.02
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.235
	0.000	0.019
	0.000	0.042
	0.000	0.000
	0.000	0.000
	0.000	0.002
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.298

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	e	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.25	0.76	9.2	0.05	-0.01375	2.20	0.08	0.50	0.000	6.470	0.298	0.00

SUB-BASIN NUMBER: 8R159C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	96	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	4	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.451
	0.000	0.000
	0.000	0.011
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.462

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.69	1.21	11.5	0.04	-0.01375	2.64	0.02	0.50	0.000	3.750	0.462	0.00

SUB-BASIN NUMBER: DR43C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	6	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	12	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	38	8.60	0.25	0.15	0.10	0.06	1.60	0.10
SANDY LOAM	44	4.30	0.35	0.25	0.04	0.40	1.80	0.72
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	20	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.028
	0.000	0.009
	0.000	0.000
	0.038	0.036
	0.015	0.317
	0.000	0.000
	0.000	0:000
	0.000	0.000
WEIGHTED TOTAL	0.053	0.391

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.94	1.59	72.3	0.05	-0.016	2.78	0.09	0.36	0.053	4.450	0.391	20.00

SUB-BASIN NUMBER: SMSIC

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	55	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	38	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	2	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	5	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.259
	0.000	0.029
	0.000	0.006
	0.000	0.000
	0.000	0.038
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.330

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.50	1.09	14.7	0.05	-0.01375	2.51	0.08	0.50	0.000	5.850	0.330	0.00

SUB-BASIN NUMBER: BR259C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	90	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	5	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	5	4.30	0.35	0.25	0.00	0.40	1.88	0.75
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.423
	0.000	0.000
	0.000	0.014
	0.000	0.000
	0.000	0.038
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.475

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
1.00	1.55	21.9	0.04	-0.01373	2.81	0.09	0.50	0.000	3.550	0.475	0.00

SUB-BASIN NUMBER: OA5SC

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	99	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	1	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.465
	0.000	0.001
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0:000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.466

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	IA	GREEN AND AMPT LOSS RATE PARAMETERS DTHETA	PSIF	XKSAT	RTIMP
0.25	0.68	7.4	0.04	-0.01	2.20	0.06	0.50	0.000	3.547	0.466	0.00

SUB-BASIN NUMBER: DR59C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	100	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.470
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.470

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.11	0.53	8.0	0.05	-0.01375	1.85	0.08	0.50	0.000	3.500	0.470	0.00

SUB-BASIN NUMBER: DR57C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	100	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.470
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.470

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	IA	GREEN AND AMPT LOSS RATE PARAMETERS DTHETA	PSIF	XKSAT	RTIMP
0.12	0.53	5.7	0.05	-0.01375	1.89	0.08	0.50	0.000	3.500	0.470	0.00

SUB-BASIN NUMBER: BR163C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	85	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	15	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.400
	0.000	0.011
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0:411

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	n	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.26	0.80	8.5	0.05	-0.01375	2.22	0.05	0.50	0.000	4.700	0.411	0.00

SUB-BASIN NUMBER: BR263C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	IKSAT ADJUST. FACTOR	ADJUSTED IKSAT
LOAM	93	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	2	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	5	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	IKSAT
	0.000	0.437
	0.000	0.000
	0.000	0.006
	0.000	0.000
	0.000	0.020
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.463

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	n	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.50	1.33	21.9	0.05	-0.01375	2.51	0.08	0.50	0.000	3.500	0.463	0.00

SUB-BASIN NUMBER: BR67C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	45	3.50	0.35	0.25	0.25	0.25	1.88	0.47
CLAY LOAM	30	8.20	0.25	0.15	0.15	0.04	1.88	0.08
SILTY LOAM	25	6.60	0.40	0.25	0.25	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.15	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.25	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.05	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.30	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.30	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.113	0.212
	0.045	0.023
	0.063	0.071
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.220	0.305

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	n	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.13	0.53	9.7	0.04	-0.01	1.92	0.06	0.50	0.220	6.200	0.305	15.00

SUB-BASIN NUMBER: CD1C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	60	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	5	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	15	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	20	8.60	0.25	0.15	0.00	0.06	1.88	0.11
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.282
	0.000	0.004
	0.000	0.042
	0.000	0.023
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0:351

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.47	0.54	7.5	0.05	-0.01775	2.46	0.09	0.50	0.000	5.320	0.351	0.00

SUB-BASIN NUMBER: CD2C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	25	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	25	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	50	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.118
	0.000	0.019
	0.000	0.141
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.277

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.58	1.06	11.7	0.04	-0.01375	2.57	0.08	0.50	0.000	6.500	0.277	0.00

SUB-BASIN NUMBER: IR65C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	100	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.470
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0:000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.470

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.17	0.91	14.7	0.05	-0.01375	2.04	0.08	0.50	0.000	3.500	0.470	0.00

SUB-BASIN NUMBER: IRDC

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	100	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	9.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.470
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0:000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.470

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.52	1.40	12.8	0.05	-0.01375	2.52	0.08	0.50	0.000	3.500	0.470	0.00

SUB-BASIN NUMBER: IRSMC

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	49	3.50	0.35	0.25	0.28	0.25	1.26	0.32
CLAY LOAM	2	8.20	0.25	0.15	0.25	0.04	1.10	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	49	4.30	0.35	0.25	0.07	0.40	1.70	0.68
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.137	0.154
	0.005	0.001
	0.000	0.000
	0.000	0.000
	0.034	0.333
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.177	0.488

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
[illegible]	[illegible]	22.0	0.05	-0.01375	2.20	0.05	0.29	0.177	3.890	0.488	0.00

SUB-BASIN NUMBER: A674C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	80	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	8	8.20	0.25	0.15	0.00	0.04	1.38	0.08
SILTY LOAM	12	6.60	0.40	0.25	0.00	0.15	1.38	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.376
	0.000	0.006
	0.000	0.034
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0.416

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	IA	GREEN AND AMPT LOSS RATE PARAMETERS DTHETA	PSIF	XKSAT	RTIMP
0.61	1.20	10.6	0.04	-0.01225	2.59	0.072	0.50	0.000	4.400	0.416	0.00

SUB-BASIN NUMBER: CD4C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	90	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	10	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.423
	0.000	0.000
	0.000	0.028
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.000	0:451

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.19	0.53	5.5	0.05	-0.01375	2.09	0.06	0.50	0.000	3.500	0.451	0.00

SUB-BASIN NUMBER: C03C

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	45	3.50	0.35	0.25	0.00	0.25	1.88	0.47
CLAY LOAM	30	8.20	0.25	0.15	0.00	0.04	1.88	0.08
SILTY LOAM	20	6.60	0.40	0.25	0.00	0.15	1.88	0.28
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	5	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.212
	0.000	0.023
	0.000	0.056
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.060
	0.000	0.000
WEIGHTED TOTAL	0.000	0.350

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	n	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.48	1.06	12.9	0.05	-0.01375	2.49	0.05	0.50	0.000	4.800	0.350	0.00

SOUTHWEST SOUTH MOUNTAIN WATERSHED

SUB-BASIN NUMBER: SWSM1

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	5	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	60	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	35	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	60	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.013	0.003
	0.210	0.264
	0.000	0.000
	0.123	0.420
	0.000	0.000
WEIGHTED TOTAL	0.345	0.687

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
1.99	2.73	395.0	0.05	-0.0194	3.11	0.11	0.15	0.345	3.550	0.687	≥0.00

SUB-BASIN NUMBER: SWSM2

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	0	8.60	0.25	0.15	0.00	0.06	1.00	0.06
SANDY LOAM	34	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	66	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	25	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.119	0.150
	0.000	0.000
	0.231	0.792
	0.000	0.000
WEIGHTED TOTAL	0.350	0.942

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.44	1.63	380.0	0.06	-0.0194	2.45	0.11	0.15	0.350	3.100	0.942	25.00

SUB-BASIN NUMBER: SWSM3

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	IKSAT (IN/HR)	IKSAT ADJUST. FACTOR	ADJUSTED IKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	50	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	50	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	IKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.125	0.033
	0.000	0.000
	0.000	0.000
	0.175	0.600
	0.000	0.000
WEIGHTED TOTAL	0.300	0.633

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	n	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.28	1.25	107.0	0.07	-0.0194	2.25	0.11	0.15	0.300	3.750	0.633	0.00

SUB-BASIN NUMBER: SWSM4

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	80	8.60	0.25	0.15	0.35	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	20	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.280	0.053
	0.000	0.000
	0.000	0.000
	0.070	0.240
	0.000	0.000
WEIGHTED TOTAL	0.350	0.293

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA (S.M.)	LENGTH (MILE)	SLOPE (FT./M.)	RESISTANCE COEFICIENT Kb	a	logA	b	GREEN AND AMPT LOSS RATE PARAMETERS IA	DTHETA	PSIF	XKSAT	RTIMP
0.34	1.63	108.0	0.06	-0.0194	2.34	0.11	0.15	0.350	3.750	0.293	0.00

SUB-BASIN NUMBER: SWSM5

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	100	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	0	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.250	0.066
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.250	0.066

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.090	0.87	99.0	0.08	-0.0194	1.76	0.11	0.15	0.250	8.600	0.066	0.00

SUB-BASIN NUMBER: SWSM6

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	34	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	33	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	33	2.40	0.35	0.30	0.35	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	40	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.085	0.022
	0.116	0.145
	0.000	0.000
	0.116	0.396
	0.000	0.000
WEIGHTED TOTAL	0.316	0.564

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.950	2.65	545.0	0.06	-0.0194	2.78	0.11	0.15	0.316	4.950	0.564	40.00

SUB-BASIN NUMBER: SWSM7

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	92	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	8	4.30	0.35	0.25	0.35	0.40	1.10	0.44
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	40	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.230	0.061
	0.028	0.035
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.258	0.096

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT					GREEN AND AMPT LOSS RATE PARAMETERS			
(S.M.)	(MILE)	(FT./M.)	Kb	a	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.10	0.61	846.0	0.07	-0.0194	1.81	0.11	0.15	0.258	8.400	0.096	40.00

SUB-BASIN NUMBER: SWSM8

**** GREEN AND AMPT LOSS RATE PARAMETERS ****

TEXTURE CLASS	% MAP UNIT	PSIF (IN)	DTHETA (DRY)	DTHETA (NORMAL)	SELECTED DTHETA	XKSAT (IN/HR)	XKSAT ADJUST. FACTOR	ADJUSTED XKSAT
LOAM	0	3.50	0.35	0.25	0.00	0.25	1.00	0.25
CLAY LOAM	0	8.20	0.25	0.15	0.00	0.04	1.00	0.04
SILTY LOAM	0	6.60	0.40	0.25	0.00	0.15	1.00	0.15
SANDY CLAY LOAM	100	8.60	0.25	0.15	0.25	0.06	1.10	0.07
SANDY LOAM	0	4.30	0.35	0.25	0.00	0.40	1.00	0.40
CLAY	0	12.40	0.15	0.05	0.00	0.01	1.00	0.01
LOAMY SAND	0	2.40	0.35	0.30	0.00	1.20	1.00	1.20
SAND	0	1.90	0.35	0.30	0.00	4.60	1.00	4.60
ROCK	55	--	--	--	--	--	--	--

WEIGHTED GREEN & AMPT PARAMETERS

	DTHETA	XKSAT
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.250	0.066
	0.000	0.000
	0.000	0.000
	0.000	0.000
	0.000	0.000
WEIGHTED TOTAL	0.250	0.066

**** INPUT DATA FOR MARICOPA COUNTY UNIT HYDROGRAPH ****

AREA	LENGTH	SLOPE	RESISTANCE COEFICIENT				GREEN AND AMPT LOSS RATE PARAMETERS				
(S.M.)	(MILE)	(FT./M.)	Kb	m	logA	b	IA	DTHETA	PSIF	XKSAT	RTIMP
0.03	0.45	1238.0	0.09	-0.0194	1.28	0.11	0.15	0.250	8.600	0.066	55.00

APPENDIX D

Calibration Model

APPENDIX D

The following information is contained in Appendix D.

1. Calculation sheets for estimating basin resistance coefficients to be used for sub-basin characterized by desert hills and mountains.

2. HEC-1 computer model developed to estimate runoff from sub-basin SM1C for various Kb values.

3. Flood Flow Frequency Analysis for gauge data.

DESIGN NOTES AND COMPUTATIONS

SUBJECT: Lauren ADMS

JOB NO.: 40916-02-30

Estimate resistance coefficient (Kb) to be used in a calibration model.

1. Use Table 3 to obtain equation parameters to be used to estimate Kb.

2. Interpolate between equation parameters for land classification that would fall between rough and or moderate vegetation and midway between bare or nearly bare ground.

3. $Kb = m \log A + b$

4. Area 1.84 $mile^2$ or 1177.6 acres

5. Equation Parameters

m	b	Calculated Kb
-0.022	0.13	0.062
-0.0207	0.12	0.056
-0.0194	0.11	0.050

PREPARED BY: PJF DATE: 7/91 CHECKED BY: 7/91 SHEET NO.: OF

CBA CELLA BARR ASSOCIATES
5062 NORTH 19TH AVE.
PHOENIX, ARIZONA 85015
[602] 242-2999
FAX [602] 246-7247

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**************************************            **************************************
*                                    *            *                                    *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1) *            *   U.S. ARMY CORPS OF ENGINEERS     *
*           FEBRUARY 1981            *            *  THE HYDROLOGIC ENGINEERING CENTER *
*         REVISED 01 APR 88          *            *        609 SECOND STREET           *
*                                    *            *      DAVIS, CALIFORNIA 95616       *
*  RUN DATE  05/29/1991  TIME  11:17:07 *         *        (916) 551-1748              *
*                                    *            *                                    *
**************************************            **************************************


                    X     X  XXXXXXX   XXXXX          X
                    X     X  X        X     X        XX
                    X     X  X        X               X
                    XXXXXXX  XXXX     X       XXXXX   X
                    X     X  X        X               X
                    X     X  X        X     X         X
                    X     X  XXXXXXX   XXXXX         XXX


THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL   LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


1                                    HEC-1 INPUT                                             PAGE  1

 LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

    1       ID   CALIBRATION MODEL                      FILE NAME SOUTH.4
    2       ID   CBA # 40916-02-30                      DATE 5/29/91
    3       IT      5                300
    4       IO      5

    5       KK   SM1CA
    6       KM   THIS MODEL IS A CALIBRATION MODEL USED TO CALIBRATE THE REISTANCE COEFFICIENT
    7       KM   (Kb) FOR SUB-BASINS THAT ARE CHARACTERIZED BY DESERT HILLSLOPES AND MOUNTAINS
    8       KM   RUNOFF VALUES FOR EACH KB VALUE ARE TO BE COMPARED TO THE 100-YEAR ESTIMATED
    9       KM   RUNOFF VALUE BASED ON GUAGE DATA. ESTIMATED RUNOFF FOR THIS BASIN BASED ON
   10       KM   GAUGED DATA = 3020 cfs.
   11       KM   SUB-BASIN SM1C    KB = 0.062
   12       KM   6-HOUR RAINFALL. PATTERN NO. 1.76 WAS USED TO FIND TC & R FOR THIS BASIN
   13       KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .98
   14       BA   1.840
   15       IN     15
   16       KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
   17       PB   3.435
   18       KM   THE FOLLOWING PC RECORD USED A 6-HOUR STROM WITH A PATTERN No. OF 1.76
   19       PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
   20       PC    .087    .100    .120    .157    .243    .433    .728    .855    .906    .941
   21       PC    .953    .965    .977    .989   1.000
   22       LG    .150    .346   3.800    .623  50.000
   23       UC    .467    .222
   24       [illegible]       0       3       5       8      12      20      43      75   [illegible]   [illegible]
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```
KK   SM1B
KM   SUB-BASIN SM1C   KB = 0.050
KM   6-HOUR RAINFALL. PATTERN NO. 1.76 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .98
BA   1.340
LG    .150    .346   3.800    .623  50.000
UC    .450    .213
UA      0       3       5       8      12      20      43      75      90      96
UA    100

KK   SM1CC
KM   SUB-BASIN SM1C   KB = 0.050
KM   6-HOUR RAINFALL. PATTERN NO. 1.76 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .98
BA   1.340
LG    .150    .346   3.800    .623  50.000
UC    .417    .196
UA      0       3       5       8      12      20      43      75      90      96
UA    100
ZZ
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1****************************************
*                                      *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            FEBRUARY 1981             *
*          REVISED 01 APR 86           *
*                                      *
* RUN DATE  05/29/1991  TIME  11:17:07 *
*                                      *
****************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
* THE HYDROLOGIC ENGINEERING CENTER *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
```

CALIBRATION MODEL
CBA # 40916-02-30

FILE NAME SOUTH.4
DATE 5/28/91

```
4 IO        OUTPUT CONTROL VARIABLES
                 IPRNT          5  PRINT CONTROL
                 IPLOT          0  PLOT CONTROL
                 QSCAL         0.  HYDROGRAPH PLOT SCALE

  IT        HYDROGRAPH TIME DATA
                  NMIN          5  MINUTES IN COMPUTATION INTERVAL
                 IDATE      1   0  STARTING DATE
                 ITIME       0000  STARTING TIME
                    NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                NDDATE      2   0  ENDING DATE
                NDTIME       0055  ENDING TIME
                 ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL     .08 HOURS
                 TOTAL TIME BASE   24.92 HOURS

      ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT
```

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	SM1CA	2879.	4.25	445.	112.	108.	1.84		
+	HYDROGRAPH AT	SM1CB	2934.	4.25	444.	112.	108.	1.84		
+	HYDROGRAPH AT	SM1CC	3036.	4.25	445.	112.	108.	1.84		

*** NORMAL END OF HEC-1 ***

DESIGN NOTES AND COMPUTATIONS

SUBJECT: Laveen ADMS

JOB NO.: 40916-02-30

Note:

Watershed drainage area used in the Flood Flow Frequency Analysis obtained from the Flood Control District of Maricopa County was estimated to be 1.75 square miles in size where as in CBA's HEC-1 analysis the drainage area was estimated to be 1.84 square miles. The difference in size of the basin in the two anaylysis is thought to be due to the scale of the maps used to estimate the drainage area.

The Flood Flow Frequency Analysis estimated the 100-year discharge to be 3020 cfs, which equates to 2.7 cfs/acre.

The HEC-1 analysis estimated the 100-year discharge to be to be 3036 cfs, which equates to 2.6 CFS/acre.

PREPARED BY: PJE DATE: 7/91 CHECKED BY: SA 7/91 SHEET NO.: OF

CBA
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5062 NORTH 19TH AVE.
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[602] 242-2999
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Log-Pearson Analysis for Salt River
Hydrology Study

Ross Croft

1

```
*********************************        ************************************
*            HECWRC             *        *                                  *
* FLOOD FLOW FREQUENCY ANALYSIS *        *   U.S. ARMY CORPS OF ENGINEERS   *
* PROGRAM DATE:    1 APRIL 1978 *        * THE HYDROLOGIC ENGINEERING CENTER *
* VERSION DATE:    1 APRIL 1937 *        *         609 SECOND STREET        *
* RUN  DATE     AND     TIME:   *        *      DAVIS, CALIFORNIA 95616     *
*    11/19/90          10:37:35 *        * (916) 551-1748 OR (FTS) 460-1748 *
*********************************        ************************************
```

```
 INPUT FILE NAME: SALRTRIB.DAT
OUTPUT FILE NAME: SALRTRIB.OUT


**TITLE CARD(S)**
TT       SALT RIVER TRIBUTARY NR SOUTH MOUNTAIN PARK

**JOB CARD(S)**
     IPPC   ISKFX  IPROLT    IFMT    IWYR   IUNIT   ISMRY   IPNCH    IREG
J1     0       0       0       0       0       0       3       0       0

       A       B  CLIMIT
J2   .00     .00     .0C

**STATION IDENTIFICATION**
ID            09512200     DA 1.75 SQ MI

**GENERALIZED SKEW**
     ISTN   GGMSE    SKEW
GS 51220     .000    -.20

**SYSTEMATIC EVENTS**
     29 EVENTS TO BE ANALYZED

**END OF INPUT DATA**
ED ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++


NOTE - ADOPTED SKEW EQUALS COMPUTED SKEW AND PRELIMINARY
       FREQUENCY STATISTICS ARE FOR THE CONDITIONAL
       FREQUENCY CURVE BECAUSE OF ZERO OR MISSING EVENTS.

* * * * WARNING - NUMBER OF ZERO AND/OR MISSING EVENTS GREATER
THAN 25 PERCENT OF ALL EVENTS.
 (SEE PAGE 5-1 OF BULLETIN 17B .)


 PRELIMINARY RESULTS
-FREQUENCY CURVE-          09512200     DA 1.75 SQ MI
*****************************************************************
*........FLOW,CFS........*              *...CONFIDENCE LIMITS...*
*              EXPECTED  * EXCEEDANCE  *                       *
*  COMPUTED  PROBABILITY * PROBABILITY *  .05 LIMIT  .95 LIMIT *
*-----------------------------------------------------------------
```

1.84

3200.	4310.	.002	11500.	1330.
2248.	2840.	.005	7430.	986.
1648.	1990.	.010	5060.	755.
1151.	1330.	.020	3250.	553.
640.	703.	.050	1520.	330.
360.	382.	.100	793.	197.
166.	171.	.200	321.	96.
22.	22.	.500	38.	12.
0.	0.	.800	0.	0.
0.	0.	.900	0.	0.
0.	0.	.950	0.	0.
0.	0.	.990	0.	0.

FREQUENCY CURVE STATISTICS		STATISTICS BASED ON	
MEAN LOGARITHM	1.7618	HISTORIC EVENTS	0
STANDARD DEVIATION	.7666	HIGH OUTLIERS	0
COMPUTED SKEW	-.4437	LOW OUTLIERS	0
GENERALIZED SKEW	-.2000	ZERO OR MISSING	9
ADOPTED SKEW	-.4437	SYSTEMATIC EVENTS	29

FINAL RESULTS

-PLOTTING POSITIONS- 09512200 DA 1.75 SQ MI

EVENTS ANALYZED				ORDERED EVENTS			
MON	DAY	YEAR	FLOW,CFS	RANK	WATER YEAR	FLOW,CFS	WEIBULL PLOT POS
0	0	61	370.	1	65	670.	.0333
0	0	62	0.	2	84	644.	.0667
0	0	63	0.	3	64	530.	.1000
0	0	64	530.	4	61	370.	.1333
0	0	65	670.	5	66	194.	.1667
0	0	66	194.	6	73	147.	.2000
0	0	67	12.	7	82	133.	.2333
0	0	68	81.	8	74	114.	.2667
0	0	69	0.	9	88	94.	.3000
0	0	70	77.	10	78	86.	.3333
0	0	71	0.	11	63	81.	.3667
0	0	72	2.	12	70	77.	.4000
0	0	73	147.	13	76	70.	.4333
0	0	74	114.	14	83	44.	.4667
0	0	75	4.	15	67	12.	.5000
0	0	76	70.	16	69	9.	.5333
0	0	77	5.	17	85	7.	.5667
0	0	78	86.	18	77	5.	.6000
0	0	79	0.	19	75	4.	.6333
0	0	80	0.	20	72	2.	.6667
0	0	81	0.	21	81	0.	.7000
0	0	82	133.	22	79	0.	.7333
0	0	83	44.	23	71	0.	.7667
0	0	84	644.	24	62	0.	.8000
0	0	85	7.	25	80	0.	.8333
0	0	86	0.	26	66	0.	.8667
0	0	87	0.	27	87	0.	.9000
0	0	88	94.	28	69	0.	.9333
0	0	89	9.	29	83	0.	.9667

-OUTLIER TESTS -

LOW OUTLIER TEST

BASED ON 20 EVENTS, 10 PERCENT OUTLIER TEST VALUE K(N) = 2.385

0 LOW OUTLIER(S) IDENTIFIED BELOW TEST VALUE OF .9
BASED ON THE STATISTICS AFTER 9 ZERO OR MISSING EVENTS DELETED

STATISTICS AND FREQUENCY CURVE ADJUSTED FOR 0 LOW OUTLIER(S)
AND/OR 9 ZERO OR MISSING EVENT(S)

HIGH OUTLIER TEST

BASED ON 20 EVENTS, 10 PERCENT OUTLIER TEST VALUE K(N) = 2.385

0 HIGH OUTLIER(S) IDENTIFIED ABOVE TEST VALUE OF 3890.

-SKEW WEIGHTING -

BASED ON 29 EVENTS, MEAN-SQUARE ERROR OF STATION SKEW = .249
DEFAULT OR INPUT MEAN-SQUARE ERROR OF GENERALIZED SKEW = .302

FINAL RESULTS
-FREQUENCY CURVE- 09512200 DA 1.75 SQ MI

FLOW, CFS COMPUTED	FLOW, CFS EXPECTED PROBABILITY	EXCEEDANCE PROBABILITY	CONFIDENCE LIMITS .05 LIMIT	CONFIDENCE LIMITS .95 LIMIT
7340.	11500.	.002	52600.	1910.
4570.	6600.	.005	29200.	1280.
3020.	4100.	.010	17400.	896.
1870.	2320.	.020	9820.	592.
864.	1020.	.050	3720.	301.
411.	459.	.100	1510.	156.
156.	165.	.200	476.	64.
19.	19.	.500	46.	8.
2.	2.	.800	4.	0.
0.	0.	.900	1.	0.
0.	9.	.950	0.	2.
1.	5.	.990	4.	1.

FREQUENCY CURVE STATISTICS		STATISTICS BASED ON	
MEAN LOGARITHM	1.1374	HISTORIC EVENTS	0
STANDARD DEVIATION	1.1723	HIGH OUTLIERS	0
COMPUTED SKEW	-.3034	LOW OUTLIERS	0
GENERALIZED SKEW	-.2000	ZERO OR MISSING	9
ADOPTED SKEW	-.5000	SYSTEMATIC EVENTS	29

APPENDIX E

Hand Calculations for Tc and R for Selected Sub-Basins

DESIGN NOTES AND COMPUTATIONS

SUBJECT: Laveen ADMS

JOB NO.: 40916

SUB-BASIN	MCUHP1 T.C. Hour	MCUHP1 T.C. minutes	MCUHP1 R	By Hand T.C. Hour	By Hand T.C. minutes	By Hand R	Ratio MCUHP1/By Hand T.C	Ratio MCUHP1/By Hand R
CR23C	0.516	36	0.26	0.50	36.5	0.25	103	104
BR43C	0.817	49	0.493	0.834	50	0.51	98	97
BR159C	0.983	59	0.527	1.030	61.8	0.55	95	96
IROC	1.217	73	0.874	1.253	75.2	0.90	97	97
BR35C1	0.867	52	0.617	0.895	53.7	0.64	97	96
SMA43C	0.433	26	0.286	0.464	27.8	0.31	93	92
WC16B	0.250	15	0.288	0.252	15.1	0.29	99	99
WC19B	0.233	14	0.176	0.220	13.2	0.165	106	107
SM1C	0.567	34	0.276	0.474	28.4	0.22	120	125

With the exception of Sub-basin SM1C the values for Tc and R calculated utilizing the MCUHP1 program are within 1 to 7 percent of the hand calculated values.

PREPARED BY: DATE: CHECKED BY: SHEET NO.: OF

CBA
CELLA BARR ASSOCIATES
5062 NORTH 19TH AVE.
PHOENIX, ARIZONA 85015
[602] 242-2999
FAX [602] 246-7247

CALCULATION OF Tc & R

Calculated by: SA Date: 5-28-91
Checked by: DJF Project: [illegible]

Watershed: SUB-BASIN # CP23C
Rainfall Frequency: 100 - yr Duration: 6 - hr. Pattern #: 335

Rainfall Loss Method:
[ ] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
335	0.12
340	0.13
345	0.13
350	0.16
355	0.16
400	0.16
405	0.09
410	0.09

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.16	0.16	1.92
10	0.16	0.32	1.92
15	0.16	0.48	1.92
20	0.13	0.61	1.83
25	0.13	0.74	1.77
30	0.12	0.86	1.72
35	0.09	0.95	1.63
40	0.09	1.04	1.56

A = 0.58 sq.mi.
L = 1.09 mi.
S = 36.7 ft/mi.

Kb = m [log(A * 640)] + b
Kb = (-0.0104) log (0.58 * 640) + (0.06)
Kb = 0.03

$Tc = 11.4\ L^{.50}\ Kb^{.52}\ S^{-.31}\ i^{-.38}$

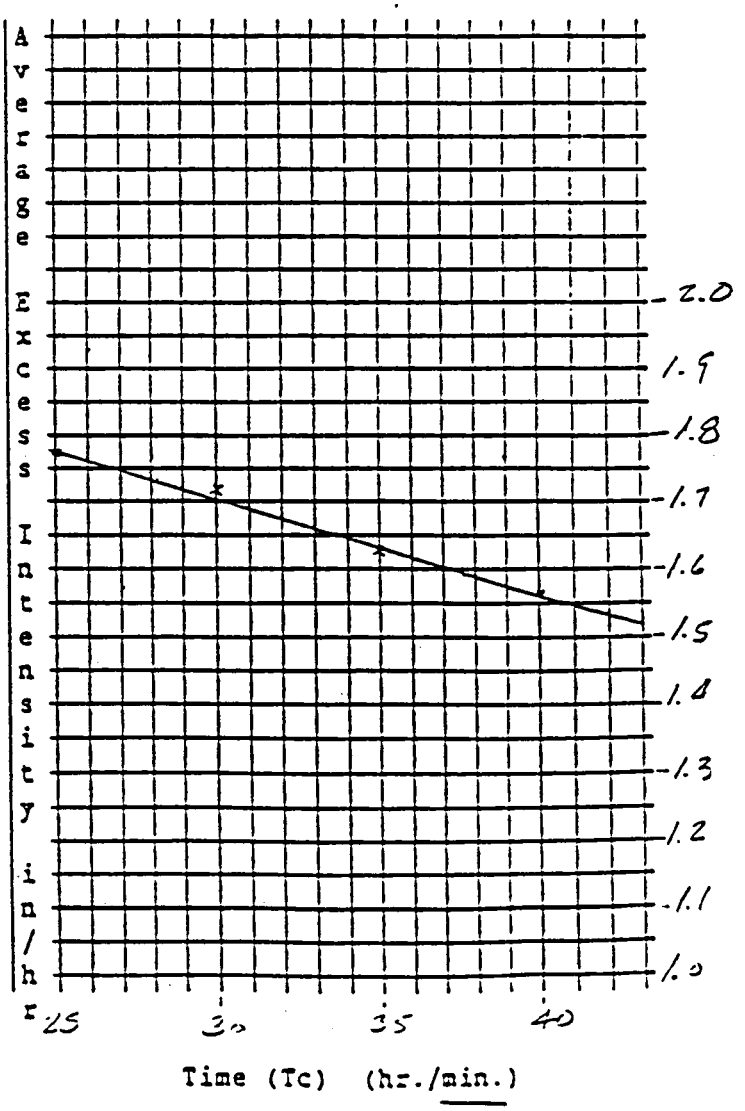
$Tc = (0.629)\ i^{-.38}$

Trial Tc		i	Calc. Tc
35	0.583	1.63	0.522
34	0.566	1.645	0.521
33	0.550	1.66	0.519
31	0.517	1.68	0.516

Tc = 0.516 hr.

$R = .37\ Tc^{1.11}\ A^{-.57}\ L^{.80}$

R = 0.26 hr.



CALCULATION OF Tc & R

Calculated by: [illegible] Date: 5-28-91
Checked by: DJE Project: LAVEEN ALMS

Watershed: SUB-BASIN # BR13C
Rainfall Frequency: 100 - yr Duration: 6 - hr. Pattern #: 335

Rainfall Loss Method:
[ ] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
330	0.06
335	0.14
340	0.14
345	0.14
350	0.17
355	0.17
400	0.17
405	0.11
410	0.11
415	0.11

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.17	0.17	2.04
10	0.17	0.34	2.04
15	0.17	0.51	2.03
20	0.14	0.65	1.95
25	0.14	0.79	1.89
30	0.14	0.93	1.86
35	0.11	1.04	1.78
40	0.11	1.15	1.72
45	0.11	1.26	1.66
50	0.06	1.32	1.58

A = 0.85 sq.mi.
L = 1.69 mi.
S = 27.3 ft/mi.

Kb = m [log(A * 640)]+ b
Kb = (-0.01375) log (*640) + (0.08)
Kb = 0.04

$Tc = 11.4\ L^{.50}\ Kb^{.52}\ S^{-.31}\ i^{-.38}$

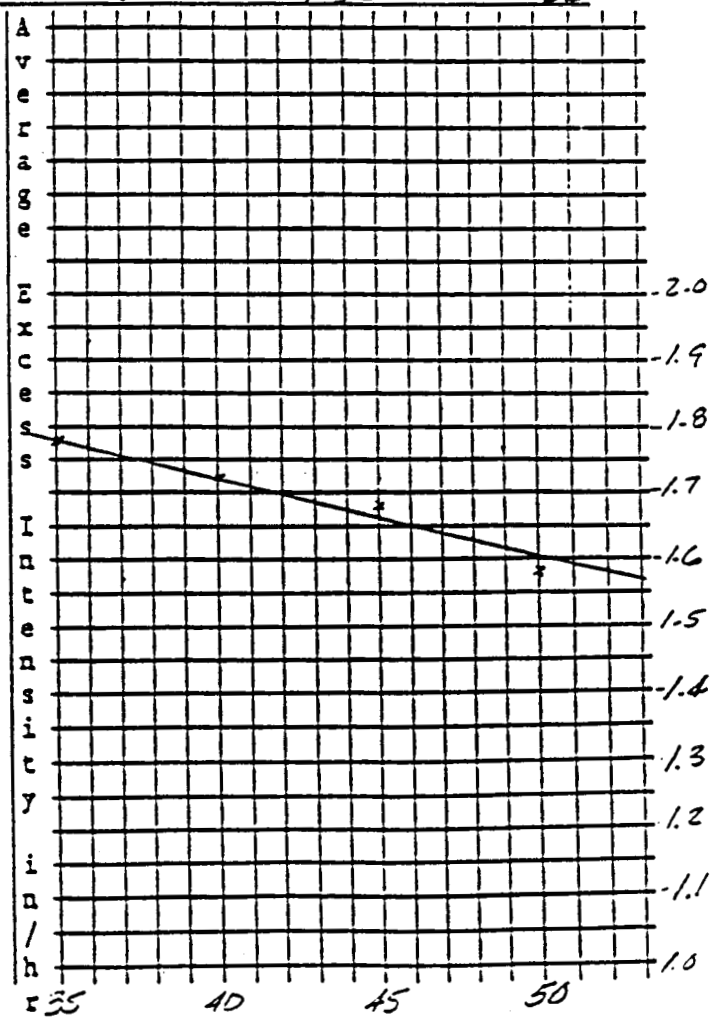
Tc = (0.997) $i^{-.38}$

Trial Tc	i	Calc. Tc
51 0.85	1.59	0.836
49 0.82	1.62	0.830
50 0.833	1.60	0.834

Tc = 0.834 hr.

$R = .37\ Tc^{1.11}\ A^{-.57}\ L^{.80}$

R = 0.51 hr.



CALCULATION OF Tc & R

Calculated by: [illegible] Date: 5-22-91
Checked by: PJE Project: [illegible]

Watershed: [illegible] = [illegible]
Rainfall Frequency: 100 - yr Duration: 6 - hr. Pattern #: 3.35

Rainfall Loss Method:
[ ] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

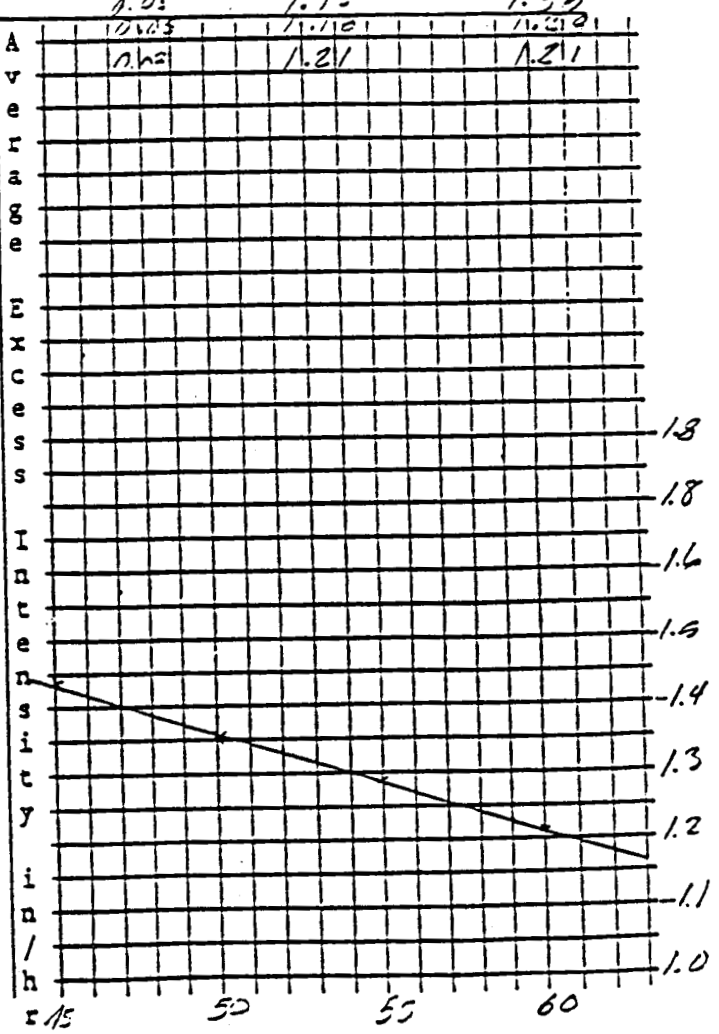
Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
325	0.05
330	0.05
335	0.12
340	0.12
345	0.12
350	0.15
355	0.15
400	0.15
405	0.09
410	0.09
415	0.05

A = 0.68 sq.mi.
L = 1.21 mi.
S = 11.5 ft/mi.

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.15	0.15	1.80
10	0.15	0.30	1.80
15	0.15	0.45	1.80
20	0.12	0.57	1.71
25	0.12	0.69	1.66
30	0.12	0.81	1.62
35	0.09	0.91	1.54
40	0.09	0.99	1.48
45	0.09	1.08	1.44
50	0.05	1.13	1.35
55	0.03	1.16	1.26
60	0.02	1.21	1.21



Kb = m [log(A * 640)]+ b
Kb = (-0.01375) log (*640) + (0.08)
Kb = 0.04

$Tc = 11.4\ L^{.50}\ Kb^{.52}\ S^{-.31}\ i^{-.38}$

$Tc = (1.103)\ i^{-.38}$

Trial Tc	i	Calc. Tc
59	0.983	1.23	1.019
60	1.00	1.21	1.026
60.5	1.01	1.20	1.030
61	1.02	1.19	1.03

Tc = 1.03 hr.

$R = .37\ Tc^{1.11}\ A^{-.57}\ L^{.80}$

R = 0.55 hr.

CALCULATION OF Tc & R

Calculated by: SA Date: 5-26-91
Checked by: PTE Project: [illegible]

Watershed: SUB-BASIN # [illegible]
Rainfall Frequency: [illegible] - yr Duration: 6 - hr. Pattern #: [illegible]

Rainfall Loss Method:
[ ] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
320	0.05
325	0.05
330	0.05
335	0.12
340	0.12
345	0.12
350	0.15
355	0.15
400	0.15
405	0.09
410	0.09

415A = 0.52 sq.mi. 0.09
420L = 1.40 mi. 0.03
425S = 12.8 ft/mi. 0.03
430

Kb = m [log(A * 640)]+ b
Kb = (-0.01375) log (*640) + (0.05)
Kb = 0.05

Tc = 11.4 L^.50 Kb^.52 S^-.31 i^-.38

Tc = (1.288) i^-.38

Trial Tc	i		Calc. Tc
73	1.22	1.08	1.251
74	1.233	1.07	1.255
72	1.200	1.09	1.246
73.5	1.225	1.075	1.253

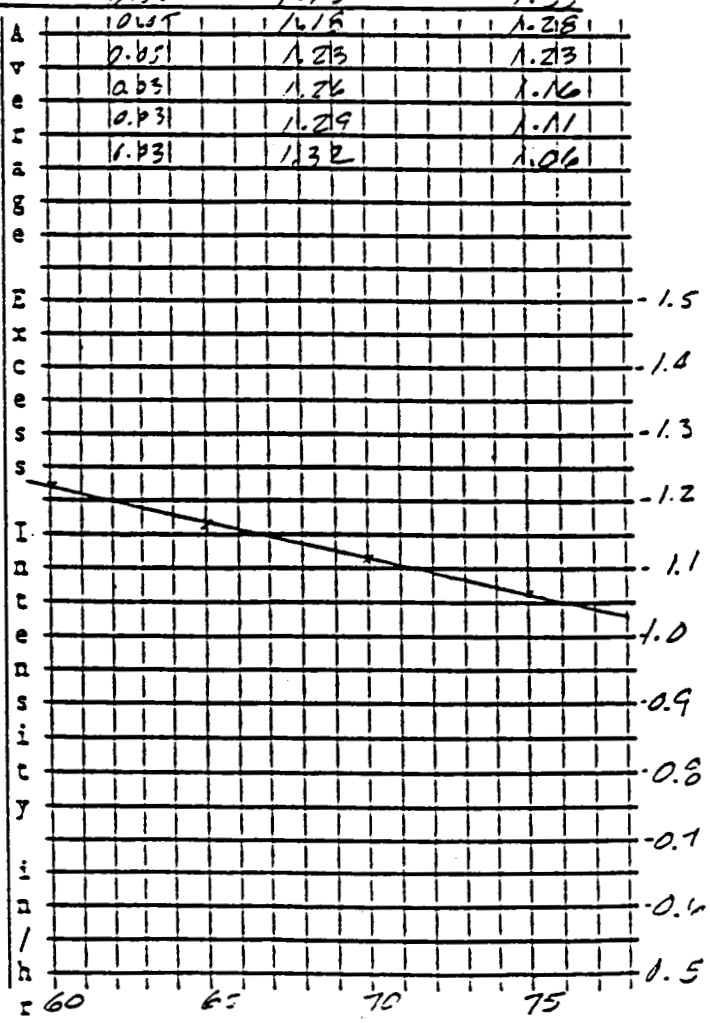
Tc = 1.253 hr.

R = .37 Tc^1.11 A^-.57 L^.80

R = 0.90 hr.

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.15	0.15	1.80
10	0.15	0.30	1.80
15	0.15	0.45	1.80
20	0.12	0.57	1.71
25	0.12	0.69	1.65
30	0.12	0.81	1.62
35	0.09	0.90	1.54
40	0.09	0.99	1.48
45	0.09	1.08	1.44
50	0.05	1.13	1.35
55	0.05	1.18	1.28
60	0.05	1.23	1.23
65	0.03	1.26	1.16
70	0.03	1.29	1.11
75	0.03	1.32	1.06



CALCULATION OF Tc & R

Calculated by: SA Date: 5-28-91
Checked by: YZE Project: LAVEEAN ALMIC

Watershed: SUB-BASIN # BR35C1
Rainfall Frequency: 100 - yr Duration: 16 - hr. Pattern #: 3.35

Rainfall Loss Method:
[ ] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

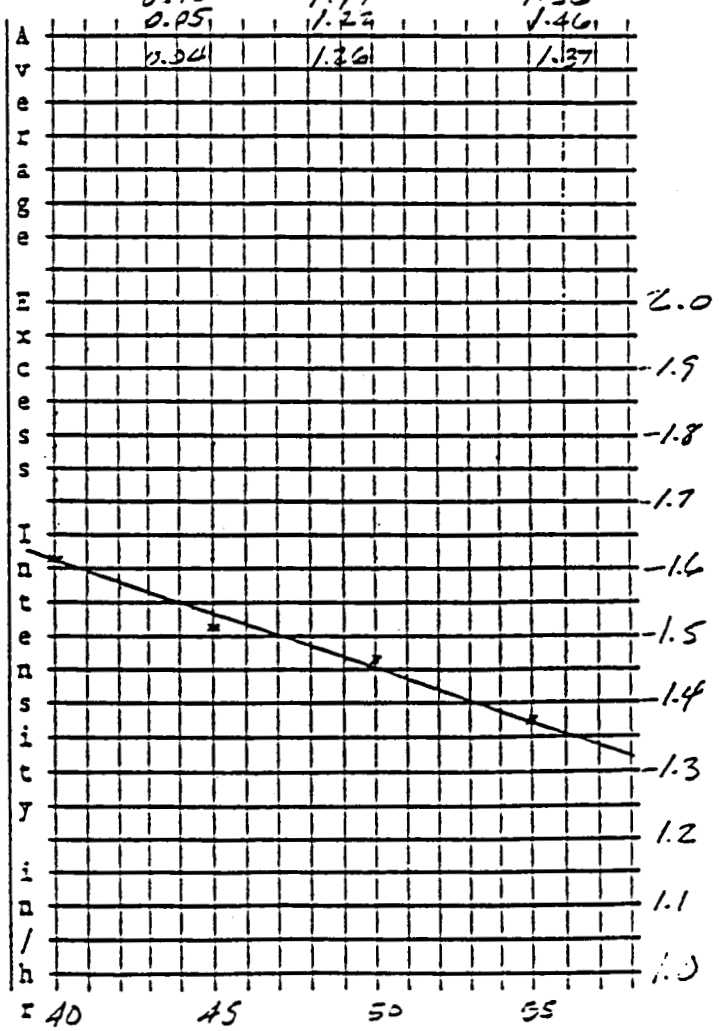
Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
330	0.05
335	0.13
340	0.13
345	0.13
350	0.16
355	0.16
400	0.16
405	0.10
410	0.10
415	0.10
420	0.04

A = 0.55 sq.mi.
L = 1.51 mi.
S = 31.1 ft/mi.

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.16	0.16	1.92
10	0.16	0.32	1.92
15	0.16	0.48	1.92
20	0.13	0.61	1.83
25	0.13	0.74	1.78
30	0.13	0.87	1.74
35	0.10	0.97	1.66
40	0.10	1.07	1.61
45	0.10	1.17	1.56
50	0.05	1.22	1.46
55	0.04	1.26	1.37



$Kb = m\,[\log(A * 640)] + b$

$Kb = (-0.01375)\log(\quad *640) + (0.08)$

$Kb = 0.05$

$Tc = 11.4\,L^{.50}\,Kb^{.52}\,S^{-.31}\,i^{-.38}$

$Tc = (1.016)\,i^{-.38}$

Trial Tc		i	Calc. Tc
56	0.933	1.35	0.906
54	0.900	1.39	0.8965
53	0.883	1.405	0.893
53.5	0.892	1.395	0.895

Tc = 0.895 hr.

$R = .37\,Tc^{1.11}\,A^{-.57}\,L^{.80}$

R = 0.64 hr.

CALCULATION OF Tc & R

Calculated by: SA Date: 5-23-91
Checked by: PJF Project: LAVEEN AIRPORT

Watershed: SUB-BASIN # SMA436
Rainfall Frequency: 100 - yr Duration: 6 - hr. Pattern #: 3.35

Rainfall Loss Method:
[ ] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
330	0.06
335	0.14
340	0.14
345	0.14
350	0.17
355	0.17
400	0.17
405	0.11
410	0.11
415	0.11

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.17	0.17	2.04
10	0.17	0.34	2.04
15	0.17	0.51	2.04
20	0.14	0.65	1.95
25	0.14	0.79	1.89
30	0.14	0.93	1.86
35	0.11	1.04	1.78
40	0.11	1.15	1.72
45	0.11	1.26	1.68
50	0.06	1.32	1.58
55	0.05	1.37	1.49

A = 0.13 sq.mi.
L = 0.54 mi.
S = 35 ft/mi.

Kb = m [log(A * 640)]+ b
Kb = (-0.01375) log (*640) + (0.08)
Kb = 0.05

$Tc = 11.4\ L^{.50}\ Kb^{.52}\ S^{-.31}\ i^{-.38}$

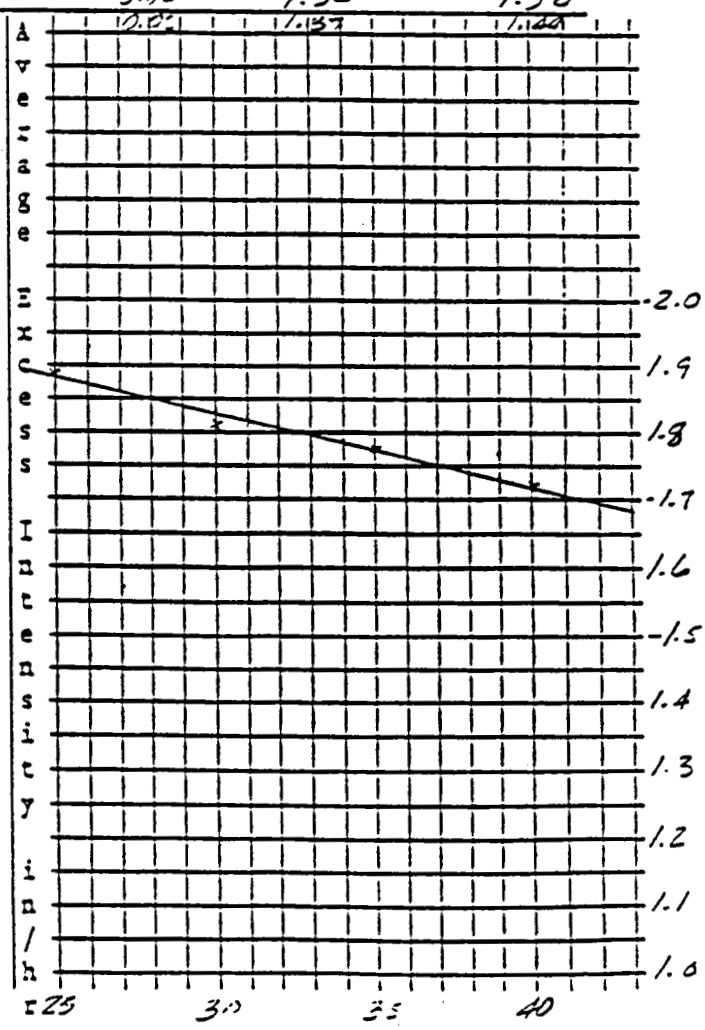
Tc = (0.586) $i^{-.38}$

Trial Tc	i	Calc. Tc
25	0.417	1.89	0.460
26	0.433	1.87	0.462
27	0.450	1.86	0.463
28	0.466	1.85	0.464

Tc = 0.464 hr.

$R = .37\ Tc^{1.11}\ A^{-.57}\ L^{.80}$

R = 0.31 hr.



CALCULATION OF Tc & R

Calculated by: LA Date: 5-22-91
Checked by: PJE Project: LAVISTA ADAIC

Watershed: SUB-BASIN # V1C16B
Rainfall Frequency: 100 - yr Duration: 6 - hr. Pattern #: 2.44

Rainfall Loss Method:
[ ] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
330	0.05
335	0.17
340	0.17
345	0.17
350	0.21
355	0.21
400	0.22
405	0.12
410	0.12
415	0.12

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.22	0.22	2.64
10	0.21	0.43	2.58
15	0.21	0.64	2.56
20	0.17	0.81	2.43
25	0.17	0.98	2.35
30	0.17	1.15	2.30
35	0.12	1.27	2.18
40	0.12	1.39	2.08
45	0.12	1.51	2.01
50	0.05	1.56	1.87

A = 0.023 sq.mi.
L = 0.34 mi.
S = 220 ft/mi.

Kb = m [log(A * 640)]+ b
Kb = (-0.0194) log (*640) + (0.11)
Kb = 0.09

$Tc = 11.4\ L^{.50}\ Kb^{.52}\ S^{-.31}\ i^{-.38}$

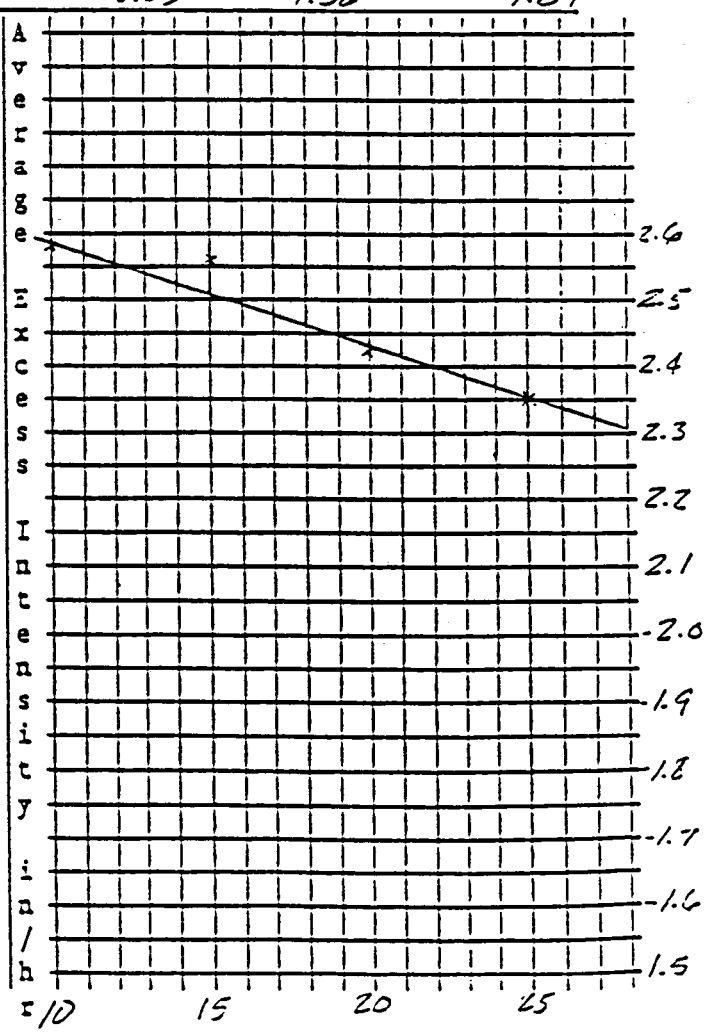
$Tc = (0.357)\ i^{-.38}$

Trial Tc	i	Calc. Tc
14	0.233	2.53	0.251
16	0.266	2.47	0.253
15	0.250	2.51	0.252

Tc = 0.252 hr.

$R = .37\ Tc^{1.11}\ A^{-.57}\ L^{.80}$

R = 0.29 hr.



CALCULATION OF Tc & R

Calculated by: SA Date: 5-28-91
Checked by: MJE Project: LAVERNA DAMS

Watershed: SUB-BASIN # LIC17B
Rainfall Frequency: 100 - yr Duration: 6 - hr. Pattern #: 2.44

Rainfall Loss Method:
[✓] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
330	0.06
335	0.17
340	0.17
345	0.17
350	0.22
355	0.22
400	0.22
405	0.12
410	0.12
415	0.12

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.22	0.22	2.64
10	0.22	0.44	2.64
15	0.22	0.66	2.64
20	0.17	0.83	2.49
25	0.17	1.00	2.40
30	0.17	1.17	2.34
35	0.12	1.29	2.21
40	0.12	1.41	2.11
45	0.12	1.53	2.04
50	0.06	1.59	

A = 0.21 sq.mi.
L = 0.98 mi.
S = 1160 ft/mi.

Kb = m [log(A * 640)]+ b
Kb = (-0.0194) log (*640) + (0.11)
Kb = 0.07

$Tc = 11.4\ L^{.50}\ Kb^{.52}\ S^{-.31}\ i^{-.38}$

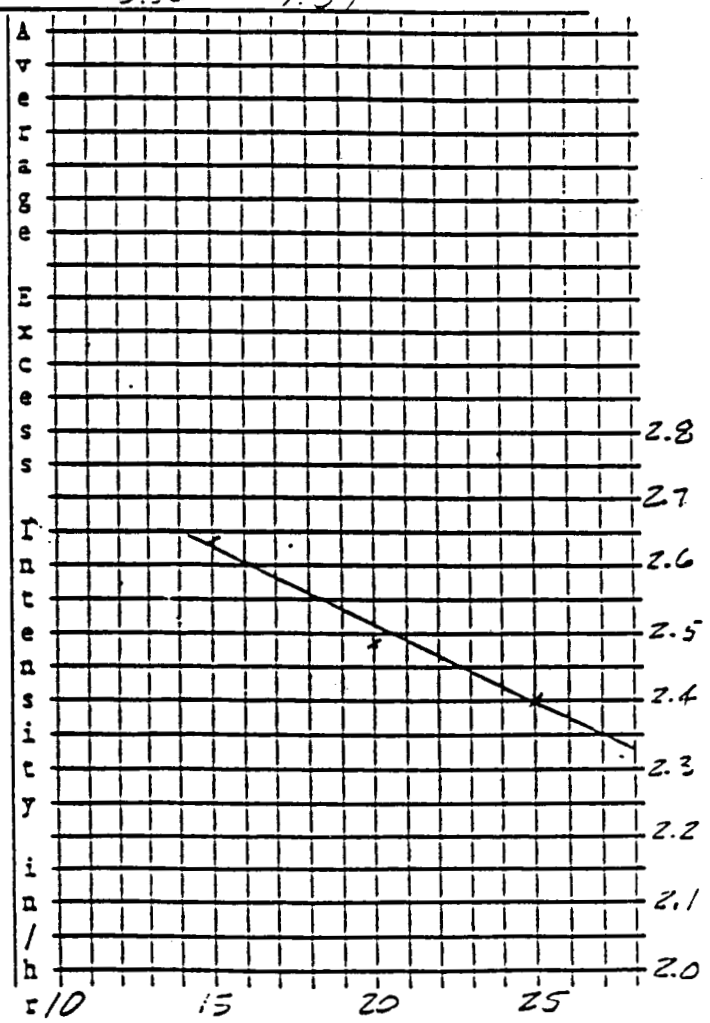
Tc = (0.318) $i^{-.38}$

Trial Tc	i	Calc. Tc
16	0.267	2.60	0.221
15	0.250	2.64	0.220
14	0.233	2.64	0.220
13.5	0.225	2.64	0.220

Tc = 0.220 hr.

$R = .37\ Tc^{1.11}\ A^{-.57}\ L^{.80}$

R = 0.165 hr.



CALCULATION OF Tc & R

Calculated by: S.H Date: 5-22-91
Checked by: PJE Project: LAVERNA DUNES

Watershed: SUB-BASIN # SM1C
Rainfall Frequency: 100 - yr Duration: 6 - hr. Pattern #: 3.35

Rainfall Loss Method:
[ ] Green & Ampt Method
[ ] IL + ULR by soil texture
[ ] IL + ULR by hydrologic soil group

Tabulate Period of Peak Rainfall Excess

Clock Time @ end of Increm.	Increm. Excess in.
335	0.10
340	0.10
345	0.11
350	0.14
355	0.14
400	0.14
405	0.08
410	0.08

Rearrange Incremental Excesses in Order of Decreasing Average Intensity

Accum. Time hr./min.	Increm. Excess in.	Accum. Excess in.	Avg. Excess Intensity in./hr.
5	0.14	0.14	1.68
10	0.14	0.28	1.68
15	0.14	0.42	1.68
20	0.11	0.53	1.59
25	0.10	0.63	1.51
30	0.10	0.73	1.46
35	0.08	0.81	1.39
40	0.08	0.89	1.34

A = 1.84 sq.mi.
L = 2.35 mi.
S = 462 ft/mi.

Kb = m [log(A * 640)]+ b
Kb = (-0.0194) log (*640) + (0.11)
Kb = 0.05

$Tc = 11.4\ L^{.50}\ Kb^{.52}\ S^{-.31}\ i^{-.38}$

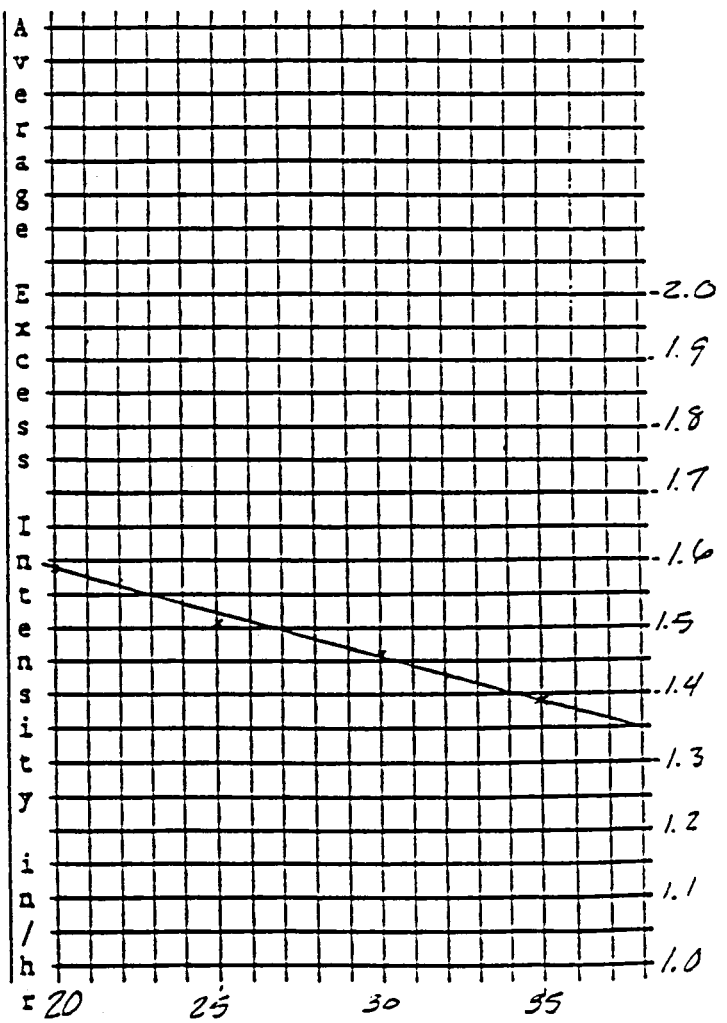
$Tc = (0.549)\ i^{-.38}$

Trial Tc	i	Calc. Tc
32	0.533	1.43	0.479
29	0.483	1.47	0.474
28	0.467	1.49	0.473
28.5	0.475	1.475	0.474

Tc = 0.474 hr.

$R = .37\ Tc^{1.11}\ A^{-.57}\ L^{.80}$

R = 0.22 hr.



APPENDIX F

Diversion Methods

APPENDIX F

The following information is contained in Appendix F:

1. Storm drain diversion for estimated flow in the storm drain located within 7th Avenue. Diversion is at concentration point SA19C.

2. Estimated split flow at computation point CPHV11 and resulting diversion data.

3. Diversion at computation point CIR63B.

4. Diversion at computation point CPHV12.

5. Diversion at computation point CIR55B.

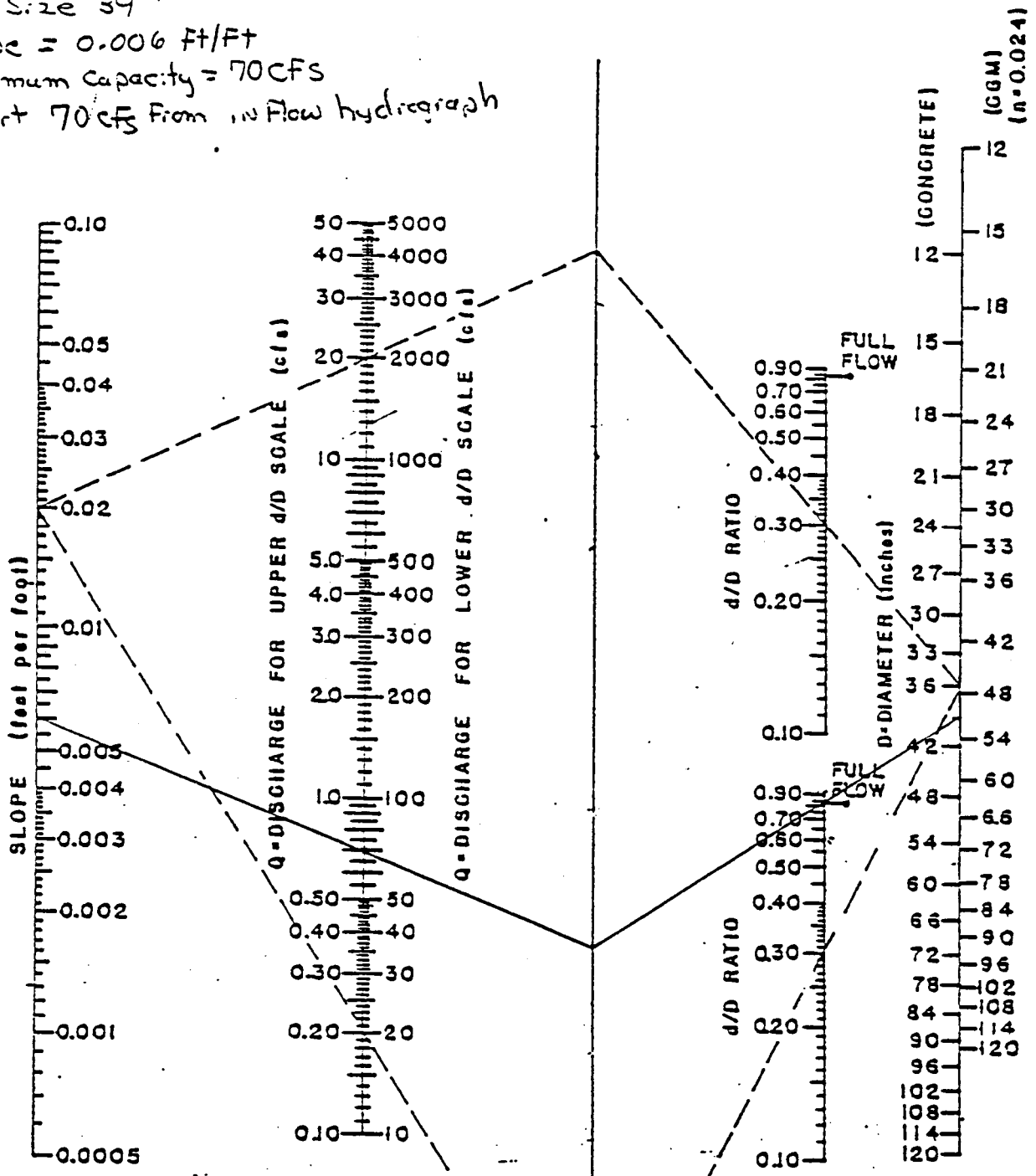
6. Estimated split flow at computation point COA51B and resulting diversion data.

7. Diversion estimated immediately upstream of computation point CIR65C.

8. Estimated split flow at Champion Drain and Baseline Road and resulting diversion data.

9. Diversion downstream of concentration point for sub-basin DR43C.

Pipe Size 39"
Slope = 0.006 ft/ft
Maximum Capacity = 70 CFS
Divert 70 cfs From inFlow hydrograph



EXAMPLE:

GIVEN: S=0.02
Q=20 cfs
D=36" (CONCRETE)

FIND: d/D=
d=

SOLUTION

d/D=0.30
d=0.30 x 3'=0.9'

UNIFORM FLOW
FOR
PIPE CULVERTS

HEC1 INPUT

DI 0 10 30 70 100 200 300
DQ 0 10 30 70 70 70 70

AHD
Structures Section
Hydraulics Branch
10-15-72

Chart 15

Texas
Highway
Department

PJE 4/91

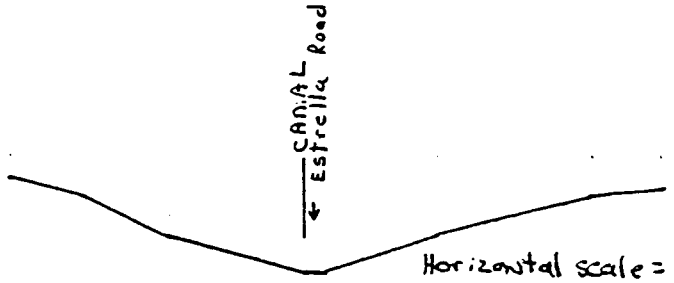
CHECKED BY: 5/22/91

DESIGN NOTES AND COMPUTATIONS

SUBJECT: LAVEEN ADMS

JOB NO.: 40916-02-30

Estimate split flow at computation point CPHU11



Slope = 0.0077 Ft/Ft

Left overbank "n" value = 0.07
Right overbank "n" value = 0.07
Channel "n" value = 0.020

Horizontal scale = 1" = 600'
Vertical scale = 1" = 10'

Mannings equation used to rate cross-section

Cross section data points (Left bank, Right bank)

x	0'	220'	480'	910'	960'	1320'	1800'	2020'	Distance from left side of channel
y	1075	1074	1072	1070	1070	1072	1074	1074.2	Elevation in feet

Flow is split at canal
Use Mannings Equation to estimate flow.

Q inflow CFS	Q out flow From x = 0 through 910 CFS	Q out flow For x = 910 through 2020 CFS	Depth of flow ft
139	20	119	0.5
558	126	432	1
1324	372	952	1.5
2507	801	1706	2

Hec 1 input data

DIO 139 558 1324 2507
DQO 20 126 372 801

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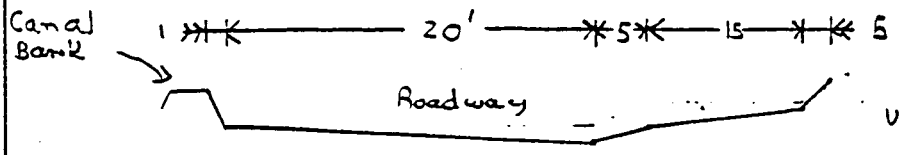
DESIGN NOTES AND COMPUTATIONS

SUBJECT: LAVEEN ADMS

JOB NO.: 40916-02-30

Diversion at computation point CIR63B located in sub basin IR63B

Computation point CIR63B is located on the western edge of the study area which is bounded by a concrete irrigation canal and earthen roadway. The earthen roadway has a capacity of approximately 45 cfs before the irrigation canal is overtopped and flow continues its natural flow path to the west. The diverted flow of approximately 45 cfs is routed to the Champion Drain watershed



"n" = 0.030

Slope = 0.001 ft/ft

Vertical Scale = 1" = 0.5'

Cross-section input data

Maximum Q = 45 cfs

x	0'	1'	21'	26'	41'	46'	← Distance starts from left side of channel
y	6'	5'	4.7'	5'	5.5'	6.2'	←

Mannings equation used to rate cross-section to find the maximum convegance capacity befor road over tops.

Hec1 input

DIO	45	100	200	400	600	800
DQO	45	45	45	45	45	45

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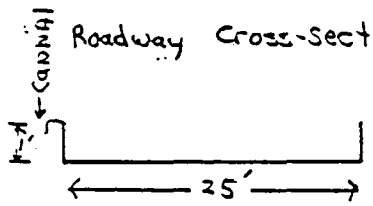
SUBJECT: LAVEEN ADMS

JOB NO.: 40916-02-30

Diversion at computation point CPHU12 located in Sub-basin IRS9C

The western edge of sub-basin IRS9C which is also the western edge of the study area is bounded by a concrete irrigation canal and earthen roadway. The earthen roadway has a capacity to convey approximately 65 cfs to the Northwest before the concrete irrigation CANAL is overtopped and flow continues to drain to the west. Therefore approximately 65 cfs will concentrate at computation point CPHU12. AT computation point CPHU12 a dip section in the earthen channel will drain approximately 684 CFS to the west. All of the Flow concentrated at computation point CPHU12 passes out of the study area.

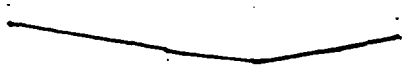
Roadway Cross-Section



"n" = 0.03
Slope = 0.003 Ft/Ft

Maximum Q before roadway is overtoped = 65 CFS

Dip Section



"n" = 0.03
slope = 0.0045 Ft/Ft

Maximum Q = 684 cFS

1400 Cross Section input

x	0	320	500	790	← distance from left bank
y	1024	1022.7	1022	1023.2	

Elevation

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DESIGN NOTES AND COMPUTATIONS

SUBJECT: Laveen ADMS

JOB NO.: 40916-02-30

Diversion at computation point CIR55B located in Sub-basin IR55C

The western edge of Sub-basin IR55B which is also the western edge of the study area is bounded by an earthen irrigation canal that is inches higher in elevation than the adjacent field grade. Minor containment of runoff and routed flow will be realized, therefore total flow at computation point CIR55B is diverted because flow at this point does not contribute to runoff computations down stream.

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DESIGN NOTES AND COMPUTATIONS

SUBJECT: Laveen ADMS

JOB NO.: 40916-02-30

Estimate split flow at computation point COA51B

Mannings equation used to rate cross-section

Point of Split Flow

Slope = 0.002 Ft/Ft

"n" value from 0 to 1690 = 0.07

"n" value from 1690 to 3300 = 0.065

Point of Split Flow

Horizontal 1" = 500'
Vertical 1" = 10'

Cross Section data points

Distance from left side of channel

Elevation

x	0	380	740	1100	1370	1690	2200	2630	2860	3300
y	1035	1034.7	1034.5	1034.4	1034	1033.7	1034.3	1034.3	1034.7	1035

Flow split occurs at point 1690

Q in Flow CFS	Q out Flow From x = 0 through 1690 CFS	Q out Flow From x = 1690 through 3300 CFS	Depth Ft.
8	4	4	0.2
24	13	11	0.3
93	50	43	0.5
219	117	102	0.7
461	199	262	0.9
852	383	469	1.1
1385	650	735	

HEC1 input

DI	0	8	24	93	219	461	852	1385
DQ	0	4	11	43	102	262	469	735

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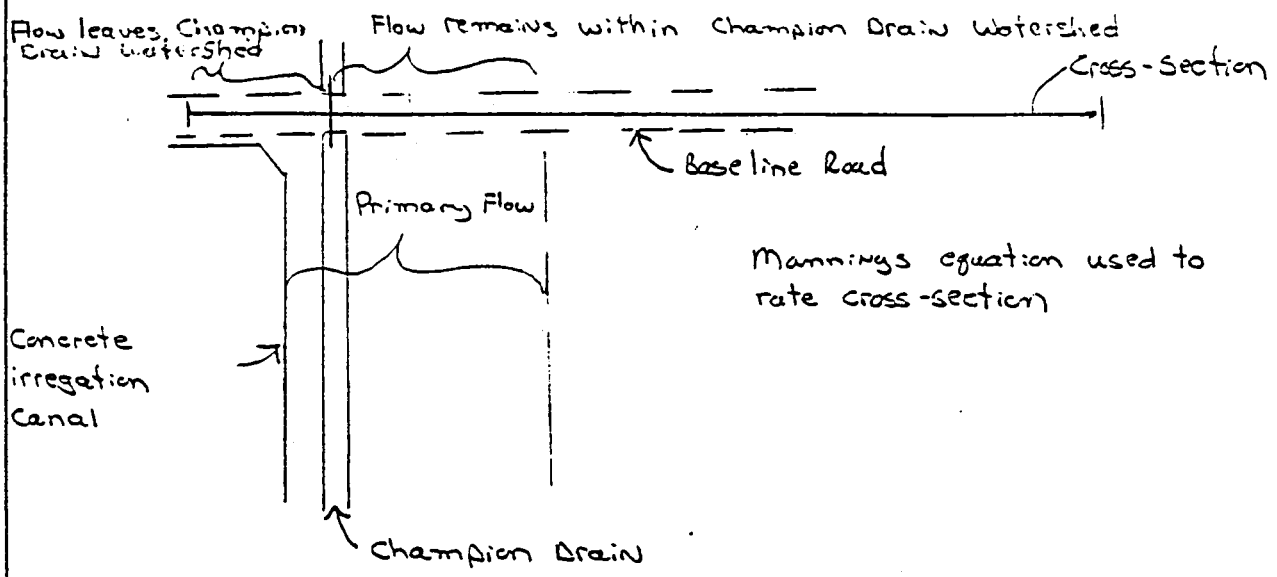
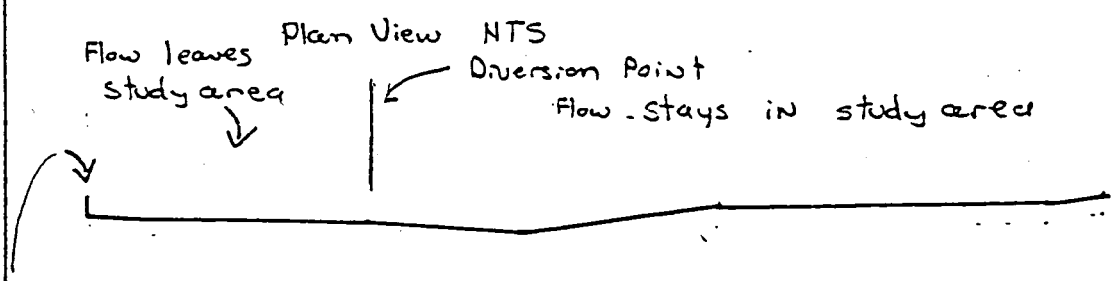
DESIGN NOTES AND COMPUTATIONS

SUBJECT: LAVEEN ADMS Diversion Point DBASE

Estimate split Flow at Champion Drain and Baseline Rd. JOB NO.: 40916-02-30



Plan View NTS



End of cross section set artificially high to contain flow

Cross-section data Points

S = 0.007 Ft/Ft

x = 0	0.1	290	440	650	990	1040	"n" From 0 to 290 = 0.030
y = 986	984.9	984.8	984.1	985.6	985.7	990	"n" From 290 to 1040 = 0.07

Depth of Flow Ft	Q in Flow CFS	Q from 0-290 CFS #1	Q from 290-1040 CFS #2
0.2	6	0	6
0.4	38	0	38
0.6	59	0	59
0.8	154	54	100
1.0	337	171	166
1.2	584	335	249
1.4	890	542	348
1.6	1113	785	328
1.8	1594	1064	530
2.0	1862	1215	647

#1 HEC1 OQ input values

#2 HEC1 DI input values

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DESIGN NOTES AND COMPUTATIONS

SUBJECT:

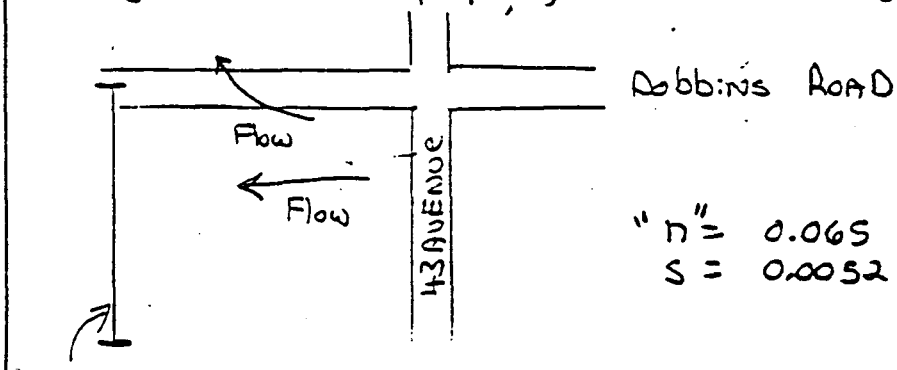
Laveen ADMS

JOB NO.: 40916-02-30

Diversion down stream of concentration point for sub-basin DR43C.

Flow ponds in road at the intersection of 43rd Avenue and Dobbins Road, low flow drains to the west through or around farm houses and works shops (FCDMC observation).

To estimate the amount of flow that would drain to the west prior to flow overtopping Dobbins Road and draing to the northwest a cross-section at the edge of farm property was rated useing Mannings equation,



"n" = 0.065
S = 0.0052 Ft/Ft

NTS

CROSS-SECTION input data

Distance from the right side = 0', 14', 29', 79', 129', 179', 279', 329'

Elevation in Feet = 48.31, 48.01, 47.51, 47.6, 47.81, 47.91, 48.21, 48.51,

Maximum capacity of channel = 119 cfs

Assume that after the capacity of the channel is exceeded remaining flow drains to the northwest

HEC1 input

DI 0	10	20	40	60	100	119	300	500	600	800
DQ 0	10	20	40	60	100	119	181	381	481	681

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DESIGN NOTES AND COMPUTATIONS

SUBJECT: LAVEEN ADMS

JOB NO.: 40916-02-30

Diversion immediately upstream of computation point CIR65C

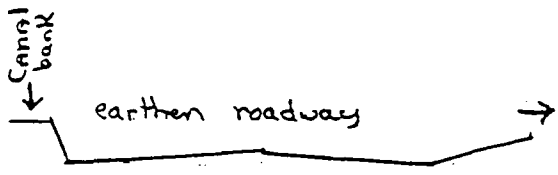
Flow from computation point CIR65C is conveyed to a point immediately upstream of computation point CIRDC within an earthen roadway bounded by canal banks, upstream of computation point CIRDC the primary flow path turns to the west, however due to the geometery of the flow path in the turn some flow will spill over into sub-basins IRDC.

Estimate spillover or diversion to sub-basin IRDC.

Estimate earthen roadway capacity immediately upstream of computation point CIR65C

"n" = 0.030

Slope = 0.0005 ft/ft



Spill over to Sub-basin IRDC

Estimated capacity of earthen roadway

N.T.S.

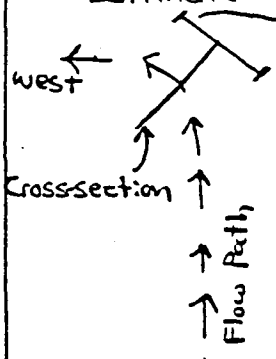
Cross-section input data

						Depth Ft'	Q CFS
X	0	2	22	42	52	0.35	16
Y	6	5	5.3	5	5.65	0.5	25
		(within earthen roadway)				0.6	32
						0.7	40

Maximum Q' before overspill to sub-basin IRDC occurs = 16 CFS (within earthen roadway)

Maximum Q' before overspill of canal bank occurs = 40 CFS

Estimate spill over flow to sub-basin IRDC



Use weir section to estimate spill over c = 3.0

$Q = CLd^{1.5}$

d = .15	Q = 9 cfs	9
d = .25	Q = 19 cfs	19
d = .35	Q = 31 cfs	31

Plan view N.T.S.

Hec input data

						Total Q at diversion point CFS	Q flowing to west CFS
DIC16	34	51	71	100	150	16	16
						34	25
						51	32
DGC16	25	32	40	69	119	71	40

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APPENDIX G

HEC-1 Input/Output Data

(Champion Model)

```
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            SEPTEMBER 1990            *
*             VERSION 4.0              *
*                                      *
*  RUN DATE  MON. JUL 29 1991          *
*  RUN TIME  17:22:17                  *
*                                      *
****************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 756-1104           *
*                                   *
*                                   *
*************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X       X     X        XX
X     X  X       X              X
XXXXXXX  XXXX    X       XXXXX  X
X     X  X       X              X
X     X  X       X     X        X
X     X  XXXXXXX   XXXXX        XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY.
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID    LAVEEN ADMS (FINAL HEC-1)                          CBA FILE # 40916-02-30
  2           ID    HIDDEN VALLEY WATERSHED/CHAMPION DRAIN WATERSHED
  3           ID    INPUT FILE NAME  CHAMPION                          DATE:  JULY 22. 1991
              *DIAGRAM
  4           IT       5                    300
  5           IO       5       0

  6           KK   WC16B
  7           KM   SUB-BASIN WC16B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR DEVELOPMENT
  8           KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
  9           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
 10           BA    .023
 11           IN      15
 12           KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN ON THE PB RECORD
 13           PB   3.345
 14           KM   THE FOLLOWING PC RECORDS REPRESENT A 6-HOUR STORM WITH A PATTERN No. OF 2.44
 15           PC    .000    .012    .018    .027    .040    .051    .062    .073    .084    .095
 16           PC    .108    .123    .144    .189    .275    .460    .683    .819    .886    .926
```

```
17          PC    .948    .962    .974    .988   1.000
18          LG    .150    .255   7.200    .123    .000
19          UC    .250    .288
20          UA       0       3       5       8      12      20      43      75      90      96
21          UA     100

22          KK   RRHV1
23          KM   ROUTE FLOW FROM SUB-BASIN WC16B TO COMPUTATION POINT CPHV1
24          RS       1    ELEV    1141
25          RC   0.035   0.040   0.035     540   0.011    1146
26          RX       0      25      80     120     140     170     240     310
27          RY    1146    1144    1142    1141    1141    1142    1144    1146

28          KK   WC17B
29          KM   SUB-BASIN WC17B -LAND USE - DESERT MOUNTAIN.DESERT HILLS;MINOR DEVELOPMENT
30          KM   6-HOUR RAINFALL, PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
31          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
32          BA    .035
33          LG    .150    .276   4.050    .361   5.000
34          UC    .283    .453
35          UA       0       3       5       8      12      20      43      75      90      96
36          UA     100

37          KK   RRHV2
38          KM   ROUTE FLOW FROM SUB-BASIN WC17B TP COMPUTATION POINT CPHV1
39          RS       1    ELEV    1140
40          RC   0.035   0.040   0.035     230   0.030    1142
41          RX       0      40      80      90     100     110     150     190
42          RY    1143    1142    1140    1140    1140    1140    1141    1142

43          KK   CPHV1
44          KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC16B AND WC17B
45          HC       2
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

46          KK   RRHV3
47          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV1 TO COMPUTATION POINT CPHV2(1ST REACH)
48          RS       1    ELEV    1137
49          RC   0.035   0.040   0.035     400   0.010    1140
50          RX       0      30      40      60      70     110     150     180
51          RY    1141    1140    1138    1137    1137    1138    1139    1140

52          KK   RRHV4
53          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV1 TO COMPUTATION POINT CPHV2(2ND REACH)
54          RS       1    ELEV    1141
55          RC   0.035   0.040   0.035     400   0.010    1146
56          RX       0      50     100     130     150     170     220     290
57          RY    1146    1144    1142    1141    1141    1142    1144    1146

58          KK   WC18B
59          KM   SUB-BASIN WC18B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR DEVELOPMENT
60          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
61          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
62          BA    .060
63          LG    .150    .265   4.100    .236    .000
```

```
 64          UC    .317    .359
 65          UA       0       3       5       8      12      20      43      75      90      96
 66          UA     100

 67          KK   RRHV5
 68          KM   ROUTE FLOW FROM SUB-BASIN WC18B TO COMPUTATION POINT CPHV2
 69          RS       1    ELEV    1136
 70          RC   0.035   0.040   0.035     650   0.017    1140
 71          RX       0      60     120     140     160     190     220     240
 72          RY    1140    1139    1138    1136    1136    1138    1139    1140

 73          KK   WC19B
 74          KM   SUB-BASIN WC19B -LAND USE - DESERT MOUNTAIN.DESERT HILLS;MINOR DEVELOPMENT
 75          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
 76          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
 77          BA    .210
 78          LG    .150    .276   3.520    .265  40.000
 79          UC    .233    .176
 80          UA       0       3       5       8      12      20      43      75      90      96
 81          UA     100

 82          KK   RRHV6
 83          KM   ROUTE FLOW FROM SUB-BASIN WC19B TO COMPUTATION POINT CPHV2
 84          RS       1    ELEV    1137
 85          RC   0.035   0.040   0.035     640   0.018    1139
 86          RX       0      10      30      45      60      75     110     140
 87          RY    1139  1138.5    1138    1137    1137    1138    1139    1140

 88          KK    PM3B
 89          KM   SUB-BASIN PM3B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR DEVELOPMENT
 90          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
 91          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
 92          BA    .060
 93          LG    .150    .345   3.100    .946   5.000
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 94          UC    .317    .309
 95          UA       0       3       5       8      12      20      43      75      90      96
 96          UA     100

 97          KK   CPHV2
 98          KM   COMBINE ROUTED FLOW FROM CPHV1. WC18B. WC19B WITH RUNOFF FROM SUB-BASIN PM3B
 99          HC       4

100          KK   RRHV7
101          KM   ROUTE FLOW FROM COMPUTATION CPHV2 TO COMPUTATION POINT CPHV3
102          RS       1    ELEV    1126
103          RC   0.035   0.040   0.035     750   0.011    1130
104          RX       0      40      90     160     190     210     250     390
105          RY    1130    1129    1128    1126    1126    1128    1132    1133

106          KK   WC20B
107          KM   SUB-BASIN WC20B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR DEVELOPMENT
108          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
109          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
110          BA    .014
```

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111        LG    .150    .250   8.600    .066    .000
112        UC    .233    .259
113        UA       0       3       5       8      12      20      43      75      90      96
114        UA     100

115        KK   RRHV8
116        KM   ROUTE FLOW FROM SUB-BASIN WC20B TO COMPUTATION POINT CPHV3
117        RS       1    ELEV    1132
118        RC   0.035   0.035   0.035     850   0.022  1134.5
119        RX       0      10      20      30      40      60     170     220
120        RY  1134.5    1134    1133    1132    1132    1134    1134  1134.5

121        KK   CPHV3
122        KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC20B AND  COMPUTATION POINT CPHV3
123        HC       2

124        KK   RRHV9
125        KM   ROUTE FLOW FROM COMPUTATION CPHV3 TO COMPUTATION POINT CPHV4
126        RS       1    ELEV    1121
127        RC   0.035   0.040   0.035     780   0.008    1126
128        RX       0     100     130     150     165     180     290     350
129        RY    1126    1124    1122    1121    1121    1122    1124    1126

130        KK   WC21B
131        KM   SUB-BASIN WC21B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR DEVELOPMENT
132        KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
133        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
134        BA    .024
135        LG    .150    .265   4.100    .236    .000
136        UC    .300    .407
137        UA       0       3       5       8      12      20      43      75      90      96
138        UA     100
```



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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

139        KK  RRHV10
140        KM   ROUTE FLOW FROM SUB-BASIN WC21B TO COMPUTATION POINT CPHV4
141        RS       2    ELEV    1129
142        RC   0.035   0.035   0.035    1110   0.022    1130
143        RX       0      25      50      75     100     125     175     200
144        RY    1130 1129.75  1129.5    1129    1129  1129.5 1129.75    1130

145        KK    PM4B
146        KM   SUB-BASIN PM4B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR DEVELOPMENT
147        KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
148        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
149        BA    .140
150        LG    .150    .327   3.450    .764  15.000
151        UC    .300    .201
152        UA       0       3       5       8      12      20      43      75      90      96
153        UA     100

154        KK   CPHV4
155        KM   COMBINE ROUTED FLOWS FROM SUB-BASINS WC21B PM4B AND  COMPUTATION POINT CPHV4
156        HC       3
```

ROUTED TO	RPOND	2960.	10.92	2043.	822.	792.	27.20	986.86	10.92
ROUTED TO	RBASE	2956.	11.00	2043.	820.	790.	27.20	986.03	11.00
DIVERSION TO	REDIVE	1831.	11.00	1316.	513.	495.	27.20		
HYDROGRAPH AT	DIBASE	1125.	11.00	727.	306.	295.	27.20		
ROUTED TO	RCD3C1	1109.	11.50	724.	300.	289.	27.20	983.75	11.50
HYDROGRAPH AT	A67AC	400.	4.75	98.	24.	24.	0.61		
ROUTED TO	RCD4C1	373.	5.33	98.	24.	24.	0.61	984.63	5.33
HYDROGRAPH AT	CD4C	128.	4.67	29.	7.	7.	0.19		
2 COMBINED AT	CPCD4C	435.	5.33	126.	32.	31.	0.80		
ROUTED TO	RCD3C2	358.	6.83	121.	32.	31.	0.80	984.61	6.83
HYDROGRAPH AT	CD3C	334.	4.67	84.	21.	20.	0.48		
3 COMBINED AT	CPCD3C	1159.	11.50	750.	352.	339.	28.48		

*** NORMAL END OF HEC-1 ***

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634   .   .   CPS27C............
      .   .       V
      .   .       V
637   .   .   RR35C3
      .   .       .
      .   .       .
643   .   CPR35C............
      .   .
      .   .
646   .   .     SM5C
      .   .       V
      .   .       V
655   .   .     RSM7
      .   .       .
      .   .       .
661   .   .       .     SMA15C
      .   .       .         .
      .   .       .         .
670   .   .   CPS15C............
      .   .       V
      .   .       V
673   .   .   RSM19C
      .   .       .
      .   .       .
679   .   .       .     SMA19C
      .   .       .         .
      .   .       .         .
688   .   .   CPS19C............
      .   .       V
      .   .       V
691   .   .   RRB27C
      .   .       .
      .   .       .
697   .   .       .       SM1C
      .   .       .         .
      .   .       .         .
706   .   .       .         .       SM1AC
      .   .       .         .         .
      .   .       .         .         .
715   .   .       .       CSM1............
      .   .       .         V
      .   .       .         V
719   .   .       .       RSM1
      .   .       .         .
      .   .       .         .
725   .   .       .         .       SM2C
      .   .       .         .         .
      .   .       .         .         .
734   .   .       .       CSM2............
      .   .       .         V
      .   .       .         V
738   .   .       .      RDENT
      .   .       .         V
      .   .       .         V
745   .   .       .       RSM2
      .   .       .         .
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                .         .         .         V
498             .         .         .     RIR63B
                .         .         .         .
                .         .         .         .
506             .         .         .         .      IR63B
                .         .         .         .         .
                .         .         .         .         .
515             .         .     CIR63B.......................
                .         .         .
                .         .         .
526             .         .         .-------> RIR63B
519             .         .     DIR63B
                .         .         .
                .         .         .
529     CDIVER.......................
                .
                .
533             .      SA19C
                .         .
                .         .
552             .         .-------> SA19C
550             .     DSA19C
                .         V
                .         V
555             .     RR23C1
                .         V
                .         V
561             .     RR23C2
                .         V
                .         V
567             .     RR23C3
                .         .
                .         .
573             .         .     CR23C
                .         .         .
                .         .         .
582             .     CPC23C............
                .         V
                .         V
585             .      RF27C
                .         .
                .         .
591             .         .     RR27C
                .         .         .
                .         .         .
600             .     CPR27C............
                .         V
                .         V
604             .     RR35C1
                .         .
                .         .
610             .         .     BR19C
                .         .         V
                .         .         V
619             .         .    RRS27C
                .         .         .
                .         .         .
625             .         .         .     SA27C
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```
                 .        V
                 .        V
364              .     RRHV23
                 .        .
                 .        .
370              .        .      IR55B
                 .        .        .
                 .        .        .
379              .     CIR55B............
                 .        .
                 .        .
389              .        .-------> RCIREB
383              .     DIR55B
                 .        .
                 .        .
392              .        .      IR62B
                 .        .        .
                 .        .        .
401              .        .        .      DR43C
                 .        .        .        .
                 .        .        .        .
420              .        .        .        .-------> RDR43C
417              .        .        .      DDR43C
                 .        .        .        V
                 .        .        .        V
423              .        .        .      ROA51B
                 .        .        .        V
                 .        .        .        V
429              .        .        .      ROA51B
                 .        .        .        .
                 .        .        .        .
435              .        .        .        .       OA51B
                 .        .        .                  .
                 .        .        .        .         .
450              .        .        .      COA51B............
                 .        .        .        .
                 .        .        .        .
457              .        .        .        .-------> DOA55C
454              .        .        .      DFO51B
                 .        .        .        V
                 .        .        .        V
460              .        .        .       RE55B
                 .        .        .        .
                 .        .        .        .
466              .        .        .        .       ER55B
                 .        .        .        .         .
                 .        .        .        .         .
475              .        .        .      CER55B............
                 .        .        .        V
                 .        .        .        V
479              .        .        .       RE59B
                 .        .        .        .
                 .        .        .        .
485              .        .        .        .       ER59B
                 .        .        .        .         .
                 .        .        .        .         .
494              .        .        .      CER59B............
                 .        .        .        V
```

```
244      CPHV8............
             V
             V
247     RRHV18
             .
             .
253          .      NWSM18
             .          V
             .          V
262          .      RR43B1
             .          V
             .          V
268          .      RR43B2
             .          .
             .          .
274          .          .      A43A1B
             .          .          .
             .          .          .
283          .      CPHV9............
             .          V
             .          V
286          .      RRHV19
             .          .
             .          .
292     CPHV10...........
             V
             V
295     RRHV20
             .
             .
301          .      ED47B
             .          .
             .          .
311     CPHV11...........
             .
             .
318          .-------> DIR55B
315     DFED47
             V
             V
321     RRHV21
             V
             V
328     RRHV22
             .
             .
335          .      IR59B
             .          .
             .          .
344     CPHV12...........
             .
             .
358          .-------> RCHV12
348     DIHV12
             .
             .
363          .          .<------- DIR55E
351          .      REED47
```

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                V
124        RRHV9
                .
                .
130             .        WC21B
                .            V
                .            V
139             .       RRHV10
                .            .
                .            .
145             .            .        PM4B
                .            .          .
                .            .          .
154        CPHV4.......................
                V
                V
157       RRHV11
                .
                .
163             .        WC22B
                .            V
                .            V
172             .       RRHV12
                .            .
                .            .
178        CPHV5............
                V
                V
181       RRHV13
                .
                .
187             .        WC23B
                .            V
                .            V
196             .       RRHV14
                .            .
                .            .
202        CPHV6............
                V
                V
205       RRHV15
                .
                .
211             .         PM5B
                .            .
                .            .
220        CPHV7............
                V
                V
223       RRHV16
                .
                .
229             .       A43A2B
                .            V
                .            V
238             .       RRHV17
                .            .
                .            .
```

```
        1839          ZZ

                SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

NO.       (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  6       WC16B
              V
              V
 22       RRHV1
              .
              .
 28           .       WC17B
              .           V
              .           V
 37           .       RRHV2
              .           .
              .           .
 43       CPHV1............
              V
              V
 46       RRHV3
              V
              V
 52       RRHV4
              .
              .
 58           .       WC18B
              .           V
              .           V
 67           .       RRHV5
              .           .
              .           .
 73           .           .       WC19B
              .           .           V
              .           .           V
 82           .           .       RRHV6
              .           .           .
              .           .           .
 88           .           .           .       PM3B
              .           .           .          .
              .           .           .          .
 97       CPHV2.................................
              V
              V
100       RRHV7
              .
              .
106           .       WC20B
              .           V
              .           V
115           .       RRHV8
              .           .
              .           .
121       CPHV3............
              V
```

```
1792          RY     984   982.9     982   981.6     982   982.5     983     984

1793          KK   A67AC
1794          KM   SUB-BASIN 67AC-LAND USE - AGRICULTURE. RURAL
1795          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1796          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1797          BA    .610
1798          LG    .500    .000   4.400    .416    .000
1799          UC   1.000    .567
1800          UA       0       3       9      18      28      42      59      73      87      92
1801          UA     100
1                                          HEC-1 INPUT                                          PAGE 41

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1802          KK  RCD4C1
1803          KM   ROUTE FLOW FROM SUB-BASIN 67AC CPCD4C TO COMPUTATION POINT CPCD4C
1804          RS      11    ELEV     984
1805          RC    0.07    0.07    0.07    2600  0.0024
1806          RX       0      80     230     340     590     730     850     920
1807          RY     988     984     984     984     984     984     984   987.8

1808          KK    CD4C
1809          KM   SUB-BASIN CD4C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1810          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1811          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1812          BA    .190
1813          LG    .500    .000   3.800    .451    .000
1814          UC    .900    .510
1815          UA       0       3       9      18      28      42      59      73      87      92
1816          UA     100

1817          KK  CPCD4C
1818          KM    COMBINE ROUTED FLOW FROM SUB-BASIN 67AC TO RUNOFF FROM SUB-BASIN CD4C
1819          HC       2

1820          KK  RCD3C2
1821          KM   ROUTE FLOW FROM COMPUTATION POINT CPCD4C TO COMPUTATION POINT CPCD3C
1822          RS      22    ELEV     984
1823          RC    0.07    0.07    0.07    5200  0.0024
1824          RX       0      80     230     340     590     730     850     920
1825          RY     988     984     984     984     984     984     984   987.8

1826          KK    CD3C
1827          KM   SUB-BASIN CD3C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1828          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1829          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1830          BA    .480
1831          LG    .500    .000   4.800    .350    .000
1832          UC    .967    .567
1833          UA       0       3       9      18      28      42      59      73      87      92
1834          UA     100

1835          KK  CPCD3C
1836          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPCD4C. ROUTED FLOW FROM DIVERSION
1837          KM   POINT AT BASELINE ROAD WITH RUNOFF FROM SUB-BASIN CD3C
1838          HC       3
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```
KM   SUB-BASIN IRSMC-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
BA    .250
LG    .290    .177   3.890    .488    .000
UC    .717    .522
UA       0       3       9      18      28      42      59      73      87      92
UA     100

KK  CIRSMC
KM
HC       2
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  RCD2C2
KM    ROUTE FLOW FROM COMPUTATION POINT CIRSMC TO COMPUTATION POINT CCD2C
RS       4    ELEV   987.6
RC    0.07    0.07    0.07    1000  0.0040
RX       0     100     300     400     560     620     750     870
RY     989   987.6   987.6   987.6   987.6   987.6   987.6     989

KK   CCD2C
KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CIRSMC TO PREVIOUSLY COMPUTED
KM   FLOW AT COMPUTATION POINT CCD2C
HC       2

KK   RPOND
KM   ROUTE INFLOW HYDROGRAPH AT COMPUTATION POINT CCD2C THROUGH DEPRESSED AREA
KM   OF SUB-BASIN CD2C
RS       1    ELEV     983
SA       0    20.4     124
SE     983     984   986.9
SS   985.8    1000     2.7     1.5

KK   RBASE
KM    ROUTE FLOW FROM OUTFALL OF PONDING AREA 700 FEET DOWN STREAM TO POINT OF
KM    SPLIT FLOW AT BASELINE ROAD AND CHAMPION DRAIN
RS       1    ELEV     984
RC   0.065   0.065   0.065     700   0.004
RX       0      60     230     350     480     580     720    1000
RY   986.2     984     984     984     984     984     985   986.2

KK  DIBASE
KM    AT BASELINE ROAD SPLIT FLOW OCCURS. FLOW THAT EXCEEDS FLOW PATH CAPACITY FOR
KM    ROUTING REACH TO COMPUTATION POINT CCD3C LEAVES THE STUDY AREA
DT  REDIVE
DI       0      38      59     154     337     584     890    1113    1594    1862
DO       0       0       0      54     171     335     542     785    1064    1215

KK  RCD3C1
KM   ROUTE FLOW FROM DIVERSION POINT AT BASELINE ROAD TO COMPUTATION
KM   POINT CPCD3C
RS       6    ELEV   981.6
RC    0.07    0.07    0.07    3000  0.0025
RX       0      90     100     170     250     400     660     840
```

```
1699        RY      6      5    4.7    4.7      5    5.5    5.5    6.2

1700        KK   IR65C
1701        KM   SUB-BASIN IR65C -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1702        KM   6-HOUR RAINFALL, PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1703        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1704        BA    .170
1705        LG    .500    .000   3.500    .470    .000
1706        UC    .867    .804
1707        UA      0       3       9      18      28      42      59      73      87      92
1708        UA     100

1709        KK  CIR65C
1710        KM   COMBINE RETRIEVED ROUTED FLOW FROM SUB-BASIN IR63B TO RUNOFF FROM SUB-BASIN
1711        KM   IR65C
1712        HC      2
1                                        HEC-1 INPUT                                        PAGE 39

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1713        KK   RIRDC
1714        KM   ROUTE FLOW FROM COMPUTATION POINT CIR65C TO COMPUTATION POINT CIRDC
1715        RS      4    ELEV    1013
1716        RC    0.03    0.03    0.03    3200  0.0018
1717        RX      0       1      10      20      30      40      50      51
1718        RY  1014.5    1013    1013    1013    1013    1013    1013  1014.5

1719        KK  DIIRDC
1720        KM    ROUTED FLOW FROM COMPUTATION POINT CIR65C IS SPLIT AT COMPUTATION POINT
1721        KM    CIRDC
1722        DT  RIR65C
1723        DI      0      16      34      51      71      80     100     120     150
1724        DO      0      16      25      32      40      49      69      89     119

1725        KK    IRDC
1726        KM   SUB-BASIN IRDC-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1727        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1728        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1729        BA    .520
1730        LG    .500    .000   3.500    .470    .000
1731        UC   1.217    .874
1732        UA      0       3       9      18      28      42      59      73      87      92
1733        UA     100

1734        KK   CIRDC
1735        KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CIR65C TO RUNOFF FROM SUB-BASIN
1736        KM    IRDC
1737        HC      2

1738        KK  RIRSMC
1739        KM    ROUTE FLOW COMPUTATION POINT CIRDC TO COMPUTATION POINT CIRSMC
1740        RS     11    ELEV  1005.5
1741        RC    0.07    0.07    0.07    3400  0.0058
1742        RX      0     160     240     470     530     780     900    1000
1743        RY  1006.2  1005.7  1005.7  1005.7  1005.6  1005.5  1005.7  1006.2

1744        KK   IRSMC
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1653        KK  RCD1C2
1654        KM    ROUTE FLOW FROM SUBASIN BR67C TO COMPUTATION POINT CPCD1C
1655        RS      17    ELEV     993
1656        RC    0.07    0.07    0.07    2100  0.0014
1657        RX       0      75     260     490     670     830    1000    1130
1658        RY     994   993.5   993.5     993     993     993     993     994

1659        KK    CD1C
1660        KM   SUB-BASIN CD1C -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1661        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1662        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1663        BA    .470
1664        LG    .500    .000   5.320    .351    .000
1665        UC    .850    .332
1666        UA       0       3       9      18      28      42      59      73      87      92
1667        UA     100
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1668        KK  CPCD1C
1669        KM    COMBINE ROUTED FLOWS FROM COMPUTATION POINT CB163C AND SUB-BASIN BR67C
1670        KM    WITH RUNOFF FROM SUB-BASIN CD1C
1671        HC       3

1672        KK  RCD2C1
1673        KM    ROUTE FLOW FROM COMPUTATION POINT CPCD1C TO COMPUTATION POINT CCD2C
1674        RS      14    ELEV   987.4
1675        RC    0.07    0.07    0.07    4600  0.0018
1676        RX       0      70     330     880    1130    1750    2250    2630
1677        RY     990     988   987.4   987.6     988   989.4   989.4     990

1678        KK    CD2C
1679        KM   SUB-BASIN CD2C -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1680        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1681        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1682        BA    .580
1683        LG    .500    .000   6.500    .277    .000
1684        UC    .867    .451
1685        UA       0       3       9      18      28      42      59      73      87      92
1686        UA     100

1687        KK   CCD2C
1688        KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPCD1C TO RUNOFF FROM SUB-BASIN
1689        KM    CD2C
1690        HC       2

1691        KK  RIR63B
1692        KM   RETRIEVE SPLIT FLOW FROM COMPUTATION POINT CIR63B
1693        DR  RIR63B

1694        KK  RIR65C
1695        KM    ROUTE RETRIEVED FLOW FROM SUB-BASIN IR63B TO COMPUTATION POINT CIR65C
1696        RS       7    ELEV     4.7
1697        RC   0.030   0.030   0.030    3300  0.0010
1698        RX       0       1      11      21      26      31      41      46
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1606          KK  CB259C
1607          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CDR59C TO PREVIOUSLY
1608          KM   COMPUTED FLOW AT COMPUTATION POINT CB1592
1609          HC       2

1610          KK  RB1631
1611          KM   ROUTE FLOW FROM COMPUTATION POINT CB259C TO COMPUTATION POINT CB163C
1612          RS      13    ELEV     997
1613          RC    0.07    0.07    0.07    2640  0.0008
1614          RX       0      50     320     620     980    1270    1350    1400
1615          RY    1002     998     997     997     997     997     997   998.9

1616          KK  BR163C
1617          KM   SUB-BASIN BR163C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1618          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1619          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1620          BA    .260
1621          LG    .500    .000   4.700    .411    .000
1622          UC    .967    .642
1623          UA       0       3       9      18      28      42      59      73      87      92
1624          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1625          KK  BR263C
1626          KM   SUB-BASIN BR263C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1627          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1628          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1629          BA    .500
1630          LG    .500    .000   3.500    .463    .000
1631          UC    .950    .652
1632          UA       0       3       9      18      28      42      59      73      87      92
1633          UA     100

1634          KK  CB163C
1635          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CB159C WITH RUNOFF FROM SUB-BASINS
1636          KM   BR163C AND BR263C AND ROUTED FLOW FROM COMPUTATION POINT  CB259C
1637          HC       4

1638          KK   RCD1C
1639          KM   ROUTE FLOW FROM COMPUTATION POINT CB163C TO COMPUTATION POINT CPCD1C
1640          RS       8    ELEV   993.4
1641          RC    0.07    0.07   0.070    3240  0.0015
1642          RX       0     140     580    1190    2100    2500    2890    3300
1643          RY     996     994   993.4   993.4   993.9     994     995     996

1644          KK   BR67C
1645          KM   SUB-BASIN BR67C-LAND USE - RURAL DEVELEMENT
1646          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1647          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1648          BA    .130
1649          LG    .500    .220   6.200    .305    15.0
1650          UC    .733    .505
1651          UA       0       3       9      18      28      42      59      73      87      92
1652          UA     100
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1559    KM    COMBINE ROUTED DIVERTED FLOW FROM SUB-BASIN OA51B TO RUNOFF FROM SUB-
1560    KM    BASIN OA55C
1561    HC       2

1562    KK   RD57C
1563    KM   ROUTE FLOW FROM COMPUTATION POINT CPO55C TO COMPUTAION CDR57C
1564    RS      12    ELEV  1028.4
1565    RC    0.07    0.07    0.07    2920   0.001
1566    RX       0     230     370     520     720     870     990    1230
1567    RY    1030  1028.6  1028.4  1028.6  1028.6  1028.8  1028.9    1030

1568    KK   DR57C
1569    KM   SUB-BASIN DR57C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1570    KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1571    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1572    BA    .120
1573    LG    .500    .000   3.500    .470    .000
1574    UC    .900    .663
1575    UA       0       3       9      18      28      42      59      73      87      92
1576    UA     100

1577    KK  CDR57C
1578    KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPO55C TO RUNOFF FROM SUB-BASIN
1579    KM   DR57C
1580    HC       2
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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1581    KK   RD59C
1582    KM   ROUTE FLOW FROM COMPUTATION POINT CDR57C TO COMPUTATION POINT CDR59C
1583    RS       3    ELEV  1025.5
1584    RC    0.07    0.07    0.07    1200  0.0025
1585    RX       0     130     250     360     480     600     700     740
1586    RY  1027.2    1027    1027    1026  1025.5  1025.5    1026  1027.2

1587    KK   DR59C
1588    KM   SUB-BASIN DR59C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1589    KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1590    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1591    BA    .110
1592    LG    .500    .000   3.500    .470    .000
1593    UC    .783    .597
1594    UA       0       3       9      18      28      42      59      73      87      92
1595    UA     100

1596    KK  CDR59C
1597    KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CDR57C TO RUNOFF FROM SUB-BASIN
1598    KM   DR59C
1599    HC       2

1600    KK   RB259
1601    KM   ROUTE FLOW FROM COMPUTATION POINT CDR59C TO COMPUTATION POINT CB259C
1602    RS       2    ELEV  1017.2
1603    RC    0.07    0.02    0.07    5280  0.0046
1604    RX       0      10      20      35      70      80     120     180
1605    RY    1019  1017.7  1017.2  1017.2  1017.2  1017.7    1018    1019
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1512        KK  RB2591
1513        KM   ROUTE FLOW FROM COMPUTATION POINT CS51C TO COMPUTATION POINT CB259C
1514        KM   FIRST REACH
1515        RS      13    ELEV  1027.5
1516        RC    0.07    0.07    0.07    4200  0.0036
1517        RX       0     612    1085    1155    1595    1670    1765    2130
1518        RY  1029.6    1029    1028  1027.5  1027.5    1028    1028  1029.6

1519        KK  RB2592
1520        KM   ROUTE FLOW FROM COMPUTATION POINT CS51C TO COMPUTATION POINT CB259C
1521        KM   2ND REACH
1522        RS      10    ELEV    1001
1523        RC    0.07    0.07    0.07    3000  0.0063
1524        RX       0      50     140     335    1120    1770    1825    1870
1525        RY    1006    1004    1003    1002    1001    1001    1002  1002.5

1526        KK  BR259C
1527        KM   SUB-BASIN BR259C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1528        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1529        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1530        BA   1.000
1531        LG    .500    .000   3.550    .475    .000
1532        UC    .900    .467
1533        UA       0       3       9      18      28      42      59      73      87      92
1534        UA     100

1535        KK  CB259C
1536        KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CS51C AND RUNOFF FROM SUB-
1537        KM    BASIN BR259C
1538        HC       2
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1539        KK  DOA55C
1540        KM   RETRIEVE FLOW FROM HIDDEN VALLEY WATERSHED AT SUB-BASIN OA51B
1541        DR  DOA55C

1542        KK   RO55C
1543        KM   ROUTE SPLIT FLOW FROM SUB-BASIN OA51B ( HIDDEN VALLEY WATERSHED ) TO
1544        KM   COMPUTATION POINT CPO55C
1545        RS       9    ELEV  1031.5
1546        RC   0.065   0.065   0.065    2600  0.0014
1547        RX       0      90     190     260     350     450     580     910
1548        RY  1033.8  1031.8  1031.5  1031.5  1031.5  1031.5  1031.5  1033.8

1549        KK   OA55C
1550        KM   SUB-BASIN OA55C -LAND USE- RUAL DEVELEMENT
1551        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1552        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1553        BA    .250
1554        LG    .500    .000   3.550    .466    .000
1555        UC    .817    .478
1556        UA       0       3       9      18      28      42      59      73      87      92
1557        UA     100

1558        KK  CPO55C
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1466        KK  RB1593
1467        KM   ROUTE FLOW FROM SUB-BASIN VR59C TO COMPUTATION POINT CB159C
1468        RS      22    ELEV  1001.4
1469        RC    0.07    0.07    0.07    3000  0.0015    1002
1470        RX       0     280     660     840    1020    1120    1220    1250
1471        RY    1002  1001.3  1001.4  1001.4  1001.5  1001.5  1001.5    1002

1472        KK  BR159C
1473        KM   SUB-BASIN BR159C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1474        KM   6-HOUR RAINFALL, PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1475        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1476        BA    .680
1477        LG    .500    .000   3.750    .462    .000
1478        UC    .983    .527
1479        UA       0       3       9      18      28      42      59      73      87      92
1480        UA     100

1481        KK  CB159C
1482        KM     COMBINE ROUTED FLOWS FROM COMPUTATION POINT CB51C AND SUB-BASINS AVR51C
1483        KM     AND VR59C WITH RUNOFF FROM SUB-BASIN BR159C
1484        HC       4

1485        KK  RBR163
1486        KM   ROUTE FLOW FROM COMPUTATION POINT CB1591 TO COMPUTATION POINT CB163C
1487        RS       6    ELEV   996.5
1488        RC    0.07    0.07    0.07    2900  0.0019
1489        RX       0      50     550     980    1340    1750    2200    2780
1490        RY     999   996.5   996.9     998     998   998.9     999    1000

1491        KK  RET43C
1492        KM    RETRIEVE SPLIT FLOW FROM DIVERSION POINT DDR43C
1493        DR  RDR43C
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1494        KK   RS51C
1495        KM    ROUTE SPLIT FLOW FROM SUB-BASIN DR43C TO COMPUTATION POINT CS51C
1496        RS      20    ELEV    1039
1497        RC    0.07    0.07    0.07    5000  0.0026
1498        RX       0     240     420     580     760     890    1030    1150
1499        RY    1041  1039.2  1039.3  1039.5  1039.2    1039  1039.4    1041

1500        KK   SM51C
1501        KM   SUB-BASIN SM51C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1502        KM   6-HOUR RAINFALL, PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1503        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1504        BA    .500
1505        LG    .500    .000   5.850    .330    .000
1506        UC    .933    .545
1507        UA       0       3       9      18      28      42      59      73      87      92
1508        UA     100

1509        KK   CS51C
1510        KM   COMBINE ROUTED FLOW FROM SUB-BASIN DR43C TO RUNOFF FROM SUB-BASIN SM51C
1511        HC       2
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1419    RS      24    ELEV    1009
1420    RC    0.07    0.07    0.07    3600   0.001  1010.5
1421    RX       0     120     240     380     570     640     670     740
1422    RY  1010.5  1009.7  1009.5  1009.4  1009.1  1009.1    1009  1010.5

1423    KK   BR51C
1424    KM   SUB-BASIN BR51C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1425    KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1426    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1427    BA    .700
1428    LG    .500    .000   3.650    .459    .000
1429    UC    .933    .337
1430    UA       0       3       9      18      28      42      59      73      87      92
1431    UA     100

1432    KK  CB51C
1433    KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CVR47C AND SUB-BASIN AVR51C
1434    KM    WITH RUNOFF FROM SUB-BASIN BR51C
1435    HC       3

1436    KK  RB1591
1437    KM    ROUTE FLOW FROM COMPUTATION POINT CB51C TO COMPUTATION POINT CB159C
1438    RS      13    ELEV  1004.5
1439    RC    0.07    0.07    0.07    5200  0.0016    1007
1440    RX       0      10      60     115     160     400    2635    3110
1441    RY    1007    1005    1005  1004.5  1004.5    1005    1006    1007

1442    KK  AVR55C
1443    KM   SUB-BASIN AVR55C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1444    KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1445    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1446    BA    .230
1447    LG    .500    .000   5.330    .295    .000
1448    UC    .933    .561
1449    UA       0       3       9      18      28      42      59      73      87      92
1450    UA     100
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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1451    KK  RB1592
1452    KM    ROUTE FLOW FROM SUBASIN AVR55C TO COMPUTATION POINT CB159C
1453    RS      26    ELEV    1003
1454    RC    0.07    0.07    0.07    5040  0.0018    1004
1455    RX       0     170     340     540     750     940    1120    1320
1456    RY    1004    1003    1003  1003.5  1003.5  1003.7  1008.8    1004

1457    KK   VR59C
1458    KM   SUB-BASIN VR59C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1459    KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1460    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1461    BA    .250
1462    LG    .500    .000   6.470    .298    .000
1463    UC    .933    .570
1464    UA       0       3       9      18      28      42      59      73      87      92
1465    UA     100
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1372        KM   SUB-BASIN BR43C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT-LAND USE
1373        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1374        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1375        BA    .850
1376        LG    .500    .000   6.350    .259    .000
1377        UC    .817    .493
1378        UA       0       3       9      18      28      42      59      73      87      92
1379        UA     100

1380        KK  CBR43C
1381        KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINT CD35.2 AND SUB-BASIN SMA43C
1382        HC       3

1383        KK  RVR472
1384        KM    ROUTE FLOW FROM COMPUTATION POINT CBR43C TO COMPUTATION POINT CVR47C
1385        RS      10    ELEV    1015
1386        RC    0.07    0.07    0.07    3720   0.006    1016
1387        RX       0     280     540     730    1000    1250    1470    1650
1388        RY    1016    1015    1015    1015    1015    1015    1015    1016

1389        KK   VR47C
1390        KM   SUB-BASIN VR47C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1391        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1392        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1393        BA    .890
1394        LG    .500    .000   4.950    .385    .000
1395        UC    .933    .407
1396        UA       0       3       9      18      28      42      59      73      87      92
1397        UA     100

1398        KK  CVR47C
1399        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINTS CAV43C AND CBR43C WITH RUNOFF
1400        KM   FROM SUB-BASIN VR47C
1401        HC       3

1402        KK  RBR511
1403        KM   ROUTE FLOW FROM COMPUTATION POINT CVR47C TO COMPUTATION POINT CB51C
1404        RS      11    ELEV  1011.7
1405        RC    0.07    0.07    0.07    3200   0.001    1014
1406        RX       0     530     650    1460    2220    2400    2640    3000
1407        RY    1014    1012  1011.7  1011.8  1011.7    1012  1013.7    1014
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1408        KK  AVR51C
1409        KM   SUB-BASIN AVR51C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1410        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1411        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1412        BA    .280
1413        LG    .500    .000   6.200    .304    .000
1414        UC    .767    .457
1415        UA       0       3       9      18      28      42      59      73      87      92
1416        UA     100

1417        KK  RBR512
1418        KM    ROUTE FLOW FROM SUB-BASIN AVR51C TO COMPUTATION POINT CB51C
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1326          UA     100

1327          KK  CD35.9
1328          KM   COMBINE ROUTED FLOWS FROM SUB-BASINS WC13A AND WC14A. COMPUTATION POINT
1329          KM   CD35.8 WITH RUNOFF FROM SUB-BASIN PM1A
1330          HC       4

1331          KK  RD3519
1332          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.9 TO COMPUTATION POINT CD35.2
1333          RS       1    ELEV    1101
1334          RC   0.040   0.045   0.040     288   0.012
1335          RX       0      80     190     270     310     335     440     480
1336          RY  1102.5    1102  1101.7  1101.5    1101  1101.5    1102  1102.5

1337          KK   DR35C
1338          KM   SUB-BASIN DR35C -LAND USE- AGRICULTURE: MINOR DEVELOPMENT
1339          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1340          KM   THIS BASIN USED RAINFALL REDUCTION FATOR OF .89
1341          BA    .600
1342          LG    .360    .221   4.200    .454    .000
1343          UC    .800    .500
1344          UA       0       3       5       8      12      20      43      75      90      96
1345          UA     100

1346          KK  CD35.2
1347          KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINTS CD35.1. CD35.4 AND CD35.9 WITH
1348          KM   RUNOFF FROM SUB-BASIN DR35C
1349          HC       4

1350          KK  RB43C1
1351          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.2 TO COMPUTATION POINT CBR43C
1352          RS      17    ELEV    1041
1353          RC    0.07    0.07    0.07    7200   0.006    1042
1354          RX       0     300     540     770    1020    1220    1400    1650
1355          RY    1042  1041.5  1041.5    1041    1041    1041  1041.5    1042

1356          KK  SMA43C
1357          KM   SUB-BASIN SMA43C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1358          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1359          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1360          BA    .130
1361          LG    .500    .000   6.960    .244    .000
1362          UC    .433    .286
1363          UA       0       3       9      18      28      42      59      73      87      92
1364          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1365          KK  RB43C2
1366          KM   ROUTE RUNOFF FROM SUB-BASIN SMA43C TO COMPUTATION POINT CBR43C
1367          RS       3    ELEV  1043.3
1368          RC    0.02    0.07    0.07    2600   0.003    1044
1369          RX       0       1      55      56      65      70      90     120
1370          RY  1044.2  1043.2  1043.2  1044.1  1043.5  1043.7  1043.8  1044.2

1371          KK   BR43C
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1279        KK  CD35.8
1280        KM   COMBINE ROUTED FLOW FROM SUB-BASIN WC15A TO SUB-BASIN PM2A
1281        HC       2

1282        KK  RD3516
1283        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.8 TO COMPUTATION POINT CD35.9
1284        RS       1    ELEV    1122
1285        RC   0.035   0.040   0.030    1400   0.008    1126
1286        RX       0      25      35      50     130     150     200     260
1287        RY    1130    1126    1124    1122    1122    1124    1125    1126

1288        KK   WC13A
1289        KM   SUB-BASIN WC13A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1290        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1291        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1292        BA    .013
1293        LG    .150    .250   8.600    .066    .000
1294        UC    .267    .366
1295        UA       0       3       5       8      12      20      43      75      90      96
1296        UA     100

1297        KK  RD3517
1298        KM   ROUTE RUNOFF FROM SUB-BASIN WC13A TO COMPUTATION POINT CD35.9
1299        RS       3    ELEV    1131
1300        RC   0.035   0.035   0.035    1280   0.023
1301        RX       0     115     180     225     270     350     435     530
1302        RY    1132  1131.5  1131.2    1131  1131.2  1131.5  1131.8    1132

1303        KK   WC14A
1304        KM   SUB-BASIN WC14A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1305        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1306        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1307        BA    .050
1308        LG    .150    .290   4.000    .520    .000
1309        UC    .417    .493
1310        UA       0       3       5       8      12      20      43      75      90      96
1311        UA     100

1312        KK  RD3518
1313        KM   ROUTE RUNOFF FROM SUB-BASIN WC14A TO COMPUTATION POINT CD35.9
1314        RS       6    ELEV  1133.4
1315        RC   0.040   0.045   0.040    2000   0.013
1316        RX       0      60     150     220     250     280     310     360
1317        RY    1134  1133.9  1133.7  1133.4  1133.7  1133.8  1133.9    1134
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1318        KK    PM1A
1319        KM   SUB-BASIN PM1A -LAND USE- AGRICULTURE. DESERT HILLS: MINOR DEVELOPMENT
1320        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1321        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1322        BA    .070
1323        LG    .380    .097   4.210    .697    2.00
1324        UC    .433    .320
1325        UA       0       3       5       8      12      20      43      75      90      96
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1232        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.7 TO COMPUTATION POINT CD35.6
1233        RS       2    ELEV  1120.5
1234        RC   0.055   0.055   0.055    1080   0.006
1235        RX       0      20      50      70     130     180     400     460
1236        RY  1122.5    1122    1121  1120.5    1121  1121.5    1122  1122.5

1237        KK  CD35.6
1238        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINTS CD35.5 AND CD35.7
1239        HC       2

1240        KK  RD3513
1241        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.6 TO COMPUTATION POINT CD35.4
1242        RS       1    ELEV    1101
1243        RC   0.040   0.035   0.030    1000   0.012
1244        RX       0      40     130     210     280     340     570     615
1245        RY  1102.5    1102  1101.8  1101.5    1101  1101.5    1102  1102.5

1246        KK  CD35.4
1247        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINTS CD35.3 AND CD35.6
1248        HC       2

1249        KK  RD3514
1250        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.4 TO COMPUTATION POINT CD35.2
1251        RS       3    ELEV  1192.5
1252        RC   0.070   0.070   0.070    1400   0.006    1194
1253        RX       0     120     200     300     400     470     560     660
1254        RY    1194  1193.0  1192.8  1192.5  1192.5  1192.8    1193    1194

1255        KK   WC15A
1256        KM   SUB-BASIN WC15A -LAND USE- DESERT MOUNTAIN. DESERT HILLS: MINOR DEVELOMENT
1257        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1258        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1259        BA    .360
1260        LG    .150    .320   3.350    .784  50.000
1261        UC    .367    .288
1262        UA       0       3       5       8      12      20      43      75      90      96
1263        UA     100

1264        KK  RD3515
1265        KM   ROUTE RUNOFF FROM SUB-BASIN WC15A TO COMPUTATION POINT CD35.8
1266        RS       1    ELEV    1132
1267        RC   0.030   0.035   0.030    1250   0.014    1136
1268        RX       0      30      50      70      85     100     140     200
1269        RY    1140    1138    1136    1134    1132    1134    1135    1136
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1270        KK    PM2A
1271        KM   SUB-BASIN PM2A -LAND USE- DESERT MOUNTAIN. DESERT HILLS: MINOR DEVELOMENT
1272        KM   6-HOUR RAINFALL.PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1273        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1274        BA    .070
1275        LG    .150    .332   4.100    .502  15.000
1276        UC    .333    .317
1277        UA       0       3       5       8      12      20      43      75      90      96
1278        UA     100
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1186          RC   0.035   0.035   0.035    1000   0.025
1187          RX       0      30      50      70     100     140     210     260
1188          RY    1134    1134    1133    1132    1132    1133  1133.5    1134

1189          KK  CD35.5
1190          KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC9A AND WC10A
1191          HC       2

1192          KK  RD35.9
1193          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.5 TO COMPUTATION POINT CD35.6
1194          RS       2    ELEV  1114.8
1195          RC   0.030   0.030   0.030    1200   0.015
1196          RX       0      60     110     170     210     240     330     370
1197          RY    1116  1115.8  1115.5    1115  1114.8    1115  1115.8    1116

1198          KK   WC11A
1199          KM   SUB-BASIN WC11A -LAND USE- DESERT MOUNTAINS. DESERT HILLS; MINOR DEVELOPMENT
1200          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1201          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1202          BA    .290
1203          LG    .150    .335   3.600    .703  53.000
1204          UC    .433    .429
1205          UA       0       3       5       8      12      20      43      75      90      96
1206          UA     100

1207          KK  RD3510
1208          KM   ROUTE RUNOFF FROM SUB-BASIN WC11A TO COMPUTATION POINT CD35.7
1209          RS       1    ELEV    1131
1210          RC   0.050   0.050   0.050    1100   0.024
1211          RX       0      50     170     180     225     260     380     460
1212          RY    1132  1131.8  1131.6  1131.5    1131  1131.5  1131.8    1132

1213          KK   WC12A
1214          KM   SUB-BASIN WC12A -LAND USE- DESERT MOUNTAIN. DESERT HILLS; MINOR DEVELOPMENT
1215          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1216          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1217          BA    .260
1218          LG    .150    .320   3.800    .632  28.000
1219          UC    .367    .301
1220          UA       0       3       5       8      12      20      43      75      90      96
1221          UA     100

1222          KK  RD3511
1223          KM   ROUTE RUNOFF FROM SUB-BASIN WC12A TO COMPUTATION POINT CD35.7
1224          RS       1    ELEV    1143
1225          RC   0.040   0.040   0.040    1200   0.022    1144
1226          RX       0      10      25      45      70     120     235     290
1227          RY  1144.5    1144  1143.5    1143  1143.5  1143.7  1143.8    1144
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1228          KK  CD35.7
1229          KM   COMBINE ROUTED FLOWS FROM SUB-BASINS WC11A AND WC12A
1230          HC       2

1231          KK  RD3512
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1139          BA    .350
1140          LG    .150    .321   3.700    .651  30.000
1141          UC    .533    .461
1142          UA       0       3       5       8      12      20      43      75      90      96
1143          UA     100

1144          KK  RD35.5
1145          KM   ROUTE FLOW FROM SUB-BASIN WC8A TO COMPUTATION POINT CD35.3
1146          RS       2    ELEV    1137
1147          RC   0.030   0.030   0.030    2200   0.022    1139
1148          RX       0      50     125     190     240     370     400     450
1149          RY    1139    1138  1137.5    1137  1137.5    1138    1140    1141

1150          KK  CD35.3
1151          KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC7A AND WC8A
1152          HC       2

1153          KK  RD35.6
1154          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.3 TO COMPUTATION POINT CD35.4
1155          RS       1    ELEV    1101
1156          RC   0.030   0.035   0.035     700   0.011
1157          RX       0      30      60     110     140     180     240     350
1158          RY    1103  1101.8  1101.6  1101.4    1101  1101.4  1101.7    1103

1159          KK    WC9A
1160          KM   SUB-BASIN WC9A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1161          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1162          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1163          BA    .025
1164          LG    .150    .250   8.600    .066    .000
1165          UC    .317    .446
1166          UA       0       3       5       8      12      20      43      75      90      96
1167          UA     100

1168          KK  RD35.7
1169          KM   ROUTE RUNOFF FROM SUB-BASIN WC9A TO COMPUTATION POINT CD35.5
1170          RS       1    ELEV    1128
1171          RC   0.035   0.035   0.035    1000   0.025    1130
1172          RX       0      30      40      60      70      90     120     140
1173          RY    1130    1130    1129    1128  1128.5    1129    1130  1130.5

1174          KK   WC10A
1175          KM   SUB-BASIN WC10A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1176          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1177          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1178          BA    .020
1179          LG    .150    .260   5.800    .059    .000
1180          UC    .250    .312
1181          UA       0       3       5       8      12      20      43      75      90      96
1182          UA     100
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1183          KK  RD35.8
1184          KM   ROUTE RUNOFF FROM SUB-BASIN WC10A TO COMPUTATION POINT CD35.5
1185          RS       1    ELEV    1132
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1092    RS      10    ELEV    1125
1093    RC   0.040   0.055   0.035    4800   0.012
1094    RX       0     130     270     330     400     460     530     625
1095    RY    1126  1125.9  1125.7  1125.5    1125  1125.5  1125.7    1126

1096    KK    WC6A
1097    KM   SUB-BASIN WC6A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1098    KM   6-HOUR RAINFALL, PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1099    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1100    BA    .014
1101    LG    .150    .270   3.750    .293    .000
1102    UC    .250    .279
1103    UA       0       3       5       8      12      20      43      75      90      96
1104    UA     100

1105    KK  RD35.2
1106    KM   ROUTE RUNOFF FROM SUB-BASIN WC6A TO COMPUTATION POINT CD35.1
1107    RS      13    ELEV  1117.8
1108    RC   0.070   0.070   0.070    3800   0.015
1109    RX       0     130     240     280     340     440     530     655
1110    RY    1122    1120    1118  1117.8    1118    1119    1120    1122

1111    KK  CD35.1
1112    KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC5A AND WC6A
1113    HC       2

1114    KK  RD35.3
1115    KM   ROUTE FLOW FROM COMPUTATION POINT CD35.1 TO COMPUTATION POINT CD35.2
1116    RS       6    ELEV  1089.6
1117    RC   0.035   0.035   0.035    2480   0.005  1090.5
1118    RX       0     100     200     350     435     480     500     525
1119    RY    1092    1091    1090  1089.8  1089.7  1089.6    1090  1090.5

1120    KK    WC7A
1121    KM   SUB-BASIN WC7A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1122    KM   6-HOUR RAINFALL, PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1123    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1124    BA    .050
1125    LG    .150    .270   7.000    .141    .000
1126    UC    .350    .371
1127    UA       0       3       5       8      12      20      43      75      90      96
1128    UA     100

1129    KK  RD35.4
1130    KM   ROUTE RUNOFF FROM SUB-BASIN WC7A TO COMPUTATION POINT CD35.3
1131    RS       4    ELEV  1125.8
1132    RC   0.035   0.035   0.035    2800   0.018  1128.5
1133    RX       0     100     170     240     250     260     330     360
1134    RY    1129    1128    1127    1126  1125.8    1126    1128  1128.5
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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1135    KK    WC8A
1136    KM   SUB-BASIN WC8A -LAND USE- DESERT MOUNTAIN. DESERT HILLS: MINOR DEVELOMENT
1137    KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1138    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
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1045        KK  BR35C1
1046        KM    SUB-BASIN BR35C2-LAND USE- AGRICULTURE: MINOR DEVELOPMENT
1047        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1048        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1049        BA    .550
1050        LG    .500    .000   5.100    .368    .000
1051        UC    .867    .617
1052        UA       0       3       9      18      28      42      59      73      87      92
1053        UA     100

1054        KK  CPB352
1055        KM    COMBINE RUNOFF FROM SUB-BASIN BR35C1 TO FLOW AT COMPUTATION POINT CPB352
1056        HC       2

1057        KK  RAV432
1058        KM   ROUTE FLOW FROM COMPUTATION POINT CPB352 TO COMPUTATION POINT CAV43C( 1ST.
1059        KM   REACH )
1060        RS       9    ELEV  1041.2
1061        RC    0.07    0.07    0.07    3400  0.0056
1062        RX       0      90      91     360     640    1015    1016    1475
1063        RY    1044    1042    1042  1041.2  1041.2    1042    1042    1044

1064        KK  RAV433
1065        KM   ROUTE FLOW FROM COMPUTATION POINT CPB352 TO COMPUTATION POINT CAV43C (2ND.
1066        KM   REACH )
1067        RS       8    ELEV    1028
1068        RC    0.07    0.07    0.07    3000  0.0060
1069        RX       0     300     301     570     630    1220    1400    1650
1070        RY    1030    1029    1029    1028    1028    1029    1029    1030

1071        KK  CAV43C
1072        KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPB352 TO FLOW AT COMPUTATION
1073        KM    POINT CAV43C
1074        HC       2

1075        KK  RVR471
1076        KM   ROUTE FLOW FROM COMPUTATION POINT CAV43C TO COMPUTATION POINT CPV47C
1077        RS       6    ELEV  1016.5
1078        RC    0.07    0.07    0.07    2900  0.0030
1079        RX       0     280     500     700     920    1130    1520    1750
1080        RY  1018.5    1017    1017  1016.5  1016.5  1017.2  1017.2  1018.5

1081        KK    WC5A
1082        KM   SUB-BASIN WC5A -LAND USE- DESERT HILLS: MINOR DEVELOMENT
1083        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1084        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1085        BA    .420
1086        LG    .150    .346   2.880   1.050  28.000
1087        UC    .650    .481
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1088        UA       0       3       5       8      12      20      43      75      90      96
1089        UA     100

1090        KK  RD35.1
1091        KM   ROUTE RUNOFF FROM SUB-BASIN WC5A TO COMPUTATION POINT CD35.1
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 999        KM   ROUTE FLOW FROM SUB-BASIN WC4A TO COMPUTATION POINT CD27.3
1000        RS       3    ELEV    1140
1001        RC   0.035   0.035   0.035    2200   0.016
1002        RX       0      60     100     180     225     300     435     500
1003        RY    1142    1141  1140.5    1140    1140  1140.5    1141    1142

1004        KK  CD27.3
1005        KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINT CD27.2 AND SUB-BASIN WC4A
1006        HC       2

1007        KK  RD27.7
1008        KM   ROUTE FLOW FROM COMPUTATION POINT CD27.3 TO COMPUTATION POINT CD27.4
1009        RS       2    ELEV    1115
1010        RC   0.040   0.050   0.035     950   0.006
1011        RX       0      20     135     170     220     280     400     460
1012        RY  1116.5    1116  1115.5    1115  1115.5  1115.8    1116  1116.5

1013        KK   DR27C
1014        KM   SUB-BASIN DR27C-LAND USE- AGRICULTURE. DESERT HILLS: MINOR DEVELOMENT
1015        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1016        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1017        BA    .230
1018        LG    .210    .345   3.996    .609    .000
1019        UC    .583    .451
1020        UA       0       3       5       8      12      20      43      75      90      96
1021        UA     100

1022        KK  CD27.4
1023        KM   COMBINE RUNOFF FROM SUB-BASIN DR27C WITH ROUTED FLOW FROM COMPUTATION POINT
1024        KM   CD27.3
1025        HC       2

1026        KK  RB35C2
1027        KM   ROUTE FLOW FROM COMPUTATION POINT CD27.3 TO COMPUTATION POINT CPB352
1028        RS      20    ELEV    1069
1029        RC   0.070   0.070   0.070    7680   0.007    1070
1030        RX       0     280     660     850    1000    1130    1180    1320
1031        RY    1070  1069.8  1069.7    1069    1069    1069  1069.7    1070

1032        KK  BR35C2
1033        KM   SUB-BASIN BR35C2-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1034        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
1035        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
1036        BA    .730
1037        LG    .500    .000   3.550    .439    .000
1038        UC    .867    .689
1039        UA       0       3       9      18      28      42      59      73      87      92
1040        UA     100
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1041        KK  CPB352
1042        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CD27.4 TO RUNOFF FROM SUB-BASIN
1043        KM   BR35C2
1044        HC       2
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953          RC   0.035   0.035   0.035    1000   0.015    1153
954          RX       0      35      75     100     135     145     165     195
955          RY    1153    1152    1150    1149    1148    1150    1152    1154

956          KK  CD27.1
957          KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC2A AND WC2.1A
958          HC       2

959          KK  RD27.3
960          KM   ROUTE FLOW FROM COMPUTATION POINT CP27.1 TO COMPUTATION POINT CP27.2
961          RS       1    ELEV    1141
962          RC   0.035   0.035   0.035     450   0.011    1144
963          RX       0      50     115     125     140     150     160     180
964          RY    1144    1143    1142    1141    1142    1144    1146    1148

965          KK    WC3A
966          KM   SUB-BASIN WC3A--LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
967          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
968          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
969          BA    .014
970          LG    .150    .250   8.600    .066    .000
971          UC    .317    .496
972          UA       0       3       5       8      12      20      43      75      90      96
973          UA     100

974          KK  RD27.4
975          KM   ROUTE FLOW FROM SUB-BASIN WC3A TO COMPUTATION POINT CD27.2
976          RS       1    ELEV  1141.8
977          RC   0.035   0.040   0.035     640   0.022
978          RX       0      40      80     100     110     120     150     200
979          RY    1145    1144    1143    1142  1141.8    1142    1144    1145

980          KK  CD27.2
981          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC3A AND COMPUTATION POINT CD27.1
982          HC       2

983          KK  RD27.5
984          KM   ROUTE FLOW FROM COMPUTATION POINT CD27.2 TO COMPUTATION POINT CD27.3
985          RS       1    ELEV    1121
986          RC   0.035   0.035   0.035    1400   0.014
987          RX       0      40     100     160     175     190     240     260
988          RY    1126    1124    1123    1122    1121    1122    1124    1126

989          KK    WC4A
990          KM   SUB-BASIN WC4A -LAND USE- DESERT MOUNTAIN. DESERT HILLS:  MINOR DEVELOPMENT
991          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
992          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
993          BA    .360
994          LG    .150    .297   3.950    .546  25.000
995          UC    .450    .326
996          UA       0       3       5       8      12      20      43      75      90      96
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

997          UA     100

998          KK  RD27.6
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906          HC       2

907          KK  RAV431
908          KM   ROUTE FLOW FROM COMPUTATION POINT CPS37C TO COMPUTATION POINT CAV43C
909          RS      15    ELEV  1020.6
910          RC    0.10    0.10    0.10    3200  0.0012
911          RX       0     380     620     980    1320    1560    1700    2200
912          RY  1022.8    1021  1020.6  1020.9  1021.4  1021.6  1021.8  1022.8

913          KK  AVR43C
914          KM   SUB-BASIN AVR43C -LAND USE- URBAN. AGRICULTURE
915          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
916          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
917          BA   1.030
918          LG    .430    .059   4.000    .396   6.250
919          UC    .750    .338
920          UA       0       5      16      30      65      77      84      90      94      97
921          UA     100

922          KK  CAV43C
923          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPS37C AND RUNOFF FROM SUB-
924          KM   BASIN AVR43C
925          HC       2

926          KK    WC2A
927          KM   SUB-BASIN WC2A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
928          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
929          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
930          BA    .080
931          LG    .150    .251   8.600    .070    .000
932          UC    .417    .581
933          UA       0       3       5       8      12      20      43      75      90      96
934          UA     100

935          KK  RD27.1
936          KM   ROUTE FLOW FROM SUB-BASIN WC2A  TO COMPUTATION POINT CD27.1
937          RS       1    ELEV    1147
938          RC   0.035   0.035   0.035     960   0.016    1150
939          RX       0      30      40      55      70      85     105     130
940          RY    1150    1150    1148    1147    1148    1149    1150    1151

941          KK  WC2.1A
942          KM   SUB-BASIN WC2.1A-LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
943          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
944          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
945          BA    .080
946          LG    .150    .290   4.000    .520    .000
947          UC    .383    .343
948          UA       0       3       5       8      12      20      43      75      90      96
949          UA     100
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

950          KK  RD27.2
951          KM   ROUTE FLOW FROM SUB-BASIN WC2.1A TO COMPUTATION POINT CD27.1
952          RS       1    ELEV    1148
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859          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
860          BA    .780
861          LG    .500    .000   4.150    .695    .000
862          UC    .767    .460
863          UA       0       3       9      18      28      42      59      73      87      92
864          UA     100

865          KK  CPB27C
866          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPS19C TO RUNOFF FROM SUB-BASIN
867          KM   BR27C
868          HC       3

869          KK  RR35C2
870          KM   ROUTE FLOW FROM COMPUTATION POINT CPB27C TO COMPUTATION POINT CPR35C
871          RS      20    ELEV  1057.0
872          RC   0.070   0.070   0.070    8800  0.0065  1058.5
873          RX       0     230     480     580     680     770     910    1600
874          RY  1058.5    1057    1057    1057    1057    1057    1057  1059.3

875          KK   RR35C
876          KM   SUB-BASIN RR35C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
877          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
878          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
879          BA   1.890
880          LG    .500    .000   5.500    .348    .000
881          UC    .900    .281
882          UA       0       3       9      18      28      42      59      73      87      92
883          UA     100

884          KK  CPR35C
885          KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPB27C TO RUNOFF FROM SUB-BASIN
886          KM    RR35C
887          HC       3

888          KK  RRS37C
889          KM   ROUTE FLOW FROM COMPUTATION POINT CPR35C TO COMPUTATION POINT CPS37C
890          RS       8    ELEV    1025
891          RC    0.10    0.10    0.10    2400  0.0025
892          RX       0     280     470     630     700     840    1390    1860
893          RY    1028    1026    1026    1025    1025    1025    1026    1028

894          KK   SA37C
895          KM   SUB-BASIN SA37C-LAND USE- URBAN. AGRICULTURE
896          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
897          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
898          BA    .590
899          LG    .320    .130   4.900    .323  15.000
900          UC    .783    .353
901          UA       0       5      16      30      65      77      84      90      94      97
902          UA     100
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

903          KK  CPS37C
904          KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPS37C WITH RUNOFF FROM SUB-
905          KM    BASIN SA37C
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```
813        KK   DR1C
814        KM   SUB-BASIN DR1C-LAND USE-NATURAL DESERT(HILLSLOPE)
815        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
816        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
817        BA    .160
818        LG    .150    .265   5.300    .198    .000
819        UC    .467    .501
820        UA       0       3       5       8      12      20      43      75      90      96
821        UA     100

822        KK   WC1A
823        KM   SUB-BASIN WC1A-LAND USE- NATURAL DESERT(HILLSLOPE)
824        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
825        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
826        BA    .250
827        LG    .150    .264   4.680    .217    40.0
828        UC    .467    .479
829        UA       0       3       5       8      12      20      43      75      90      96
830        UA     100

831        KK   RSM6
832        KM   ROUTE FLOW FROM SUB-BASIN WC1A TO COMPUTATION POINT CPDR2C
833        RS       1    ELEV    1146
834        RC   0.045   0.045   0.045    1150   0.012    1150
835        RX       0      30      50      70      90     110     130     170
836        RY    1152    1151    1150    1148    1146    1146    1148    1150

837        KK   DR2C
838        KM   SUB-BASIN DR2C-LAND USE- NATURAL DESERT(HILLSLOPE),AGRICULTURAL
839        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
840        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
841        BA    .050
842        LG    .150    .325   4.255    .423    .000
843        UC    .400    .369
844        UA       0       3       5       8      12      20      43      75      90      96
845        UA     100

846        KK  CPDR2C
847        KM   COMBINE FLOW FROM SUB-BASINS DR2C AND DR1C TO ROUTED FLOW FROM SUB-BASIN WC1A
848        KM   AND COMPUTATION POINT CSM4
849        HC       4

850        KK  RRB27C
851        KM   ROUTE FLOW FROM COMPUTATION POINT CPDR2C TO COMPUTATION POINT CPB27C
852        RS      15    ELEV  1107.8
853        RC   0.070   0.070   0.070    7400   0.009    1110
854        RX       0     260     550     770     920    1170    1320    1500
855        RY    1110    1109    1109    1108    1108  1107.8    1108    1110
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

856        KK   BR27C
857        KM   SUB-BASIN BR27C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
858        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
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768          RX       0     120     190     270     330     400     470     530
769          RY    1178  1177.5    1177    1176    1176    1177  1177.5    1178
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

770          KK    SM4C
771          KM   SUB-BASIN SM4C-LAND USE-URBAN
772          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
773          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
774          BA    .240
775          LG    .260    .350   4.600    .592  14.400
776          UC    .550    .527
777          UA       0       5      16      30      65      77      84      90      94      97
778          UA     100

779          KK    RSM4
780          KM   ROUTE FLOW FROM SUB-BASIN SM4C TO COMPUTATION POINT CSM4
781          RS       2    ELEV    1168
782          RC   0.035   0.035   0.035    1200   0.012
783          RX       0      50      80     110     130     160     180     200
784          RY    1170  1169.5    1169  1168.5    1168  1168.5    1169    1170

785          KK   DRW2C
786          KM   SUB-BASIN DRW2C-LAND USE- NATURAL DESERT(HILLSLOPE.MOUNTAIN)
787          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
788          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
789          BA    .530
790          LG    .150    .340   3.250    .859  30.000
791          UC    .683    .515
792          UA       0       3       5       8      12      20      43      75      90      96
793          UA     100

794          KK  DRWC1C
795          KM   SUB-BASIN DRWC1C-LAND USE-AGRICULTURE
796          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
797          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
798          BA   .120
799          LG   .500    .000   4.250    .727    .000
800          UC   .667    .809
801          UA       0       3       9      18      28      42      59      73      87      92
802          UA     100

803          KK    CSM4
804          KM   COMBINE RUNOFF FROM SUB-BASINS DRW2C AND DRWC1C WITH ROUTED FLOW FROM SM4C
805          KM   AND COMPUTATION POINT CSM3
806          HC       4

807          KK    RSM5
808          KM   ROUTE FLOW FROM COMPUTATION POINT CSM4 TO COMPUTATION POINT CSM5
809          RS       1    ELEV    1156
810          RC   0.045   0.045   0.045    1800  0.0078
811          RX       0      80     130     160     180     190     220     260
812          RY    1160    1159  1158.5    1158    1156    1156    1158    1160
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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721          RS       2    ELEV  1375.5
722          RC   0.035   0.035   0.035    4300   0.017
723          RX       0      90     160     230     310     380     490     590
724          RY    1390    1380    1377  1375.5    1377    1380    1383    1390
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

725          KK    SM2C
726          KM   SUB-BASIN SM2C-LAND USE- NATURAL DESERT(MOUNTAIN)
727          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
728          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
729          BA   2.190
730          LG    .150    .350   3.310    .820  86.000
731          UC    .500    .180
732          UA       0       3       5       8      12      20      43      75      90      96
733          UA     100

734          KK    CSM2
735          KM   COMBINE RUNOFF FROM SUB-BASIN SM2C TO ROUTED FLOW FROM COMPUTATION
736          KM   POINT CSM1
737          HC       2

738          KK   RDENT
739          KM   ROUTE INFLOW HYDROGRAPH THROUGH SOUTH MOUNTAIN DETENTION BASIN
740          RS       1    ELEV    1292
741          SA    2.30    7.80   15.91   19.96   24.08   28.27   30.45   31.91
742          SE    1292    1294    1300    1305    1310    1315    1318    1320
743          SL    1298    7.06    0.58     0.5
744          SS    1318     200     2.7     1.5

745          KK    RSM2
746          KM   ROUTE FLOW FROM COMPUTATOIN POINT CSM2 TO COMPUTATOIN POINT CSM3
747          RS      12    ELEV    1226
748          RC   0.040   0.040   0.040    6600   0.019    1228
749          RX       0      70     100     140     160     190     240     320
750          RY    1228  1227.5    1227    1226    1228  1228.5    1229    1230

751          KK    SM3C
752          KM   SUB-BASIN SM3C-LAND USE- NATURAL DESERT(HILLSLOPE.MOUNTAIN),MINOR DEVELOPMENT
753          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
754          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
755          BA    .480
756          LG    .160    .348   3.850    .507   1.500
757          UC    .383    .186
758          UA       0       3       5       8      12      20      43      75      90      96
759          UA     100

760          KK    CSM3
761          KM   COMBINE RUNOFF FROM SUB-BASIN SM3C TO ROUTED FLOW FROM COMPUTATION
762          KM   POINT CSM2
753          HC       2

764          KK    RSM3
765          KM   ROUTE FLOW FROM COMPUTATION POINT CSM3 TO COMPUTATION POINT CSM4
766          RS       4    ELEV    1176
767          RC   0.040   0.040   0.040    3000  0.0095
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674          KM   ROUTE FLOW FROM SUB-BASIN SA15C TO COMPUTATION POINT CPS19C
675          RS       4    ELEV  1139.2
676          RC   0.070   0.070   0.070    2030    0.01    1140
677          RX       0      50     110     160     210     260     350     430
678          RY    1140  1139.5  1139.2  1139.2  1139.2  1139.2  1139.5    1140
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

679          KK  SMA19C
680          KM   SUB-BASIN SMA19C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
681          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
682          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
683          BA    .156
684          LG    .500    .000   4.200    .777    .000
685          UC    .900   1.320
686          UA       0       3       9      18      28      42      59      73      87      92
687          UA     100

688          KK  CPS19C
689          KM   COMBINE ROUTED FLOW FROM SUB-BASIN SMA15C TO RUNOFF FROM SUB-BASIN SMA19C
690          HC       2

691          KK  RRB27C
692          KM   ROUTE FLOW FROM COMPUTATION POINT CPS19C TO COMPUTATION POINT CPB27C
693          RS      22    ELEV  1107.8
694          RC   0.070   0.070   0.070    7400  0.0090    1110
695          RX       0     260     550     770     920    1170    1320    1500
696          RY    1110    1109    1109    1108    1108  1107.8    1108    1110

697          KK    SM1C
698          KM   SUB-BASIN SM1C-LAND USE- NATURAL DESERT(MOUNTAIN)
699          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
700          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
701          BA   1.840
702          LG    .150    .346   3.800    .523  50.000
703          UC    .567    .276
704          UA       0       3       5       8      12      20      43      75      90      96
705          UA     100

706          KK   SM1AC
707          KM   SUB-BASIN SM1AC-LAND USE- NATURAL DESERT(MOUNTAIN)
708          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
709          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
710          BA    .280
711          LG    .150    .343   4.050    .528  10.000
712          UC    .417    .332
713          UA       0       3       5       8      12      20      43      75      90      96
714          UA     100

715          KK    CSM1
716          KM   COMBINE FLOW FROM SUB-BASIN SM1C WITH SM1AC AT COMPUTATOIN
717          KM   POINT CSM1
718          HC       2

719          KK    RSM1
720          KM   ROUTE FLOW FROM COMPUTATION POINT CSM1  TO COMPUTATION POINT CSM2
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628          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
629          BA    .623
630          LG    .500    .000   3.520    .476    .000
631          UC    .717    .468
632          UA       0       3       9      18      28      42      59      73      87      92
633          UA     100
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

634          KK  CPS27C
635          KM    COMBINE ROUTED FLOW FROM SUB-BASIN BR19C TO RUNOFF FROM SUB-BASIN SA27C
636          HC       2

637          KK  RR35C3
638          KM   ROUTE FLOW FROM COMPUTATION POINT CPS27C TO COMPUTATION POINT CPR35C
639          RS       8    ELEV  1040.8
640          RC   0.070   0.070   0.070    3400  0.0072    1042
641          RX       0     200     420     520     630     750    1120    1360
642          RY    1042  1041.5    1041  1040.8  1040.9    1041  1041.5    1042

643          KK  CPR35C
644          KM   COMBINE ROUTED FLOW FROM  COMPUTATION POINTS.CPR27C AND CPS27C
645          HC       2

646          KK    SM5C
647          KM   SUB-BASIN SM5C-LAND USE-URBAN
648          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
649          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
650          BA    .200
651          LG    .200    .349   4.300    .555  18.000
652          UC    .467    .441
653          UA       0       5      16      30      65      77      84      90      94      97
654          UA     100

655          KK    RSM7
656          KM   ROUTE FLOW FROM SUB-BASIN SM5C TO COMPUTATION POINT CPS15C
657          RS      10    ELEV    1178
658          RC   0.070   0.070   0.070    4000  0.0145
659          RX       0     110     180     270     330     420     510     600
660          RY    1180    1179  1178.5    1178    1178  1178.5    1179    1180

661          KK  SMA15C
662          KM   SUB-BASIN SMA15C-LAND USE- URBAN.AGRICULTURE
663          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
664          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
665          BA    .360
666          LG    .400    .045   3.700    .547    .000
667          UC    .500    .357
668          UA       0       3       9      18      28      42      59      73      87      92
669          UA     100

670          KK  CPS15C
671          KM   COMBINE ROUTED FLOW FROM SUB-BASIN SM5C WITH RUNOFF FROM SUB-BASIN SMA15C
672          HC       2

673          KK  RSM19C
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582          KK  CPC23C
583          KM   COMBINE ROUTED FLOW FROM SUB-BASIN SA19C TO RUNOFF FROM SUB-BASIN CR23C
584          HC      2

585          KK   RF27C
586          KM   ROUTE FLOW FROM COMPUTATION POINT CPC23C TO COMPUTATION POINT CPR27C
587          RS     11    ELEV    1047
588          RC  0.070   0.070   0.070    3000  0.0020    1049
589          RX      0     200     460     680     880     985    1220    2110
590          RY   1049  1048.2    1048    1047    1047    1048    1048    1049
1                                         HEC-1 INPUT                                          PAGE 14

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


591          KK   RR27C
592          KM   SUB-BASIN RR27C-LAND USE- URBAN.AGRICULTURE
593          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
594          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
595          BA    .480
596          LG    .460    .036   3.780    .432    .000
597          UC    .683    .342
598          UA      0       3       9      18      28     42      59      73      87      92
599          UA     100

600          KK  CPR27C
601          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPC23C WITH RUNOFF FROM SUB-
602          KM   BASIN RR27C
603          HC      2

604          KK  RR35C1
605          KM   ROUTE FLOW FROM COMPUTATION POINT CPR27C TO COMPUTATION POINT CPR35C
606          RS     18    ELEV    1137
607          RC  0.070   0.070   0.070    5320  0.0030    1140
608          RX      0     270     540     630     790     870    1260    1300
609          RY   1140    1138    1137    1137    1137    1137    1138    1140

610          KK   BR19C
611          KM   SUB-BASIN BR19C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
612          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
613          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
614          BA    .390
615          LG    .430    .027   4.050    .619   3.300
616          UC    .583    .365
617          UA      0       3       9      18      28     42      59      73      87      92
618          UA     100

619          KK  RRS27C
620          KM   ROUTE FLOW FROM SUB-BASIN BR19C TO COMPUTATION POINT CPS27C
621          RS     33    ELEV    1085
622          RC  0.070   0.070   0.070    7400  0.0077    1086
623          RX      0     730    1080    1340    1710    2380    2850    3350
624          RY   1086  1085.9  1085.7  1085.5    1085  1085.6  1085.6    1086

625          KK   SA27C
626          KM   SUB-BASIN SA27C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
627          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
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533        KK   SA19C
534        KM    !!!!!!! START CHAMPION DRAIN WATERSHED  !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
535        KM   SUB-BASIN SA19C-LAND USE- URBAN.AGRICULTURE
536        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
537        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
538        BA    .480
539        IN      15
540        KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
541        PB   3.131
542        KM   THE FOLLOWING PC RECORD USED A 6-HOUR STORM WITH A PATTERN No. OF 3.35
543        PC    .000    .017    .025    .037    .056    .071    .086    .102    .118    .133
544        PC    .151    .169    .195    .243    .325    .482    .666    .788    .858    .904
545        PC    .939    .955    .970    .985   1.000
546        LG    .400    .093   3.750    .484   5.800
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

547        UC    .767    .619
548        UA       0       3       9      18      28      42      59      73      87      92
549        UA     100

550        KK  DSA19C
551        KM   DIVERT CAPACITY OF STORMDRAIN AT CONCENTRARION POINT
552        DT   SA19C
553        DI      10      30      70     100     200     300
554        DO      10      30      70      70      70      70

555        KK  RR23C1
556        KM   ROUTE FLOW FROM SUB-BASIN SA19C TO COMPUTATION POINT CPC23C ( 1ST REACH )
557        RS       4    ELEV  1075.8
558        RC   0.035   0.035   0.035    1200  0.0083    1076
559        RX       0      50     120     220    1020    1080    1180    1250
560        RY    1076  1075.8  1075.8  1075.8  1075.8  1075.8  1075.8    1076

561        KK  RR23C2
562        KM   ROUTE FLOW FROM SUB-BASIN SA19C TO COMPUTATION POINT CPC23C ( 2ND REACH )
563        RS       8    ELEV  1063.5
564        RC   0.100   0.100   0.100    1600  0.0088    1066
565        RX       0     150     560     820    1230    1470    1700    1870
566        RY    1066    1064    1064  1063.6  1063.5    1064    1064    1066

567        KK  RR23C3
568        KM   ROUTE FLOW FROM SUB-BASIN SA19C TO COMPUTATION POINT CPC23C ( 3RD REACH )
569        RS      10    ELEV  1052.8
570        RC   0.070   0.070   0.070    1900  0.0053    1056
571        RX       0      40     110     590    1210    1490    1770    2040
572        RY    1058    1054    1054  1052.8  1052.8    1054  1054.8    1056

573        KK   CR23C
574        KM   SUB-BASIN CR23C-LAND USE- URBAN.AGRICULTURE
575        KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
576        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
577        BA    .580
578        LG    .320    .114   5.550    .234   3.300
579        UC    .500    .251
580        UA       0       3       9      18      28      42      59      73      87      92
581        UA     100
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486          KM   SUB-BASIN ER59B-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
487          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
488          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
489          BA    .280
490          LG    .500    .000   3.790    .454    .000
491          UC    .900    .563
492          UA       0       3       9      18      28      42      59      73      87      92
493          UA     100

494          KK  CER59B
495          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CRE55B TO RUNOFF FROM SUBASIN
496          KM   ER59B
497          HC       2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

498          KK  RIR63B
499          KM   ROUTE FLOW FROM COMPUTATION POINT CER59B TO COMPUTATION POINT CIR63B. NOTE
500          KM   END POINTS OF CROSSECTION WERE ADJUSTED SO THAT FLOW WOULD BE CONTAINED
501          KM   WITHIN THE GIVEN ROUTING REACH
502          RS       7    ELEV    1019
503          RC    0.07    0.07    0.07    3100   0.002
504          RX       0      40      80     120     160     210     290     360
505          RY  1022.7    1020  1019.7  1019.7    1020  1020.2  1020.9  1022.7

506          KK   IR63B
507          KM   SUB-BASIN IR63B-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
508          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
509          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
510          BA    .130
511          LG    .500    .000   3.500    .470    .000
512          UC    .683    .570
513          UA       0       3       9      18      28      42      59      73      87      92
514          UA     100

515          KK  CIR63B
516          KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CER59B AND RUNOFF OF SUB-BASINS
517          KM    IR63B AND IR62B
518          HC       3

519          KK  DIR63B
520          KM    COMPUTATION POINT CIR63B IS LOCATED ON THE WESTERN EDGE OF THE STUDY AREA
521          KM    WHICH IS BOUNDED BY A CONCRETE IRRIGATION CANAL AND EARTHEN ROADWAY. THE
522          KM    EARTHEN ROADWAY HAS A CAPACITY OF APPROXIMATELY 45 CFS BEFORE THE
523          KM    IRRIGATION  CANAL IS OVERTOPPED AND FLOW CONTINUES ITS NATURAL FLOW
524          KM    PATH TO THE WEST. THE DIVERTED FLOW OF APPROXIMATELY 45 CFS IS ROUTED
525          KM    TO THE CHAMPION DRAIN WATERSHED
526          DT  RIR63B
527          DI       0      45     100     200     400     500     800
528          DO       0      45      45      45      45      45      45

529          KK  CDIVER
530          KM    COMBINE HYDROGRAPHS THAT LEAVE THE STUDY TO CLEAN UP HYDROGAPH STACK IN
531          KM    THE HEC1 MODEL
532          HC       3
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439          BA   1.370
440          IN      15
441          KM   RAINFALL DEPTH OF 3.5 WAS SPACIALLY REDUCED AS SHOWN ON THE PB RECORD
442          PB   3.345
443          PC    .000    .012    .018    .027    .040    .051    .062    .073    .084    .095
444          PC    .108    .123    .144    .189    .275    .460    .683    .819    .886    .926
445          PC    .948    .926    .974    .988   1.000
446          LG    .360    .098   5.300    .312    10.0
447          UC    .867    .313
448          UA       0       3       9      18      28      42      59      73      87      92
449          UA     100

450          KK  COA51B
451          KM    COMBINE ROUTED SPLIT FLOW FROM SUB-BASIN DR43C TO RUNOFF FROM SUB-BASIN
452          KM    OA51B
453          HC       2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

454          KK  DFO51B
455          KM    RATE CHANNEL CROSS-SECTION AT CONCENTRATION POINT OA51B FOR SPLIT FLOW.
456          KM    DIVERTED FLOW IS ROUTED THROUGH CHAMPION DRAIN WATERSHED
457          DT  DOA55C
458          DI       0       8      24      93     219     461     852    1384
459          DO       0       4      11      43     102     262     479     735

460          KK   RE55B
461          KM    ROUTE SPLIT FLOW FROM SUB-BASIN OA51B TO COMPUTATION POINT CRE55B
462          RS      18    ELEV  1028.8
463          RC    0.07    0.07    0.07    3840  0.0013
464          RX       0      30     370     530     680     860    1120    1260
465          RY    1032    1030  1029.7  1029.4  1029.2    1029  1028.8    1031

466          KK   ER55B
467          KM   SUB-BASIN ERA55B-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
468          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
469          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
470          BA    .250
471          LG    .500    .000   7.800    .150    .000
472          UC    .917    .619
473          UA       0       3       9      18      28      42      59      73      87      92
474          UA     100

475          KK  CER55B
476          KM   COMBINE ROUTED DIVERTED FLOW FROM SUB-BASIN OA51B TO RUNOFF FROM SUBASIN
477          KM   ER55B
478          HC       2

479          KK   RE59B
480          KM   ROUTE FLOW FROM COMPUTATION POINT CRE55B TO COMPUTATION POINT CER59B
481          RS       7    ELEV    1024
482          RC    0.07    0.07    0.07    2600   0.002
483          RX       0      30      50      90     180     270     360     860
484          RY  1026.5    1024    1024    1024    1025  1025.3  1025.5  1026.5

485          KK   ER59B
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391          DO      0     100     200     400     600     800

392          KK   IR62B
393          KM   SUB-BASIN  IR62B -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
394          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
395          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
396          BA    .550
397          LG    .500    .000   5.000    .371    .000
398          UC    .817    .569
399          UA      0       3       9      18      28      42      59      73      87      92
400          UA    100

401          KK   DR43C
402          KM   SUB-BASIN DR43C -LAND USE- AGRICULTURE. DESERT HILLS: MINOR DEVELOPMENT
403          KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
404          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .89
405          BA    .940
406          IN      15
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

407          KM   RAINFALL DEPTH OF 3.5 WAS SPACIALLY REDUCED AS SHOWN ON THE PB RECORD
408          PB   3.131
409          KM   THE FOLLOWING PC RECORDS REPRESENTS A 6-HOUR STORM WITH A PATTERN NO. OF 3.35
410          PC    .000    .017    .025    .037    .056    .071    .086    .102    .118    .133
411          PC    .151    .169    .195    .243    .325    .482    .666    .788    .858    .904
412          PC    .939    .955    .970    .985   1.000
413          LG    .360    .053   4.450    .391  20.000
414          UC    .667    .354
415          UA      0       3       5       8      12      20      43      75      90      96
416          UA    100

417          KK  DDR43C
418          KM   SPLIT FLOW.RESULTANT HYDROGRAPH IS THE ESTIMATED FLOW THAT DRAINS THE TO WEST
419          KM   OF THE SOUTHWEST CORNER OF 43RD AVENUE AND DOBBINS ROAD
420          DT  RDR43C
421          DI      0      50     100     119     300     500     600     800     900
422          DO      0      50     100     119     181     381     481     681     781

423          KK  ROA51B
424          KM   ROUTE SPLIT FLOW FROM SUB-BASIN DR43B TO COMPUTATION POINT COA51B (1ST REACH)
425          RS     10    ELEV    1041
426          RC   0.07    0.07    0.07    2790  0.0042
427          RX      0     300     440     480     560     590     615     640
428          RY   1042    1041    1041    1041    1041    1041    1041    1042

429          KK  ROA51B
430          KM   ROUTE SPLIT FLOW FROM SUB-BASIN DR43B TO COMPUTATION POINT COA51B (2ND REACH)
431          RS     24    ELEV    1037
432          RC  0.065   0.065   0.065    3600  0.0017
433          RX      0      90     320     490     690    1060    1950    1960
434          RY   1038  1037.8  1037.4    1037    1037  1037.1  1037.8    1038

435          KK   OA51B
436          KM   SUB-BASIN  OA51B-LAND USE - AGRICULTURE. RURAL DEVELOPMENT
437          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
438          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
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344          KK  CPHV12
345          KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPHV11 TO RUNOFF FROM SUB-BASIN
346          KM    IR59B
347          HC       2

348          KK  DIHV12
349          KM    THE WESTERN EDGE OF SUB-BASIN IR59B WHICH IS ALSO THE WESTERN EDGE OF THE
350          KM    STUDY AREA IS BOUNDED  BY A CONCRETE IRRIGATION CANAL AND EARTHEN ROADWAY
351          KM    THE EARTHEN ROADWAY HAS A CAPACITY TO CONVEY  APPROXIMATELY 65 CFS TO THE
352          KM    NORTH WEST BEFORE THE CONCRETE IRRIGATION CANAL IS OVERTOPPED AND FLOW
353          KM    CONTINUES TO DRAIN TO THE WEST. THEREFORE APPROXIMATELY 65 CFS WILL
354          KM    CONCENTRATE AT COMPUTATION POINT CPHV12. AT COMPUTATION POINT CPHV12
355          KM    A DIP SECTION IN THE EARTHEN ROADWAY WILL DRAIN APPROXIMATELY 684 CFS
356          KM    TO THE WEST. ALL OF THE FLOW CONCENTRATED AT COMPUTATION CPHV12 PASSES
357          KM    OUT OF THE STUDY AREA.
358          DT  RCHV12
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

359          DI       0     100     200     400     600     800     900    1000    1200    1400
360          DO       0     100     200     400     600     800     900    1000    1200    1400

361          KK  REED47
362          KM   RETRIVE DIVERTED FLOW FROM COMPUTATION POINT CPHV11
363          DR  DIR55B

364          KK  RRHV23
365          KM   ROUTE DIVERTED FLOW FROM COMPUTATION POINT CPHV11 THROUGH SUB-BASIN IR55B
366          RS      19    ELEV    1061
367          RC    0.07    0.07    0.07    4800   0.006
368          RX       0     240     470     620     830    1200    1520    1740
369          RY    1062    1061    1061    1061    1061    1061    1061    1062

370          KK   IR55B
371          KM   SUB-BASIN IR55B -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
372          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
373          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
374          BA    .530
375          LG    .480    .079   3.650    .502   5.000
376          UC    .850    .554
377          UA       0       3       5       9      12      20      43      75      90      96
378          UA     100

379          KK  CIR55B
380          KM    COMBINE ROUTED DIVERTED FLOW FROM COMPUTATION POINT CPHV11 WITH RUNOFF FROM
381          KM    SUB-BASIN IR55B
382          HC       2

383          KK  DIR55B
384          KM    THE WESTERN EDGE OF SUB-BASIN IR55B WHICH IS ALSO THE WESTERN EDGE OF THE
385          KM    STUDY AREA IS BOUNDED BY AN EARTHEN IRRIGATION CANAL. MINOR CONTAINMENT OF
386          KM    RUNOFF AND ROUTED FLOW WILL BE REALIZED. THEREFORE TOTAL FLOW AT COMPUTATION
387          KM    POINT CIR55B IS DIVERTED BECAUSE FLOW FROM THIS POINT DOES NOT CONTRIBUTE
388          KM    TO RUNOFF COMPUTATIONS DOWNSTREAM.
389          DT  RCIRE8
390          DI       0     100     200     400     600     800
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296          KM     ROUTE FLOW FROM COMPUTATION CPHV10 TO COMPUTATION POINT CPHV11
297          RS       2    ELEV  1074.5
298          RC   0.065   0.065   0.065    1100  0.0085    1078
299          RX       0      90     480     510     520     530     870    1300
300          RY    1078    1076  1074.5  1074.5  1074.5  1074.5    1076    1078

301          KK   ED47B
302          KM   SUB-BASIN ED47B -LAND USE - AGRICULTURE.DESERT MOUNTAIN.DESERT HILLS:MODERATE
303          KM   DEVELOPMENT
304          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
305          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
306          BA    .810
307          LG    .330    .094   4.100    .629  10.000
308          UC    .283    .114
309          UA       0       3       5       8      12      20      43      75      90      96
310          UA     100
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

311          KK  CPHV11
312          KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINT CPHV10 TO RUNOFF FROM SUB-BASIN
313          KM   ED47B
314          HC       2

315          KK  DFED47
316          KM   RATE CHANNEL CROSSECTION AT COMPUTATION POINT ED47B FOR SPLIT FLOW
317          KM   DIVERTED FLOW IS ROUTED THROUGH SUB BASIN IR55B
318          DT  DIR55B
319          DI       0     139     558    1324    2507
320          DO       0      20     126     372     801

321          KK  RRHV21
322          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV11 TO COMPUTATION POINT CPHV12
323          KM   (1ST REACH)
324          RS       5    ELEV  1059.5
325          RC   0.015   0.065   0.065    2660   0.006  1060.7
326          RX       0      30      50     150     180     600     660     690
327          RY  1060.7  1060.0    1060    1060  1059.5  1059.5    1060  1060.7

328          KK  RRHV22
329          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV11 TO COMPUTATION POINT CPHV12
330          KM   (2ND REACH)
331          RS       7    ELEV  1039.5
332          RC     .07     .07     .07    2724   0.007  1040.1
333          RX       0     230     700     701    1260    1261    1480    1520
334          RY  1040.1    1039  1039.5  1039.5  1039.5  1039.5    1040  1040.1

335          KK   IR59B
336          KM   SUB-BASIN IR59B -LAND USE - AGRICULTURE: MINOR DEVELOPMENT
337          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
338          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
339          BA    .660
340          LG    .500    .000   3.990    .636    .000
341          UC    .783    .534
342          UA       0     1.6       5    10.6    19.5      32      44      56      70      82
343          UA     100
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250          RC   0.065   0.065   0.065    2200   0.008    1088
251          RX       0      80     200     300     360     440     550     610
252          RY    1088    1086    1086    1086    1086    1086    1086    1088

253          KK  NWSM1B
254          KM   SUB-BASIN NWSM1B -LAND USE - DESERT MOUNTAIN:UNDEVELOPED
255          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
256          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
257          BA    .130
258          LG    .150    .345   2.500   1.143  60.000
259          UC    .283    .242
260          UA       0       3       5       8      12      20      43      75      90      96
261          UA     100

262          KK  RR43B1
263          KM   ROUTE FLOW FROM SUB-BASIN NWSM1B TO COMPUTATION POINT CPHV9 (1ST REACH)
264          RS       1    ELEV    1168
265          RC   0.035   0.040   0.035    1850   0.47    1172
266          RX       0      40     100     120     135     150     190     240
267          RY    1172  1171.5    1170    1168    1168    1170  1171.5    1172
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

268          KK  RR43B2
269          KM   ROUTE FLOW FROM SUB-BASIN NWSM1B TO COMPUTATION POINT CPHV9 ( 2ND REACH )
270          RS       2    ELEV    1118
271          RC   0.035   0.040   0.035    1000   0.034    1120
272          RX       0      50     110     410     580     850     970    1160
273          RY    1120    1119    1119    1118    1118    1118    1119    1120

274          KK  A43A1B
275          KM   SUB-BASIN A43A1B -LAND USE - DESERT MOUNTAINS.DESERT HILLS:MINOR DEVELOPMENT
276          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
277          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
278          BA    .170
279          LG    .150    .285   4.100    .463  15.000
280          UC    .300    .161
281          UA       0       3       5       8      12      20      43      75      90      96
282          UA     100

283          KK   CPHV9
284          KM   COMBINE ROUTED FLOW FROM SUB-BASIN NWSM1B WITH RUNOFF FROM SUB-BASIN A43A1B
285          HC       2

286          KK  RRHV19
287          KM   ROUTE FLOW FROM COMPUTATION CPHV9 TO COMPUTATION POINT CPHV10
288          RS       5    ELEV    1091
289          RC   0.065   0.065   0.065    1700   0.014    1092
290          RX       0      60     450     530     610     690     830     960
291          RY    1092    1091    1091    1091    1091    1091    1091    1092

292          KK  CPHV10
293          KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINTS CPHV8 AND CPHV9
294          HC       2

295          KK  RRHV20
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204          HC       2

205          KK  RRHV15
206          KM   ROUTE FLOW FROM COMPUTATION CPHV6 TO COMPUTATION POINT CPHV7
207          RS       2    ELEV    1105
208          RC   0.035   0.040   0.035    1980   0.008    1110
209          RX       0     170     430     470     490     530     580     630
210          RY    1110    1106    1106    1105    1105    1106    1108    1110

211          KK    PM5B
212          KM   SUB-BASIN PM5B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR DEVELOPMENT
213          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
214          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
215          BA    .130
216          LG    .150    .310   4.200    .518  15.000
217          UC    .500    .360
218          UA       0       3       5       8      12      20      43      75      90      96
219          UA     100

220          KK   CPHV7
221          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN PM5B AND  COMPUTATION POINT CPHV6
222          HC       2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

223          KK  RRHV16
224          KM   ROUTE FLOW FROM COMPUTATION CPHV7 TO COMPUTATION POINT CPHV8
225          RS       1    ELEV    1097
226          RC   0.065   0.065   0.065     400   0.008    1100
227          RX       0     210     315     430     540     640     800     930
228          RY    1100    1098    1098    1097    1097    1098    1099    1100

229          KK  A43A2B
230          KM   SUB-BASIN A43A2B -LAND USE - DESERT MOUNTAIN.DESERT HILLS;MINOR DEVELOPMENT
231          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
232          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
233          BA    .090
234          LG    .150    .279   6.300    .174  30.000
235          UC    .333    .290
236          UA       0       3       5       8      12      20      43      75      90      96
237          UA     100

238          KK  RRHV17
239          KM   ROUTE FLOW FROM SUB-BASIN A43A2B TO COMPUTATION POINT CPHV8
240          RS       1    ELEV    1099
241          RC   0.065   0.065   0.065     440   0.015    1100
242          RX       0     105     135     165     190     210     260     320
243          RY    1100    1099    1099    1099    1099    1099    1099    1100

244          KK   CPHV8
245          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN A43A2B AND  COMPUTATION POINT CPHV7
246          HC       2

247          KK  RRHV18
248          KM   ROUTE FLOW FROM COMPUTATION CPHV8 TO COMPUTATION POINT CPHV10
249          RS       3    ELEV    1086
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157          KK  RRHV11
158          KM   ROUTE FLOW FROM COMPUTATION CPHV4 TO COMPUTATION POINT CPHV5
159          RS       1    ELEV    1116
160          RC   0.035   0.040   0.035     340   0.006    1121
161          RX       0     100     150     170     190     220     280     340
162          RY    1121    1120    1118    1116    1116    1118    1120    1121

163          KK   WC22B
164          KM   SUB-BASIN WC22B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR DEVELOPMENT
165          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
166          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
167          BA    .007
168          LG    .150    .260   5.800    .179    .000
169          UC    .217    .304
170          UA       0       3       5       8      12      20      43      75      90      96
171          UA     100

172          KK  RRHV12
173          KM   ROUTE FLOW FROM SUB-BASIN WC22B TO COMPUTATION POINT CPHV5
174          RS       3    ELEV  1123.5
175          RC   0.035   0.040   0.035    1020   0.023  1124.5
176          RX       0      30      70      90     100     120     135     160
177          RY  1124.5    1124  1123.5  1123.5  1123.5  1123.5    1124  1124.5

178          KK   CPHV5
179          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC22B AND  COMPUTATION POINT CPHV4
180          HC       2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

181          KK  RRHV13
182          KM   ROUTE FLOW FROM COMPUTATION CPHV5 TO COMPUTATION POINT CPHV6
183          RS       1    ELEV    1114
184          RC   0.035   0.040   0.035     430   0.005    1116
185          RX       0      70     130     160     180     220     340     410
186          RY    1117    1116    1116    1114    1114    1115    1115    1116

187          KK   WC23B
188          KM   SUB-BASIN WC23B -LAND USE - DESERT MOUNTAIN.DESERT HILLS;MINOR DEVELOPMENT
189          KM   6-HOUR RAINFALL. PATTERN NO. 2.44 WAS USED TO FIND TC & R FOR THIS BASIN
190          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .96
191          BA    .400
192          LG    .150    .300   4.120    .253  60.000
193          UC    .300    .247
194          UA       0       3       5       8      12      20      43      75      90      96
195          UA     100

196          KK  RRHV14
197          KM   ROUTE FLOW FROM SUB-BASIN WC23B AND TO COMPUTATION POINT CPHV6
198          RS       1    ELEV    1120
199          RC   0.035   0.035   0.035    1020   0.027  1122.5
200          RX       0      40      80     100     120     140     170     210
201          RY  1122.5    1122  1121.5    1120    1120  1121.5    1122  1122.5

202          KK   CPHV6
203          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC23B AND  COMPUTATION POINT CPHV5
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751                                  SM3C
                                       .
                                       .
760                            CSM3............
                                     V
                                     V
764                            RSM3
                                       .
                                       .
770                                  SM4C
                                       V
                                       V
779                                  RSM4
                                       .
                                       .
785                                       .      DRW2C
                                       .          .
                                       .          .
794                                       .          .      DRWC1C
                                       .          .          .
                                       .          .          .
803                            CSM4..................................
                                     V
                                     V
807                            RSM5
                                       .
                                       .
813                                  DR1C
                                       .
                                       .
822                                       .      WC1A
                                       .          V
                                       .          V
831                                       .      RSM6
                                       .          .
                                       .          .
837                                       .          .      DR2C
                                       .          .          .
                                       .          .          .
846                            CPDR2C................................
                                     V
                                     V
850                            RR827C
                                       .
                                       .
856                                  BR27C
                                       .
                                       .
865                       CPB27C.......................
                                V
                                V
869                       RR35C2
                                .
                                .
875                            RR35C
                                       .
                                       .
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884   .   CPR35C.......................
      .       V
      .       V
888   .   RRS37C
      .       .
      .       .
894   .       .       SA37C
      .       .           .
      .       .           .
903   .   CPS37C............
      .       V
      .       V
907   .   RAV431
      .       .
      .       .
913   .       .       AVR43C
      .       .           .
      .       .           .
922   .   CAV43C............
      .       .
      .       .
926   .       .        WC2A
      .       .          V
      .       .          V
935   .       .       RD27.1
      .       .           .
      .       .           .
941   .       .           .      WC2.1A
      .       .           .          V
      .       .           .          V
950   .       .           .      RD27.2
      .       .           .           .
      .       .           .           .
956   .       .       CD27.1............
      .       .          V
      .       .          V
959   .       .       RD27.3
      .       .           .
      .       .           .
965   .       .           .       WC3A
      .       .           .          V
      .       .           .          V
974   .       .           .      RD27.4
      .       .           .           .
      .       .           .           .
980   .       .       CD27.2............
      .       .          V
      .       .          V
983   .       .       RD27.5
      .       .           .
      .       .           .
989   .       .           .       WC4A
      .       .           .          V
      .       .           .          V
998   .       .           .      RD27.6
      .       .           .           .
      .       .           .           .
1004  .       .       CD27.3............
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                 .          .          V
                 .          .          V
1007             .          .     RD27.7
                 .          .          .
                 .          .          .
1013             .          .          .      DR27C
                 .          .          .          .
                 .          .          .          .
1022             .          .     CD27.4............
                 .          .          V
                 .          .          V
1026             .          .     RB35C2
                 .          .          .
                 .          .          .
1032             .          .          .     BR35C2
                 .          .          .          .
                 .          .          .          .
1041             .          .     CPB352............
                 .          .          .
                 .          .          .
1045             .          .          .     BR35C1
                 .          .          .          .
                 .          .          .          .
1054             .          .     CPB352............
                 .          .          V
                 .          .          V
1057             .          .     RAV432
                 .          .          V
                 .          .          V
1064             .          .     RAV433
                 .          .          .
                 .          .          .
1071             .     CAV43C............
                 .          V
                 .          V
1075             .     RVR471
                 .          .
                 .          .
1081             .          .       WC5A
                 .          .          V
                 .          .          V
1090             .          .     RD35.1
                 .          .          .
                 .          .          .
1096             .          .          .       WC6A
                 .          .          .          V
                 .          .          .          V
1105             .          .          .     RD35.2
                 .          .          .          .
                 .          .          .          .
1111             .          .     CD35.1............
                 .          .          V
                 .          .          V
1114             .          .     RD35.3
                 .          .          .
                 .          .          .
1120             .          .          .       WC7A
                 .          .          .          V
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                 .         .         .         V
1129             .         .         .     RD35.4
                 .         .         .         .
                 .         .         .         .
1135             .         .         .         .       WC9A
                 .         .         .         .          V
                 .         .         .         .          V
1144             .         .         .         .     RD35.5
                 .         .         .         .          .
                 .         .         .         .          .
1150             .         .         .     CD35.3............
                 .         .         .         V
                 .         .         .         V
1153             .         .         .     RD35.6
                 .         .         .         .
                 .         .         .         .
1159             .         .         .         .       WC9A
                 .         .         .         .          V
                 .         .         .         .          V
1168             .         .         .         .     RD35.7
                 .         .         .         .          .
                 .         .         .         .          .
1174             .         .         .         .          .      WC10A
                 .         .         .         .          .         V
                 .         .         .         .          .         V
1183             .         .         .         .          .     RD35.8
                 .         .         .         .          .         .
                 .         .         .         .          .         .
1189             .         .         .         .     CD35.5............
                 .         .         .         .          V
                 .         .         .         .          V
1192             .         .         .         .     RD35.9
                 .         .         .         .          .
                 .         .         .         .          .
1198             .         .         .         .          .      WC11A
                 .         .         .         .          .         V
                 .         .         .         .          .         V
1207             .         .         .         .          .     RD3510
                 .         .         .         .          .         .
                 .         .         .         .          .         .
1213             .         .         .         .          .         .      WC12A
                 .         .         .         .          .         .         V
                 .         .         .         .          .         .         V
1222             .         .         .         .          .         .     RD3511
                 .         .         .         .          .         .         .
                 .         .         .         .          .         .         .
1228             .         .         .         .          .     CD35.7............
                 .         .         .         .          .         V
                 .         .         .         .          .         V
1231             .         .         .         .          .     RD3512
                 .         .         .         .          .         .
                 .         .         .         .          .         .
1237             .         .         .         .     CD35.6............
                 .         .         .         .          V
                 .         .         .                    V
1240             .         .         .         .     RD3513
                 .         .         .         .          .
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1246          .         .         .     CD35.4............
              .         .         .          V
              .         .         .          V
1249          .         .         .     RD3514
              .         .         .          .
              .         .         .          .
1255          .         .         .          .      WC15A
              .         .         .          .          V
              .         .         .          .          V
1264          .         .         .          .     RD3515
              .         .         .          .          .
              .         .         .          .          .
1270          .         .         .          .          .      PM2A
              .         .         .          .          .        .
              .         .         .          .          .        .
1279          .         .         .          .     CD35.8............
              .         .         .          .          V
              .         .         .          .          V
1282          .         .         .          .     RD3516
              .         .         .          .          .
              .         .         .          .          .
1288          .         .         .          .          .      WC13A
              .         .         .          .          .          V
              .         .         .          .          .          V
1297          .         .         .          .          .     RD3517
              .         .         .          .          .        .
              .         .         .          .          .        .
1303          .         .         .          .          .        .      WC14A
              .         .         .          .          .        .          V
              .         .         .          .          .        .          V
1312          .         .         .          .          .        .     RD3518
              .         .         .          .                   .        .
              .         .         .          .          .        .        .
1318          .         .         .          .          .        .        .      PM1A
              .         .         .          .          .        .        .        .
              .         .         .          .          .        .        .        .
1327          .         .         .          .     CD35.9.................................
              .         .         .          .          V
              .         .         .          .          V
1331          .         .         .          .     RD3519
              .         .         .          .          .
              .         .         .          .          .
1337          .         .         .          .          .      DR35C
              .         .         .          .          .        .
              .         .         .          .          .        .
1346          .         .     CD35.2.................................
              .         .         V
              .         .         V
1350          .         .     RB43C1
              .         .         .
              .         .         .
1356          .         .         .     SMA43C
              .         .         .          V
              .         .         .          V
1365          .         .         .     RB43C2
              .         .         .          .
              .         .         .          .
1371          .         .         .          .     BR43C
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                .         .         .         .         .
                .         .         .         .         .
1380            .         .     CBR43C.......................
                .         .         V
                .         .         V
1383            .         .     RVR472
                .         .         .
                .         .         .
1389            .         .         .     VR47C
                .         .         .         .
                .         .         .         .
1398            .     CVR47C.......................
                .         V
                .         V
1402            .     RBR511
                .         .
                .         .
1408            .         .     AVR51C
                .         .         V
                .         .         V
1417            .         .     RBR512
                .         .         .
                .         .         .
1423            .         .         .     BR51C
                .         .         .         .
                .         .         .         .
1432            .     CB51C .......................
                .         V
                .         V
1436            .     RB1591
                .         .
                .         .
1442            .         .     AVR55C
                .         .         V
                .         .         V
1451            .         .     RB1592
                .         .         .
                .         .         .
1457            .         .         .     VR59C
                .         .         .         V
                .         .         .         V
1466            .         .         .     RB1593
                .         .         .         .
                .         .         .         .
1472            .         .         .         .     BR159C
                .         .         .         .         .
                .         .         .         .         .
1481            .     CB159C.....................................
                .         V
                .         V
1485            .     RBR163
                .         .
                .         .
1493            .         .         .<------- RDR43C
1491            .         .     RET43C
                .         .         V
                .         .         V
1494            .         .     RS51C
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                .         .         .
                .         .         .
1500            .         .         .      SM51C
                .         .         .         .
                .         .         .         .
1509            .         .      CS51C.............
                .         .         V
                .         .         V
1512            .         .      RB2591
                .         .         V
                .         .         V
1519            .         .      RB2592
                .         .         .
                .         .         .
1526            .         .         .      BR259C
                .         .         .         .
                .         .         .         .
1535            .         .      CB259C.............
                .         .         .
                .         .         .
1541            .         .         .         .<-------. DOA55C
1539            .         .         .      DOA55C
                .         .         .         V
                .         .         .         V
1542            .         .         .      RO55C
                .         .         .         .
                .         .         .         .
1549            .         .         .         .      OA55C
                .         .         .         .         .
                .         .         .         .         .
1558            .         .         .      CPO55C.............
                .         .         .         V
                .         .         .         V
1562            .         .         .      RD57C
                .         .         .         .
                .         .         .         .
1568            .         .         .         .      DR57C
                .         .         .         .         .
                .         .         .         .         .
1577            .         .         .      CDR57C.............
                .         .         .         V
                .         .         .         V
1591            .         .         .      RD59C
                .         .         .         .
                .         .         .         .
1587            .         .         .         .      DR59C
                .         .         .         .         .
                .         .         .         .         .
1596            .         .         .      CDR59C.............
                .         .         .         V
                .         .         .         V
1600            .         .         .      RB259
                .         .         .         .
                .         .         .         .
1606            .         .      CB259C.............
                .         .         V
                .         .         V
1610            .         .      RB1631
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                .          .          .
                .          .          .
1616            .          .          .      BR163C
                .          .          .          .
                .          .          .          .
1625            .          .          .          .     BR263C
                .          .          .          .          .
                .          .          .          .          .
1634            .     CB163C.................................
                .        V
                .        V
1638            .     RCD1C
                .          .
                .          .
1644            .          .      BR67C
                .          .         V
                .          .         V
1653            .          .     RCD1C2
                .          .          .
                .          .          .
1659            .          .          .      CD1C
                .          .          .          .
                .          .          .          .
1668            .     CPCD1C......................
                .        V
                .        V
1672            .     RCD2C1
                .          .
                .          .
1678            .          .      CD2C
                .          .          .
                .          .          .
1687            .     CCD2C............
                .          .
                .          .
1693            .          .          .<-------  RIR63B
1691            .          .     RIR63B
                .          .         V
                .          .         V
1694            .          .     RIR65C
                .          .          .
                .          .          .
1700            .          .          .      IR65C
                .          .          .          .
                .          .          .          .
1709            .          .     CIR65C............
                .          .         V
                .          .         V
1713            .          .     RIRDC
                .          .          .
                .          .          .
1722            .          .          .------->  RIR65C
1719            .          .     DIIRDC
                .          .          .
                .          .          .
1725            .          .          .      IRDC
                .          .          .          .
                .          .          .          .
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1734          .          .      CIRDC............
              .          .          V
              .          .          V
1738          .          .     RIRSMC
              .          .          .
              .          .          .
1744          .          .          .       IRSMC
              .          .          .           .
              .          .          .           .
1753          .          .     CIRSMC............
              .          .          V
              .          .          V
1756          .          .     RCD2C2
              .          .          .
              .          .          .
1762          .      CCD2C............
              .          V
              .          V
1766          .      RPOND
              .          V
              .          V
1773          .      RBASE
              .          .
              .          .
1783          .          .-------> REDIVE
1780          .     DIBASE
              .          V
              .          V
1786          .     RCD3C1
              .          .
              .          .
1793          .          .      A67AC
              .          .          V
              .          .          V
1802          .          .     RCD4C1
              .          .          .
              .          .          .
1808          .          .          .        CD4C
              .          .          .           .
              .          .          .           .
1817          .          .     CPCD4C............
              .          .          V
              .          .          V
1820          .          .     RCD3C2
              .          .          .
              .          .          .
1826          .          .          .        CD3C
              .          .          .           .
              .          .          .           .
1835          .     CPCD3C........................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*****************************************
 *                                       *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
 *            SEPTEMBER 1990             *
 *             VERSION 4.0               *
 *                                       *
```

```
*****************************************
*
*    U.S. ARMY CORPS OF ENGINEERS
*    HYDROLOGIC ENGINEERING CENTER
*          609 SECOND STREET
*       DAVIS, CALIFORNIA 95616
```

```
* RUN DATE  MON. JUL 29 1991          *                                    *          (916) 756-1104
* RUN TIME  17:22:17                  *                                    *
*                                     *                                    *
***************************************                                    **************************************
```

LAVEEN ADMS (FINAL HEC-1)
HIDDEN VALLEY WATERSHED/CHAMPION DRAIN WATERSHED
INPUT FILE NAME CHAMPION

CBA FILE # 40916-02-30

DATE: JULY 22, 1991

```
5 IO        OUTPUT CONTROL VARIABLES
                 IPRNT          5  PRINT CONTROL
                 IPLOT          0  PLOT CONTROL
                 OSCAL         0.  HYDROGRAPH PLOT SCALE

  IT        HYDROGRAPH TIME DATA
                  NMIN          5  MINUTES IN COMPUTATION INTERVAL
                 IDATE      1   0  STARTING DATE
                 ITIME       0000  STARTING TIME
                    NO        300  NUMBER OF HYDROGRAPH ORDINATES
                NDDATE      2   0  ENDING DATE
                NDTIME       0055  ENDING TIME
                 ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL    0.08 HOURS
                 TOTAL TIME BASE   24.92 HOURS

      ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT
```

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS. AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT									
	WC16B	29.	4.17	5.	1.	1.	0.02		
ROUTED TO									
	RRHV1	28.	4.25	5.	1.	1.	0.02		
								1141.43	4.25
HYDROGRAPH AT									
	WC17B	31.	4.25	5.	1.	1.	0.03		
ROUTED TO									

	RRHV2	31.	4.25	5.	1.	1.	0.03		
								1140.29	4.25
2 COMBINED AT									
	CPHV1	59.	4.25	10.	2.	2.	0.06		
ROUTED TO									
	RRHV3	58.	4.25	10.	2.	2.	0.06		
								1137.78	4.25
ROUTED TO									
	RRHV4	59.	4.33	10.	2.	2.	0.06		
								1141.68	4.33
HYDROGRAPH AT									
	WC18B	65.	4.25	11.	3.	3.	0.06		
ROUTED TO									
	RRHV5	65.	4.25	11.	3.	3.	0.06		
								1136.70	4.25
HYDROGRAPH AT									
	WC19B	315.	4.08	52.	13.	13.	0.21		
ROUTED TO									
	RRHV6	311.	4.17	52.	13.	13.	0.21		
								1138.50	4.17
HYDROGRAPH AT									
	PM3B	33.	4.17	4.	1.	1.	0.06		
4 COMBINED AT									
	CPHV2	457.	4.17	77.	19.	19.	0.39		
ROUTED TO									
	RRHV7	449.	4.25	77.	19.	19.	0.39		
								1127.65	4.25
HYDROGRAPH AT									
	WC20B	19.	4.17	3.	1.	1.	0.01		
ROUTED TO									
	RRHV8	19.	4.17	3.	1.	1.	0.01		
								1132.43	4.17
2 COMBINED AT									
	CPHV3	468.	4.25	80.	20.	19.	0.40		
ROUTED TO									
	RRHV9	466.	4.25	80.	20.	19.	0.40		
								1122.99	4.25
HYDROGRAPH AT									
	WC21B	25.	4.25	4.	1.	1.	0.02		
ROUTED TO									
	RRHV10	24.	4.33	4.	1.	1.	0.02		
								1129.28	4.33

HYDROGRAPH AT	PM4B	126.	4.17	17.	4.	4.	0.14		
3 COMBINED AT	CPHV4	608.	4.25	101.	25.	24.	0.57		
ROUTED TO	RRHV11	608.	4.25	101.	25.	24.	0.57	1118.62	4.25
HYDROGRAPH AT	WC22B	8.	4.17	1.	0.	0.	0.01		
ROUTED TO	RRHV12	8.	4.33	1.	0.	0.	0.01	1123.61	4.33
2 COMBINED AT	CPHV5	616.	4.25	102.	26.	25.	0.57		
ROUTED TO	RRHV13	607.	4.25	102.	26.	25.	0.57	1115.78	4.25
HYDROGRAPH AT	WC23B	576.	4.17	112.	28.	27.	0.40		
ROUTED TO	RRHV14	569.	4.25	112.	28.	27.	0.40	1121.69	4.25
2 COMBINED AT	CPHV6	1176.	4.25	214.	54.	52.	0.97		
ROUTED TO	RRHV15	1134.	4.33	213.	54.	52.	0.97	1106.72	4.33
HYDROGRAPH AT	PM5B	111.	4.33	19.	5.	5.	0.13		
2 COMBINED AT	CPHV7	1244.	4.33	232.	59.	56.	1.10		
ROUTED TO	RRHV16	1244.	4.42	232.	59.	56.	1.10	1098.67	4.42
HYDROGRAPH AT	A43A2B	115.	4.25	21.	5.	5.	0.09		
ROUTED TO	RRHV17	113.	4.25	21.	5.	5.	0.09	1099.42	4.25
2 COMBINED AT	CPHV8	1350.	4.42	253.	54.	61.	1.19		

ROUTED TO	RRHV18	1280.	4.58	251.	54.	61.	1.19	1087.16	4.58
HYDROGRAPH AT	NWSM1B	151.	4.17	30.	8.	7.	0.13		
ROUTED TO	RR43B1	150.	4.17	30.	8.	7.	0.13	1168.52	4.17
ROUTED TO	RR43B2	145.	4.25	30.	8.	7.	0.13	1118.15	4.25
HYDROGRAPH AT	A43A1B	205.	4.17	27.	7.	6.	0.17		
2 COMBINED AT	CPHV9	340.	4.17	57.	14.	14.	0.30		
ROUTED TO	RRHV19	316.	4.42	56.	14.	14.	0.30	1091.32	4.42
2 COMBINED AT	CPHV10	1574.	4.58	307.	78.	75.	1.49		
ROUTED TO	RRHV20	1524.	4.67	307.	78.	75.	1.49	1076.16	4.67
HYDROGRAPH AT	ED47B	1023.	4.08	121.	30.	29.	0.81		
2 COMBINED AT	CPHV11	1671.	4.67	425.	108.	104.	2.30		
DIVERSION TO	DIR55B	498.	4.67	109.	28.	27.	2.30		
HYDROGRAPH AT	DFED47	1173.	4.67	315.	81.	78.	2.30		
ROUTED TO	RRHV21	1135.	4.92	314.	81.	78.	2.30	1060.59	4.92
ROUTED TO	RRHV22	1078.	5.33	313.	89.	86.	2.30	1040.04	5.33
HYDROGRAPH AT	IR59B	522.	4.67	109.	27.	26.	0.66		
2 COMBINED AT	CPHV12	1342.	5.17	418.	116.	112.	2.96		

DIVERSION TO									
+	RCHV12	1342.	0.08	418.	116.	112.	2.96		
HYDROGRAPH AT									
-	DIHV12	0.	0.08	0.	0.	0.	2.96		
HYDROGRAPH AT									
+	REED47	498.	4.67	109.	28.	27.	0.00		
ROUTED TO									
+	RRHV23	414.	5.75	104.	28.	27.	0.00		
+								1061.37	5.75
HYDROGRAPH AT									
+	IR55B	406.	4.67	83.	21.	20.	0.53		
2 COMBINED AT									
+	CIR55B	501.	5.75	182.	49.	47.	0.53		
DIVERSION TO									
+	RCIREB	501.	0.08	182.	49.	47.	0.53		
HYDROGRAPH AT									
+	DIR55B	0.	0.08	0.	0.	0.	0.53		
HYDROGRAPH AT									
+	IR62B	502.	4.58	115.	29.	28.	0.55		
HYDROGRAPH AT									
-	DR43C	800.	4.50	166.	42.	40.	0.94		
DIVERSION TO									
+	RDR43C	681.	4.00	136.	34.	33.	0.94		
HYDROGRAPH AT									
-	DDR43C	119.	4.00	30.	8.	7.	0.94		
ROUTED TO									
-	ROA51B	118.	5.42	30.	8.	7.	0.94		
+								1041.43	5.42
ROUTED TO									
+	ROA51B	87.	7.67	27.	8.	7.	0.94		
+								1037.34	7.67
HYDROGRAPH AT									
+	OA51B	1384.	4.50	268.	67.	65.	1.37		
2 COMBINED AT									
-	COA51B	1384.	4.50	284.	75.	72.	2.31		
DIVERSION TO									
-	DOA55C	735.	4.50	151.	40.	38.	2.31		
HYDROGRAPH AT									
-	DFO51B	649.	4.50	133.	35.	34.	2.31		

ROUTED TO	RE55B	511.	5.83	129.	35.	34.	2.31	1030.04	5.83
HYDROGRAPH AT	ER55B	245.	4.67	67.	17.	16.	0.25		
2 COMBINED AT	CER55B	598.	5.75	188.	52.	50.	2.56		
ROUTED TO	RE59B	524.	6.50	186.	52.	50.	2.56	1026.08	6.50
HYDROGRAPH AT	ER59B	239.	4.67	56.	14.	13.	0.28		
2 COMBINED AT	CER59B	546.	6.42	238.	66.	63.	2.84		
ROUTED TO	RIR63B	518.	6.92	234.	66.	63.	2.84	1021.66	6.92
HYDROGRAPH AT	IR63B	114.	4.50	25.	6.	6.	0.13		
3 COMBINED AT	CIR63B	618.	4.58	364.	101.	97.	3.52		
DIVERSION TO	RIR63B	45.	4.58	45.	21.	20.	3.52		
HYDROGRAPH AT	DIR63B	573.	4.58	319.	80.	77.	3.52		
3 COMBINED AT	CDIVER	573.	4.58	319.	80.	77.	7.01		
HYDROGRAPH AT	SA19C	255.	4.58	59.	15.	14.	0.48		
DIVERSION TO	SA19C	70.	4.58	31.	8.	7.	0.48		
HYDROGRAPH AT	DSA19C	185.	4.58	29.	7.	7.	0.48		
ROUTED TO	RR23C1	178.	4.83	29.	7.	7.	0.48	1075.94	4.83
ROUTED TO	RR23C2	151.	5.42	29.	7.	7.	0.48	1063.94	5.42
ROUTED TO	RR23C3	128.	6.17	28.	7.	7.	0.48		

								1053.08	6.17
HYDROGRAPH AT	CR23C	538.	4.33	93.	23.	22.	0.58		
2 COMBINED AT	CPC23C	538.	4.33	119.	30.	29.	1.06		
ROUTED TO	RF27C	431.	5.25	117.	30.	29.	1.06		
								1048.19	5.25
HYDROGRAPH AT	RR27C	365.	4.42	66.	16.	16.	0.48		
2 COMBINED AT	CPR27C	545.	5.08	180.	47.	45.	1.54		
ROUTED TO	RR35C1	497.	6.33	170.	47.	45.	1.54		
								1137.89	6.33
HYDROGRAPH AT	BR19C	262.	4.42	46.	11.	11.	0.39		
ROUTED TO	RRS27C	170.	6.75	45.	11.	11.	0.39		
								1085.50	6.75
HYDROGRAPH AT	SA27C	444.	4.50	92.	23.	22.	0.62		
2 COMBINED AT	CPS27C	444.	4.50	133.	35.	33.	1.01		
ROUTED TO	RR35C3	388.	5.25	130.	35.	33.	1.01		
								1041.52	5.25
2 COMBINED AT	CPR35C	643.	6.17	293.	81.	78.	2.55		
HYDROGRAPH AT	SM5C	98.	4.25	21.	5.	5.	0.20		
ROUTED TO	RSM7	84.	5.00	21.	5.	5.	0.20		
								1178.48	5.00
HYDROGRAPH AT	SMA15C	253.	4.33	42.	10.	10.	0.36		
2 COMBINED AT	CPS15C	262.	4.33	63.	16.	15.	0.56		
ROUTED TO	RSM19C	247.	4.67	62.	16.	15.	0.56		
								1139.84	4.67

HYDROGRAPH AT									
+	SMA19C	47.	4.75	16.	4.	4.	0.16		
2 COMBINED AT									
+	CPS19C	293.	4.67	78.	20.	19.	0.72		
ROUTED TO									
+	RRB27C	227.	6.42	73.	20.	19.	0.72		
+								1108.31	6.42
HYDROGRAPH AT									
+	SM1C	1506.	4.33	355.	90.	86.	1.84		
HYDROGRAPH AT									
+	SM1AC	156.	4.25	26.	7.	6.	0.28		
2 COMBINED AT									
+	CSM1	1662.	4.33	381.	96.	93.	2.12		
ROUTED TO									
-	RSM1	1605.	4.50	379.	96.	93.	2.12		
-								1377.73	4.50
HYDROGRAPH AT									
+	SM2C	2567.	4.25	637.	161.	155.	2.19		
2 COMBINED AT									
+	CSM2	3990.	4.33	1012.	257.	247.	4.31		
ROUTED TO									
-	RDENT	144.	6.58	141.	115.	111.	4.31		
-								1317.13	6.58
ROUTED TO									
-	RSM2	144.	7.00	141.	113.	109.	4.31		
-								1227.21	6.92
HYDROGRAPH AT									
-	SM3C	260.	4.25	29.	7.	7.	0.48		
2 COMBINED AT									
+	CSM3	327.	4.25	157.	120.	116.	4.79		
ROUTED TO									
-	RSM3	299.	4.50	155.	118.	114.	4.79		
-								1176.91	4.50
HYDROGRAPH AT									
+	SM4C	90.	4.33	21.	5.	5.	0.24		
ROUTED TO									
-	RSM4	89.	4.42	21.	5.	5.	0.24		
-								1168.81	4.42
HYDROGRAPH AT									
-	DRW2C	234.	4.50	64.	16.	16.	0.53		

HYDROGRAPH AT	DRWC1C	53.	4.58	13.	3.	3.	0.12		
4 COMBINED AT	CSM4	673.	4.50	236.	143.	138.	5.68		
ROUTED TO	RSM5	638.	4.58	236.	142.	137.	5.68		
								1159.01	4.58
HYDROGRAPH AT	DR1C	113.	4.42	23.	6.	6.	0.16		
HYDROGRAPH AT	WC1A	211.	4.33	54.	14.	13.	0.25		
ROUTED TO	RSM6	210.	4.42	54.	14.	13.	0.25		
								1147.53	4.42
HYDROGRAPH AT	DR2C	28.	4.33	4.	1.	1.	0.05		
4 COMBINED AT	CPDR2C	968.	4.58	308.	162.	157.	6.14		
ROUTED TO	RRB27C	832.	5.58	298.	150.	145.	6.14		
								1108.74	5.58
HYDROGRAPH AT	BR27C	457.	4.50	88.	22.	21.	0.78		
3 COMBINED AT	CPB27C	921.	5.50	424.	192.	185.	7.64		
ROUTED TO	RR35C2	782.	7.00	399.	173.	167.	7.64		
								1057.73	7.00
HYDROGRAPH AT	RR35C	1651.	4.50	331.	83.	80.	1.89		
3 COMBINED AT	CPR35C	1691.	4.58	911.	337.	325.	12.08		
ROUTED TO	RRS37C	1606.	5.17	894.	329.	317.	12.08		
								1026.96	5.17
HYDROGRAPH AT	SA37C	455.	4.33	94.	24.	23.	0.59		
2 COMBINED AT	CPS37C	1770.	5.08	940.	353.	340.	12.67		
ROUTED TO	RAV431	1567.	6.25	915.	337.	325.	12.67		

							1022.65	6.25
HYDROGRAPH AT	AVR43C	804.	4.33	152.	38.	37.	1.03	
2 COMBINED AT	CAV43C	1580.	6.25	919.	375.	362.	13.70	
HYDROGRAPH AT	WC2A	63.	4.42	15.	4.	4.	0.08	
ROUTED TO	RD27.1	63.	4.42	15.	4.	4.	0.08	
							1148.07	4.42
HYDROGRAPH AT	WC2.1A	43.	4.25	6.	1.	1.	0.08	
ROUTED TO	RD27.2	42.	4.33	6.	1.	1.	0.08	
							1148.83	4.33
2 COMBINED AT	CD27.1	104.	4.42	21.	5.	5.	0.16	
ROUTED TO	RD27.3	104.	4.42	21.	5.	5.	0.16	
							1142.42	4.42
HYDROGRAPH AT	WC3A	12.	4.25	3.	1.	1.	0.01	
ROUTED TO	RD27.4	12.	4.33	3.	1.	1.	0.01	
							1142.16	4.33
2 COMBINED AT	CD27.2	115.	4.42	24.	6.	6.	0.17	
ROUTED TO	RD27.5	112.	4.50	24.	6.	6.	0.17	
							1122.37	4.50
HYDROGRAPH AT	WC4A	245.	4.33	49.	12.	12.	0.36	
ROUTED TO	RD27.6	237.	4.50	48.	12.	12.	0.36	
							1140.59	4.50
2 COMBINED AT	CD27.3	348.	4.50	72.	18.	18.	0.53	
ROUTED TO	RD27.7	341.	4.58	72.	18.	18.	0.53	
							1116.18	4.58
HYDROGRAPH AT								

	DR27C	78.	4.42	12.	3.	3.	0.23		
2 COMBINED AT									
	CD27.4	413.	4.58	84.	21.	20.	0.76		
ROUTED TO									
	RB35C2	304.	6.08	81.	21.	20.	0.76		
								1069.67	6.08
HYDROGRAPH AT									
	BR35C2	443.	4.67	113.	28.	27.	0.73		
2 COMBINED AT									
	CPB352	443.	4.67	189.	50.	48.	1.49		
HYDROGRAPH AT									
	BR35C1	372.	4.67	94.	23.	23.	0.55		
2 COMBINED AT									
	CPB352	815.	4.67	283.	73.	70.	2.04		
ROUTED TO									
	RAV432	777.	5.17	278.	73.	70.	2.04		
								1042.16	5.17
ROUTED TO									
	RAV433	709.	5.83	273.	73.	70.	2.04		
								1029.10	5.83
2 COMBINED AT									
	CAV43C	2175.	6.17	1179.	448.	432.	15.74		
ROUTED TO									
	RVR471	2065.	6.67	1168.	441.	425.	15.74		
								1018.10	6.67
HYDROGRAPH AT									
	WC5A	158.	4.50	44.	11.	11.	0.42		
ROUTED TO									
	RD35.1	140.	5.17	43.	11.	11.	0.42		
								1125.76	5.17
HYDROGRAPH AT									
	WC6A	12.	4.17	2.	0.	0.	0.01		
ROUTED TO									
	RD35.2	7.	5.75	2.	0.	0.	0.01		
								1118.00	5.75
2 COMBINED AT									
	CD35.1	144.	5.17	45.	12.	11.	0.43		
ROUTED TO									
	RD35.3	139.	5.50	45.	12.	11.	0.43		
								1090.14	5.50
HYDROGRAPH AT									

+		WC7A	42.	4.25	8.	2.	2.	0.05		
	ROUTED TO									
+		RD35.4	40.	4.58	8.	2.	2.	0.05		
+									1126.36	4.58
	HYDROGRAPH AT									
+		WC8A	196.	4.42	48.	12.	12.	0.35		
	ROUTED TO									
+		RD35.5	190.	4.58	48.	12.	12.	0.35		
+									1137.67	4.58
	2 COMBINED AT									
+		CD35.3	230.	4.58	56.	14.	14.	0.40		
	ROUTED TO									
+		RD35.6	228.	4.58	56.	14.	14.	0.40		
+									1101.85	4.58
	HYDROGRAPH AT									
+		WC9A	22.	4.25	5.	1.	1.	0.02		
	ROUTED TO									
+		RD35.7	22.	4.33	5.	1.	1.	0.02		
+									1128.61	4.33
	HYDROGRAPH AT									
+		WC10A	21.	4.17	4.	1.	1.	0.02		
	ROUTED TO									
+		RD35.8	21.	4.25	4.	1.	1.	0.02		
+									1132.24	4.25
	2 COMBINED AT									
+		CD35.5	42.	4.33	9.	2.	2.	0.04		
	ROUTED TO									
+		RD35.9	42.	4.42	9.	2.	2.	0.04		
+									1115.15	4.42
	HYDROGRAPH AT									
+		WC11A	211.	4.33	57.	15.	14.	0.29		
	ROUTED TO									
+		RD3510	202.	4.50	57.	15.	14.	0.29		
+									1131.83	4.50
	HYDROGRAPH AT									
+		WC12A	173.	4.25	35.	9.	8.	0.26		
	ROUTED TO									
+		RD3511	164.	4.33	35.	9.	8.	0.26		
+									1143.88	4.33
	2 COMBINED AT									
+		CD35.7	363.	4.42	92.	23.	22.	0.55		

ROUTED TO									
	RD3512	351.	4.58	91.	23.	22.	0.55		
								1121.98	4.58
2 COMBINED AT									
	CD35.6	390.	4.58	100.	26.	25.	0.59		
ROUTED TO									
	RD3513	383.	4.67	100.	26.	25.	0.59		
								1101.90	4.67
2 COMBINED AT									
	CD35.4	610.	4.67	156.	40.	38.	0.99		
ROUTED TO									
	RD3514	592.	4.83	155.	40.	38.	0.99		
								1193.58	4.83
HYDROGRAPH AT									
	WC15A	285.	4.25	67.	17.	16.	0.36		
ROUTED TO									
	RD3515	279.	4.25	67.	17.	16.	0.36		
								1134.46	4.25
HYDROGRAPH AT									
	PM2A	45.	4.25	8.	2.	2.	0.07		
2 COMBINED AT									
	CD35.8	323.	4.25	75.	19.	18.	0.43		
ROUTED TO									
	RD3516	315.	4.33	74.	19.	18.	0.43		
								1123.07	4.33
HYDROGRAPH AT									
	WC13A	12.	4.17	3.	1.	1.	0.01		
ROUTED TO									
	RD3517	12.	4.42	3.	1.	1.	0.01		
								1131.19	4.42
HYDROGRAPH AT									
	WC14A	23.	4.33	4.	1.	1.	0.05		
ROUTED TO									
	RD3518	20.	4.75	4.	1.	1.	0.05		
								1133.73	4.75
HYDROGRAPH AT									
	PM1A	40.	4.33	6.	1.	1.	0.07		
4 COMBINED AT									
	CD35.9	371.	4.42	86.	22.	21.	0.56		
ROUTED TO									
	RD3519	372.	4.42	86.	22.	21.	0.56		
								1102.10	4.42

HYDROGRAPH AT								
+	DR35C	286.	4.58	52.	13.	13.	0.60	
4 COMBINED AT								
+	CD35.2	1154.	4.67	334.	86.	83.	2.59	
ROUTED TO								
+	RB43C1	966.	6.08	328.	86.	83.	2.59	
+								1041.87 6.08
HYDROGRAPH AT								
+	SMA43C	134.	4.25	26.	6.	6.	0.13	
ROUTED TO								
+	RB43C2	128.	4.50	26.	7.	6.	0.13	
+								1043.91 4.50
HYDROGRAPH AT								
-	BR43C	690.	4.58	166.	42.	40.	0.85	
3 COMBINED AT								
+	CBR43C	1074.	6.00	505.	134.	130.	3.57	
ROUTED TO								
+	RVR472	1018.	6.58	491.	134.	129.	3.57	
-								1015.65 6.58
HYDROGRAPH AT								
+	VR47C	682.	4.58	149.	37.	36.	0.89	
3 COMBINED AT								
-	CVR47C	3089.	6.67	1700.	613.	590.	20.20	
ROUTED TO								
-	RBR511	2905.	7.42	1677.	594.	573.	20.20	
-								1013.36 7.42
HYDROGRAPH AT								
-	AVR51C	227.	4.50	52.	13.	12.	0.28	
ROUTED TO								
-	RBR512	184.	6.08	51.	13.	12.	0.28	
-								1009.98 6.08
HYDROGRAPH AT								
-	BR51C	535.	4.58	106.	27.	26.	0.70	
3 COMBINED AT								
+	CB51C	2976.	7.42	1731.	634.	611.	21.18	
ROUTED TO								
-	RB1591	2705.	8.58	1682.	614.	592.	21.18	
-								1006.50 8.58
HYDROGRAPH AT								
-	AVR55C	172.	4.58	43.	11.	10.	0.23	

ROUTED TO	RB1592	123.	7.25	41.	11.	10.	0.23	1003.64	7.25
HYDROGRAPH AT	VR59C	184.	4.67	47.	12.	11.	0.25		
ROUTED TO	RB1593	151.	6.25	45.	12.	12.	0.25	1001.77	6.25
HYDROGRAPH AT	BR159C	442.	4.67	103.	26.	25.	0.68		
4 COMBINED AT	CB159C	2795.	8.58	1731.	663.	639.	22.34		
ROUTED TO	RBR163	2703.	9.08	1720.	653.	629.	22.34	998.87	9.08
HYDROGRAPH AT	RET43C	681.	4.50	136.	34.	33.	0.00		
ROUTED TO	RS51C	482.	6.00	132.	34.	33.	0.00	1039.96	6.00
HYDROGRAPH AT	SM51C	362.	4.67	89.	22.	22.	0.50		
2 COMBINED AT	CS51C	552.	5.92	212.	57.	55.	0.50		
ROUTED TO	RB2591	459.	6.92	203.	57.	55.	0.50	1028.28	6.92
ROUTED TO	RB2592	426.	7.67	199.	57.	55.	0.50	1001.52	7.67
HYDROGRAPH AT	BR259C	684.	4.58	149.	37.	36.	1.00		
2 COMBINED AT	CB259C	684.	4.58	311.	94.	90.	1.50		
HYDROGRAPH AT	OOA55C	735.	4.50	151.	40.	38.	0.00		
ROUTED TO	RO55C	674.	5.08	148.	40.	38.	0.00	1032.78	5.08
HYDROGRAPH AT	OA55C	175.	4.58	38.	9.	9.	0.25		

2 COMBINED AT	CP055C	783.	5.08	182.	49.	47.	0.25	
ROUTED TO	RD57C	648.	6.08	174.	49.	47.	0.25	1029.71 6.08
HYDROGRAPH AT	DR57C	72.	4.67	18.	4.	4.	0.12	
2 COMBINED AT	CDR57C	662.	6.08	185.	53.	51.	0.37	
ROUTED TO	RD59C	632.	6.33	184.	53.	51.	0.37	1027.04 6.33
HYDROGRAPH AT	DR59C	70.	4.58	16.	4.	4.	0.11	
2 COMBINED AT	CDR59C	638.	6.33	196.	57.	55.	0.48	
ROUTED TO	RB259	568.	6.67	195.	57.	55.	0.48	1018.61 6.67
2 COMBINED AT	CB259C	868.	6.67	501.	151.	145.	1.98	
ROUTED TO	RB1631	811.	7.58	482.	150.	145.	1.98	998.10 7.58
HYDROGRAPH AT	BR163C	163.	4.75	42.	10.	10.	0.26	
HYDROGRAPH AT	BR263C	299.	4.75	75.	19.	18.	0.50	
4 COMBINED AT	CB163C	3231.	9.00	2057.	833.	802.	25.08	
ROUTED TO	RCD1C	3150.	9.67	2043.	813.	783.	25.08	994.96 9.67
HYDROGRAPH AT	BR67C	74.	4.58	17.	4.	4.	0.13	
ROUTED TO	RCD1C2	59.	5.92	16.	4.	4.	0.13	993.30 5.92
HYDROGRAPH AT	CD1C	399.	4.50	92.	20.	20.	0.47	
3 COMBINED AT								

	CPCD1C	3154.	9.67	2046.	838.	807.	25.68		
ROUTED TO									
	RCD2C1	3078.	10.58	2036.	814.	784.	25.68		
								989.53	10.50
HYDROGRAPH AT									
	CD2C	474.	4.58	111.	28.	27.	0.58		
2 COMBINED AT									
	CCD2C	3078.	10.58	2036.	842.	811.	26.26		
HYDROGRAPH AT									
	RIR63B	45.	3.67	45.	21.	20.	0.00		
ROUTED TO									
	RIR65C	45.	5.00	45.	20.	20.	0.00		
								5.81	5.42
HYDROGRAPH AT									
	IR65C	93.	4.67	25.	6.	6.	0.17		
2 COMBINED AT									
	CIR65C	138.	4.67	68.	27.	26.	0.17		
ROUTED TO									
	RIRDC	135.	4.92	67.	27.	26.	0.17		
								1014.18	4.92
DIVERSION TO									
	RIR65C	104.	4.50	45.	19.	18.	0.17		
HYDROGRAPH AT									
	DIIRDC	31.	4.50	22.	7.	7.	0.17		
HYDROGRAPH AT									
	IRDC	256.	4.92	78.	19.	19.	0.52		
2 COMBINED AT									
	CIRDC	287.	4.92	98.	27.	26.	0.69		
ROUTED TO									
	RIRSMC	269.	5.75	94.	27.	26.	0.69		
								1006.03	5.75
HYDROGRAPH AT									
	IRSMC	121.	4.50	23.	6.	6.	0.25		
2 COMBINED AT									
	CIRSMC	287.	5.75	112.	33.	31.	0.94		
ROUTED TO									
	RCD2C2	281.	6.00	111.	33.	31.	0.94		
								988.10	6.00
2 COMBINED AT									
	CCD2C	3104.	10.50	2057.	874.	842.	27.20		

APPENDIX H

HEC-1 Input/Output Data

(WEST.Ca Model)

```
*****************************************
*                                       *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *
*           SEPTEMBER 1990              *
*            VERSION 4.0                *
*                                       *
* RUN DATE  TUE. JUL 30 1991            *
* RUN TIME  09:09:38                    *
*                                       *
*****************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 756-1104           *
*                                   *
*                                   *
*************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X       X     X        XX
X     X  X       X              X
XXXXXXX  XXXX    X       XXXXX  X
X     X  X       X              X
X     X  X       X     X        X
X     X  XXXXXXX   XXXXX        XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE . SINGLE EVENT DAMAGE CALCULATION. DSS:WRITE STAGE FREQUENCY.
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID   LAVEEN ADMS (FINAL HEC-1)...                        CBA FILE # 40916-02-30
  2           ID   SUB-BASINS OUTFALLING AT THE WESTERN CANAL
  3           ID   INPUT FILE NAME WEST.CA                            DATE: JULY 23, 1991
  4           IT       5                    300
  5           IO       5       0

  6           KK    WC1A
  7           KM   SUB-BASIN WC1A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
  8           KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
  9           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
 10           BA    .250
 11           IN      15
 12           KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 13           PB   3.489
 14           KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
 15           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 16           PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 17           PC    .962    .972    .983    .991   1.000
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18        LG    .150    .254   4.680    .217  40.000
19        UC    .317    .311
20        UA      0       3       5       8      12      20      43      75      90      96
21        UA    100

22        KK    WC2A
23        KM    SUB-BASIN WC2A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
24        KM    6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
25        KM    THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
26        BA    .080
27        IN      15
28        KM    RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
29        PB    3.495
30        KM    THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
31        PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
32        PC    .087    .099    .118    .138    .216    .377    .934    .911    .931    .950
33        PC    .962    .972    .983    .991   1.000
34        LG    .150    .251   8.600    .370    .000
35        UC    .283    .379
36        UA      0       3       5       8      12      20      43      75      90      96
37        UA    100

38        KK   WC2.1A
39        KM    SUB-BASIN WC2.1A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
40        KM    6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
41        KM    THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
42        BA    .080
43        IN      15
44        KM    RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
45        PB    3.496
46        KM    THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
47        PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
48        PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
49        PC    .962    .972    .983    .991   1.000
50        LG    .150    .290   4.000    .520    .000
51        UC    .233    .198
52        UA      0       3       5       8      12      20      43      75      90      96
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

53        UA    100

54        KK    WC3A
55        KM    SUB-BASIN WC3A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
56        KM    6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
57        KM    THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
58        BA    .014
59        IN      15
60        KM    RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
61        PB    3.499
62        KM    THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
63        PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
64        PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
65        PC    .962    .972    .983    .991   1.000
66        LG    .150    .250   8.500    .066    .000
67        UC    .217    .326
68        UA      0       3       5       8      12      20      43      75      90      96
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 69          UA     100

 70          KK    WC4A
 71          KM   SUB-BASIN WC4A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
 72          KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 73          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
 74          BA    .360
 75          IN      15
 76          KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 77          PB   3.484
 78          KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
 79          PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 80          PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 81          PC    .962    .972    .983    .991   1.000
 82          LG    .150    .297   3.950    .546  25.000
 83          UC    .267    .183
 84          UA       0       3       5       8      12      20      43      75      90      96
 85          UA     100

 86          KK    WC5A
 87          KM   SUB-BASIN WC5A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
 88          KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
 89          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
 90          BA    .420
 91          IN      15
 92          KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 93          PB   3.481
 94          KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
 95          PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
 96          PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
 97          PC    .962    .972    .983    .991   1.000
 98          LG    .150    .346   2.880   1.050  28.000
 99          UC    .300    .204
100          UA       0       3       5       8      12      20      43      75      90      96
101          UA     100
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

102          KK    WC6A
103          KM   SUB-BASIN WC6A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
104          KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
105          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
106          BA    .014
107          IN      15
108          KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
109          PB   3.499
110          KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
111          PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
112          PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
113          PC    .962    .972    .983    .991   1.000
114          LG    .150    .270   3.750    .293    .000
115          UC    .167    .178
116          UA       0       3       5       8      12      20      43      75      90      96
117          UA     100

118          KK    WC7A
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119     KM   SUB-BASIN WC7A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
120     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
121     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
122     BA    .050
123     IN      15
124     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
125     PB   3.498
126     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
127     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
128     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
129     PC    .962    .972    .983    .991   1.000
130     LG    .150    .270   7.000    .141    .000
131     UC    .233    .237
132     UA       0       3       5       8      12      20      43      75      90      96
133     UA     100

134     KK    WC8A
135     KM   SUB-BASIN WC8A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
136     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
137     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
138     BA    .350
139     IN      15
140     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
141     PB   3.484
142     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
143     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
144     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
145     PC    .962    .972    .983    .991   1.000
146     LG    .150    .321   3.700    .651  30.000
147     UC    .300    .243
148     UA       0       3       5       8      12      20      43      75      90      96
149     UA     100
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

150     KK    WC9A
151     KM   SUB-BASIN WC9A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
152     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
153     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
154     BA    .025
155     IN      15
156     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
157     PB   3.499
158     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
159     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
160     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
161     PC    .962    .972    .983    .991   1.000
162     LG    .150    .250   8.600    .066    .000
163     UC    .217    .293
164     UA       0       3       5       8      12      20      43      75      90      96
165     UA     100

166     KK   WC10A
167     KM   SUB-BASIN WC10A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
168     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
169     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
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170     BA    .020
171     IN     15
172     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
173     PB   3.499
174     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
175     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
176     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
177     PC    .962    .972    .983    .991   1.000
178     LG    .150    .250   5.300    .059    .000
179     UC    .167    .199
180     UA      0       3       5       8      12      20      43      75      90      96
181     UA     100

182     KK   WC11A
183     KM   SUB-BASIN WC11A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
184     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
185     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
186     BA    .290
187     IN     15
188     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
189     PB   3.437
190     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
191     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
192     PC    .087    .099    .118    .138    .216    .377    .334    .911    .931    .950
193     PC    .962    .972    .983    .991   1.000
194     LG    .150    .335   3.600    .703  53.000
195     UC    .233    .216
196     UA      0       3       5       8      12      20      43      75      90      96
197     UA     100
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

198     KK   WC12A
199     KM   SUB-BASIN WC12A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
200     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
201     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
202     BA    .260
203     IN     15
204     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
205     PB   3.499
206     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
207     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
208     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
209     PC    .962    .972    .983    .991   1.000
210     LG    .150    .320   3.800    .632  28.000
211     UC    .200    .154
212     UA      0       3       5       8      12      20      43      75      90      96
213     UA     100

214     KK   WC13A
215     KM   SUB-BASIN WC13A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
216     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
217     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
218     BA    .013
219     IN     15
220     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
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221        PB   3.499
222        KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
223        PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
224        PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
225        PC    .962    .972    .983    .991   1.000
226        LG    .150    .250   8.600    .366    .000
227        UC    .183    .242
228        UA       0       3       5       8      12      20      43      75      90      96
229        UA     100

230        KK   WC14A
231        KM   SUB-BASIN WC14A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
232        KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
233        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
234        BA    .050
235        IN      15
236        KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
237        PB   3.498
238        KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
239        PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
240        PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
241        PC    .962    .972    .983    .991   1.000
242        LG    .150    .290   4.000    .520    .000
243        UC    .250    .279
244        UA       0       3       5       3      12      20      43      75      90      96
245        UA     100
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

246        KK   WC15A
247        KM   SUB-BASIN WC15A - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
248        KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
249        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
250        BA    .360
251        IN      15
252        KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
253        PB   3.484
254        KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
255        PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
256        PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
257        PC    .962    .972    .983    .991   1.000
258        LG    .150    .320   3.350    .784  50.000
259        UC    .183    .133
260        UA       0       3       5       8      12      20      43      75      90      96
261        UA     100

262        KK   WC16B
263        KM   SUB-BASIN WC16B - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
264        KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
265        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
266        BA    .023
267        IN      15
268        KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
269        PB   3.499
270        KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
271        PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
```

```
272    PC   .087   .099   .118   .138   .216   .377   .834   .911   .931   .950
273    PC   .962   .972   .983   .991  1.000
274    LG   .150   .255  7.200   .123   .000
275    UC   .167   .183
276    UA     0      3      5      8     12     20     43     75     90     96
277    UA   100

278    KK   WC17B
279    KM   SUB-BASIN WC17B - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
280    KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
281    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
282    BA    .035
283    IN     15
284    KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
285    PB   3.498
286    KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
287    PC   .000   .008   .016   .025   .033   .041   .050   .058   .066   .074
288    PC   .087   .099   .118   .138   .216   .377   .834   .911   .931   .950
289    PC   .962   .972   .983   .991  1.000
290    LG   .150   .276  4.050   .361  5.000
291    UC   .183   .279
292    UA     0      3      5      8     12     20     43     75     90     96
293    UA   100
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LINE   ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

294    KK   WC18B
295    KM   SUB-BASIN WC18B - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
296    KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
297    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
298    BA    .060
299    IN     15
300    KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
301    PB   3.497
302    KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
303    PC   .000   .008   .016   .025   .033   .041   .050   .058   .066   .074
304    PC   .087   .099   .118   .138   .216   .377   .834   .911   .931   .950
305    PC   .962   .972   .983   .991  1.000
306    LG   .150   .265  4.100   .236   .000
307    UC   .217   .236
308    UA     0      3      5      8     12     20     43     75     90     96
309    UA   100

310    KK   WC19B
311    KM   SUB-BASIN WC19B - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
312    KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
313    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
314    BA    .210
315    IN     15
316    KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
317    PB   3.490
318    KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
319    PC   .000   .008   .016   .025   .033   .041   .050   .058   .066   .074
320    PC   .087   .099   .118   .138   .216   .377   .834   .911   .931   .950
321    PC   .962   .972   .983   .991  1.000
322    LG   .150   .255  3.520   .276 40.000
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323     UC    .150    .108
324     UA      0       3       5       8      12      20      43      75      90      96
325     UA    100

326     KK   WC20B
327     KM   SUB-BASIN WC20B - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
328     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
329     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
330     BA    .014
331     IN      15
332     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
333     PB   3.499
334     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
335     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
336     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
337     PC    .962    .972    .983    .991   1.000
338     LG    .150    .250   8.600    .066    .000
339     UC    .167    .178
340     UA      0       3       5       8      12      20      43      75      90      96
341     UA    100
                                   HEC-1 INPUT                                        PAGE  8

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


342     KK   WC21B
343     KM   SUB-BASIN WC21B - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
344     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
345     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
346     BA    .024
347     IN      15
348     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
349     PB   3.499
350     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
351     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
352     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
353     PC    .962    .972    .983    .991   1.000
354     LG    .150    .255   4.100    .236    .000
355     UC    .200    .260
356     UA      0       3       5       8      12      20      43      75      90      96
357     UA    100

358     KK   WC22B
359     KM   SUB-BASIN WC22B - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
360     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
361     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
362     BA    .007
363     IN      15
364     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
365     PB   3.500
366     KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
367     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
368     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
369     PC    .962    .972    .983    .991   1.000
370     LG    .150    .260   5.800    .179    .000
371     UC    .150    .202
372     UA      0       3       5       8      12      20      43      75      90      96
373     UA    100
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374          KK   WC23B
375          KM   SUB-BASIN WC23B - NATURAL DESERT HILLSLOPES. MINOR DEVELOPMENT-
376          KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
377          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
378          BA    .400
379          IN      15
380          KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
381          PB   3.482
382          KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.00
383          PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
384          PC    .087    .099    .113    .138    .216    .377    .834    .911    .931    .950
385          PC    .962    .972    .983    .991   1.000
386          LG    .150    .300   4.120    .253  60.000
387          UC    .217    .172
388          UA       0       3       5       8      12      20      43      75      90      96
389          UA     100
390          ZZ
```

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*****************************************                    *****************************************
*                                       *                    *                                       *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *                    *   U.S. ARMY CORPS OF ENGINEERS        *
*          SEPTEMBER 1990               *                    *   HYDROLOGIC ENGINEERING CENTER       *
*           VERSION 4.0                 *                    *         609 SECOND STREET             *
*                                       *                    *      DAVIS. CALIFORNIA 95616          *
*  RUN DATE  TUE. JUL 30 1991           *                    *          (916) 756-1104               *
*  RUN TIME  09:09:38                   *                    *                                       *
*                                       *                    *                                       *
*****************************************                    *****************************************
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                    LAVEEN ADMS (FINAL HEC-1)                    CSA FILE # 40916-02-30
                    SUB-BASINS OUTFALLING AT THE WESTERN CANAL
                    INPUT FILE NAME WEST.CA                      DATE: JULY 23. 1991

  5 IO        OUTPUT CONTROL VARIABLES
                    IPRNT          5  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    OSCAL         0.  HYDROGRAPH PLOT SCALE

   IT         HYDROGRAPH TIME DATA
                     NMIN          5  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NO        300  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      2   0  ENDING DATE
                   NDTIME       0055  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.08 HOURS
                   TOTAL TIME BASE   24.92 HOURS

        ENGLISH UNITS
            DRAINAGE AREA         SQUARE MILES
            PRECIPITATION DEPTH   INCHES
            LENGTH. ELEVATION     FEET
```

FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS. AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	WC1A	549.	4.17	70.	18.	17.	0.25		
HYDROGRAPH AT	WC2A	161.	4.17	20.	5.	5.	0.08		
HYDROGRAPH AT	WC2.1A	178.	4.08	14.	3.	3.	0.08		
HYDROGRAPH AT	WC3A	31.	4.17	4.	1.	1.	0.01		
HYDROGRAPH AT	WC4A	863.	4.17	78.	20.	19.	0.36		
HYDROGRAPH AT	WC5A	869.	4.17	81.	20.	20.	0.42		
HYDROGRAPH AT	WC6A	38.	4.08	3.	1.	1.	0.01		
HYDROGRAPH AT	WC7A	120.	4.08	11.	3.	3.	0.05		
HYDROGRAPH AT	WC8A	742.	4.17	76.	19.	18.	0.35		
HYDROGRAPH AT	WC9A	58.	4.08	6.	2.	2.	0.02		
HYDROGRAPH AT	WC10A	58.	4.08	5.	1.	1.	0.02		
HYDROGRAPH AT	WC11A	699.	4.08	77.	19.	19.	0.29		
HYDROGRAPH AT	WC12A	697.	4.08	56.	14.	14.	0.26		
HYDROGRAPH AT	WC13A	34.	4.08	3.	1.	1.	0.01		
HYDROGRAPH AT	WC14A	94.	4.17	9.	2.	2.	0.05		

HYDROGRAPH AT	WC15A	1061.	4.08	93.	23.	22.	0.36
HYDROGRAPH AT	WC16B	55.	4.08	5.	1.	1.	0.02
HYDROGRAPH AT	WC17B	75.	4.08	7.	2.	2.	0.03
HYDROGRAPH AT	WC18B	144.	4.08	13.	3.	3.	0.06
HYDROGRAPH AT	WC19B	683.	4.08	59.	15.	14.	0.21
HYDROGRAPH AT	WC20B	41.	4.08	4.	1.	1.	0.01
HYDROGRAPH AT	WC21B	55.	4.08	5.	1.	1.	0.02
HYDROGRAPH AT	WC22B	18.	4.08	2.	0.	0.	0.01
HYDROGRAPH AT	WC23B	1185.	4.08	123.	31.	30.	0.40

*** NORMAL END OF HEC-1 ***

APPENDIX I

HEC-1 Input/Output Data

(PMWEST1 Model)

```
1*****************************************
                                         *
   FLOOD HYDROGRAPH PACKAGE  (HEC-1)     *
*            SEPTEMBER 1990              *
*             VERSION 4.0                *
*                                        *
* RUN DATE  TUE. JUL 23 1991             *
* RUN TIME  10:53:01                     *
*                                        *
*****************************************
```

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*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*         609 SECOND STREET             *
*      DAVIS, CALIFORNIA 95616          *
*          (916) 756-1104               *
*                                       *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X       X     X        XX
X     X  X       X              X
XXXXXXX  XXXX    X       XXXXX  X
X     X  X       X              X
X     X  X       X     X        X
X     X  XXXXXXX   XXXXX        XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID   LAVEEN ADMS ( FINAL HEC-1 )                    CBA FILE # 40916-02-30
  2           ID   PROSPECT MOUNTAIN WEST DRAINAGE AREA
  3           ID   INPUT FILE NAME  PMWEST1                       DATE JULY 23, 1991
  4           IT       5                    300
  5           IO       5       0
              *DIAGRAM

  6           KK   WC16B
  7           KM   SUB-BASIN WC16B
  8           KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
  9           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
 10           BA    .023
 11           IN      15
 12           KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 13           PB   3.452
 14           KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.46
 15           PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .075
 16           PC    .087    .099    .119    .149    .233    .411    .770    .877    .917    .944
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17        PC    .956    .968    .979    .990   1.000
18        LG    .150    .255   7.200    .123    .000
19        UC    .200    .225
20        UA       0       3       5       8      12      20      43      75      90      96
21        UA     100

22        KK   RRHV1
23        KM   ROUTE FLOW FROM SUB-BASIN WC16B TO COMPUTATION POINT CPHV1
24        RS       1    ELEV    1141
25        RC   0.035   0.040   0.035     540   0.011    1146
26        RX       0      25      80     120     140     170     240     310
27        RY    1146    1144    1142    1141    1141    1142    1144    1146

28        KK   WC17B
29        KM   SUB-BASIN WC17B
30        KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
31        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
32        BA    .035
33        LG    .150    .276   4.050    .361   5.000
34        UC    .217    .336
35        UA       0       3       5       8      12      20      43      75      90      96
36        UA     100

37        KK   RRHV2
38        KM   ROUTE FLOW FROM SUB-BASIN WC17B TO COMPUTATION POINT CPHV1
39        RS       1    ELEV    1140
40        RC   0.035   0.040   0.035     230   0.030    1142
41        RX       0      40      80      90     100     110     150     190
42        RY    1143    1142    1140    1140    1140    1140    1141    1142

43        KK   CPHV1
44        KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC16B AND WC17B
45        HC       2
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

46        KK   RRHV3
47        KM   ROUTE FLOW FROM COMPUTATION POINT CPHV1 TO COMPUTATION POINT CPHV2(1ST REACH)
48        RS       1    ELEV    1137
49        RC   0.035   0.040   0.035     400   0.010    1140
50        RX       0      30      40      60      70     110     150     180
51        RY    1141    1140    1138    1137    1137    1138    1139    1140

52        KK   RRHV4
53        KM   ROUTE FLOW FROM COMPUTATION POINT CPHV1 TO COMPUTATION POINT CPHV2(1ST REACH)
54        RS       1    ELEV    1141
55        RC   0.035   0.040   0.035     400   0.010    1146
56        RX       0      50     100     130     150     170     220     290
57        RY    1146    1144    1142    1141    1141    1142    1144    1146

58        KK   WC18B
59        KM   SUB-BASIN WC18B
60        KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
61        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
62        BA    .060
63        LG    .150    .265   4.100    .236    .000
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```
 64          UC    .250    .276
 65          UA       0       3       5       8      12      20      43      75      90      96
 66          UA     100

 67          KK   RRHV5
 68          KM   ROUTE FLOW FROM SUB-BASIN WC18B TO COMPUTATION POINT CPHV2
 69          RS       1    ELEV    1136
 70          RC   0.035   0.040  0.0350     650   0.017    1140
 71          RX       0      60     120     140     160     190     220     240
 72          RY    1140    1139    1138    1136    1136    1138    1139    1140

 73          KK   WC19B
 74          KM   SUB-BASIN WC19B
 75          KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
 76          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
 77          BA    .210
 78          LG    .150    .265   3.520    .276  40.000
 79          UC    .167    .121
 80          UA       0       3       5       8      12      20      43      75      90      96
 81          UA     100

 82          KK   RRHV6
 83          KM   ROUTE FLOW FROM SUB-BASIN WC19B TO COMPUTATION POINT CPHV2
 84          RS       1    ELEV    1137
 85          RC   0.035   0.040   0.035     640   0.018    1139
 86          RX       0      10      30      45      60      75     110     140
 87          RY    1139  1138.5    1138    1137    1137    1138    1139    1140

 88          KK    PM3B
 89          KM   SUB-BASIN PM3B
 90          KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
 91          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
 92          BA    .060
 93          LG    .150    .345   3.100    .946   5.000
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 94          UC    .200    .185
 95          UA       0       3       5       8      12      20      43      75      90      96
 96          UA     100

 97          KK   CPHV2
 98          KM   COMBINE ROUTED FLOW FROM CPHV1, WC18B, WC19B WITH RUNOFF FROM SUB-BASIN PM3B
 99          HC       4

100          KK   RRHV7
101          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV2 TO COMPUTATION POINT CPHV3
102          RS       1    ELEV    1126
103          RC   0.035   0.040   0.035     750   0.011    1130
104          RX       0      40      90     160     190     210     250     390
105          RY    1130    1129    1128    1126    1126    1128    1132    1133

106          KK   WC20B
107          KM   SUB-BASIN WC20B
108          KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
109          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
110          BA    .014
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```
111        LG    .150    .250   8.600    .066    .000
112        UC    .183    .198
113        UA       0       3       5       8      12      20      43      75      90      96
114        UA     100

115        KK   RRHV8
116        KM   ROUTE FLOW FROM SUB-BASIN WC208 TO COMPUTATION POINT CPHV3
117        RS       1    ELEV    1132
118        RC   0.035   0.035   0.035     850   0.002  1134.5
119        RX       0      10      20      30      40      60     170     220
120        RY  1134.5    1134    1133    1132    1132    1134    1134  1134.5

121        KK   CPHV3
122        KM   COMBINE ROUTED FLOWS FROM SUB-BASINS WC208 AND COMPUTATION POINT CPHV4
123        HC       2

124        KK   RRHV9
125        KM   ROUTE FLOW FROM COMPUTATION CPHV3 TO COMPUTATION POINT CPHV4
126        RS       1    ELEV    1121
127        RC   0.035   0.040   0.035     780   0.008    1126
128        RX       0     100     130     150     165     180     290     350
129        RY    1126    1124    1122    1121    1121    1122    1124    1126

130        KK   WC218
131        KM   SUB-BASIN WC218
132        KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
133        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
134        BA    .024
135        LG    .150    .255   4.100    .236    .000
136        UC    .233    .308
137        UA       0       3       5       8      12      20      43      75      90      96
138        UA     100
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

139        KK  RRHV10
140        KM   ROUTE FLOW FROM SUB-BASIN WC218 TO COMPUTATION POINT CPHV4
141        RS       2    ELEV    1129
142        RC   0.035   0.035   0.035    1110   0.022    1130
143        RX       0      25      50      75     100     125     175     200
144        RY    1130 1129.75  1129.5    1129    1129  1129.5 1129.75    1130

145        KK    PM48
146        KM   SUB-BASIN PM48
147        KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
148        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
149        BA    .140
150        LG    .150    .327   3.450    .764  15.000
151        UC    .200    .128
152        UA       0       3       5       8      12      20      43      75      90      96
153        UA     100

154        KK   CPHV4
155        KM   COMBINE ROUTED FLOWS FROM SUB-BASINS WC218. PM48 AND COMPUTATION POINT CPHV4
156        HC       3
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157          KK  RRHV11
158          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV4 TO COMPUTATION POINT CPHV5
159          RS       1    ELEV    1116
160          RC   0.035   0.040   0.035     340   0.006    1121
161          RX       0     100     150     170     190     220     280     340
162          RY    1121    1120    1118    1116    1116    1118    1120    1121

163          KK   WC22B
164          KM   SUB-BASIN WC22B
165          KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
166          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
167          BA    .007
168          LG    .150    .260   5.800    .179    .000
169          UC    .167    .227
170          UA       0       3       5       8      12      20      43      75      90      96
171          UA     100

172          KK  RRHV12
173          KM   ROUTE FLOW FROM SUB-BASIN WC22B TO COMPUTATION POINT CPHV4
174          RS       3    ELEV  1123.5
175          RC   0.035   0.040   0.035    1020   0.023  1124.5
176          RX       0      30      70      90     100     120     135     160
177          RY  1124.5    1124  1123.5  1123.5  1123.5  1123.5    1124  1124.5

178          KK   CPHV5
179          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC22B AND COMPUTATION POINT CPHV4
180          HC       2
```



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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

181          KK  RRHV13
182          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV5 TO COMPUTATION POINT CPHV4
183          RS       1    ELEV    1114
184          RC   0.035   0.040   0.035     430   0.005    1117
185          RX       0      70     130     160     180     220     340     410
186          RY    1117    1116    1116    1114    1114    1115    1115    1117

187          KK   WC23B
188          KM   SUB-BASIN WC23B
189          KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
190          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
191          BA    .400
192          LG    .150    .300   4.120    .253  60.000
193          UC    .233    .187
194          UA       0       3       5       8      12      20      43      75      90      96
195          UA     100

196          KK  RRHV14
197          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV5 TO COMPUTATION POINT CPHV4
198          RS       1    ELEV    1120
199          RC   0.035   0.035   0.035    1020   0.027  1122.5
200          RX       0      40      80     100     120     140     170     210
201          RY  1122.5    1122  1121.5    1120    1120  1121.5    1122  1122.5

202          KK   CPHV6
203          KM   COMBINE ROUTED FLOWS FROM SUBASIN WC23B AND COMPUTATION POINT CPHV5
```

```
204          HC       2

205          KK   RRHV15
206          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV6 TO COMPUTATION POINT CPHV7
207          RS       2    ELEV    1105
208          RC   0.035   0.040   0.035    1980   0.008    1110
209          RX       0     170     430     470     490     530     580     630
210          RY    1110    1106    1106    1105    1105    1106    1108    1110

211          KK    PM5B
212          KM   SUB-BASIN PM5B
213          KM   6-HOUR RAINFALL. PATTERN NO. 1.46 WAS USED TO FIND TC & R FOR THIS BASIN
214          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
215          BA    .130
216          LG    .150    .310   4.200    .518  15.000
217          UC    .400    .281
218          UA       0       3       5       8      12      20      43      75      90      96
219          UA     100

220          KK   CPHV7
221          KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINT CPHV6 WITH RUNOFF FROM SUB-BASIN
222          KM   PM5B
223          HC       2
224          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  5      WC16B
             V
             V
 22      RRHV1
             .
             .
 28          .        WC17B
             .            V
             .            V
 37          .        RRHV2
             .            .
             .            .
 43      CPHV1............
             V
             V
 46      RRHV3
             V
             V
 52      RRHV4
             .
             .
 58          .        WC18B
             .            V
             .            V
 67          .        RRHV5
             .            .
             .            .
```

```
73          .           .       WC19B
            .           .          V
            .           .          V
82          .           .       RRHV6
            .           .          .
            .           .          .
88          .           .          .        PM3B
            .           .          .          .
            .           .          .          .
97       CPHV2.......................................
            V
            V
100      RRHV7
            .
            .
106         .        WC20B
            .           V
            .           V
115         .       RRHV8
            .           .
            .           .
121      CPHV3............
            V
            V
124      RRHV9
            .
            .
130         .       WC21B
            .           V
            .           V
139         .      RRHV10
            .           .
            .           .
145         .           .       PM4B
            .           .          .
            .           .          .
154      CPHV4........................
            V
            V
157      RRHV11
            .
            .
163         .       WC22B
            .           V
            .           V
172         .      RRHV12
            .           .
            .           .
178      CPHV5............
            V
            V
181      RRHV13
            .
            .
187         .       WC23B
            .           V
            .           V
196         .      RRHV14
```

```
                .          .
                .          .
  202       CPHV6............
                V
                V
  205      RRHV15
                .
                .
  211           .        PM58
                .          .
                .          .
  220       CPHV7............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            SEPTEMBER 1990             *
*             VERSION 4.0               *
*                                       *
*  RUN DATE  TUE. JUL 23 1991           *
*  RUN TIME  10:53:01                   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*         609 SECOND STREET             *
*       DAVIS. CALIFORNIA 95616         *
*          (916) 756-1104               *
*                                       *
*                                       *
*****************************************
```

```
                    LAVEEN ADMS ( FINAL HEC-1 )                CBA FILE # 40916-02-30
                    PROSPECT MOUNTAIN WEST DRAINAGE AREA
                    INPUT FILE NAME  PMWEST1                   DATE JULY 23. 1991

  5 IO        OUTPUT CONTROL VARIABLES
                    IPRNT          5  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    OSCAL         0.  HYDROGRAPH PLOT SCALE

   IT         HYDROGRAPH TIME DATA
                     NMIN          5  MINUTES IN COMPUTATION INTERVAL
                    IDATE     1    0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NO        300  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE     2    0  ENDING DATE
                   NDTIME       0055  ENDING TIME
                   ICENT          19  CENTURY MARK

              COMPUTATION INTERVAL    0.08 HOURS
                   TOTAL TIME BASE   24.92 HOURS

        ENGLISH UNITS
            DRAINAGE AREA          SQUARE MILES
            PRECIPITATION DEPTH    INCHES
            LENGTH. ELEVATION      FEET
            FLOW                   CUBIC FEET PER SECOND
            STORAGE VOLUME         ACRE-FEET
            SURFACE AREA           ACRES
            TEMPERATURE            DEGREES FAHRENHEIT
```

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS. AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	WC16B	48.	4.08	5.	1.	1.	0.02		
ROUTED TO	RRHV1	46.	4.17	5.	1.	1.	0.02	1141.56	4.17
HYDROGRAPH AT	WC17B	54.	4.17	6.	2.	2.	0.03		
ROUTED TO	RRHV2	54.	4.17	6.	2.	2.	0.03	1140.40	4.17
2 COMBINED AT	CPHV1	101.	4.17	12.	3.	3.	0.06		
ROUTED TO	RRHV3	99.	4.17	12.	3.	3.	0.06	1137.98	4.17
ROUTED TO	RRHV4	97.	4.25	12.	3.	3.	0.06	1141.87	4.25
HYDROGRAPH AT	WC18B	108.	4.17	12.	3.	3.	0.06		
ROUTED TO	RRHV5	107.	4.17	12.	3.	3.	0.06	1136.91	4.17
HYDROGRAPH AT	WC19B	541.	4.08	56.	14.	14.	0.21		
ROUTED TO	RRHV6	537.	4.08	56.	14.	14.	0.21	1138.85	4.08
HYDROGRAPH AT	PM3B	90.	4.08	7.	2.	2.	0.06		
4 COMBINED AT	CPHV2	796.	4.08	87.	22.	21.	0.39		
ROUTED TO	RRHV7	783.	4.17	86.	22.	21.	0.39	1128.11	4.17

HYDROGRAPH AT									
	WC20B	32.	4.08	3.	1.	1.	0.01		
ROUTED TO									
	RRHV8	27.	4.17	3.	1.	1.	0.01		
								1132.97	4.17
2 COMBINED AT									
	CPHV3	810.	4.17	90.	23.	22.	0.40		
ROUTED TO									
	RRHV9	795.	4.17	90.	23.	22.	0.40		
								1123.44	4.17
HYDROGRAPH AT									
	WC21B	41.	4.17	5.	1.	1.	0.02		
ROUTED TO									
	RRHV10	40.	4.25	5.	1.	1.	0.02		
								1129.36	4.25
HYDROGRAPH AT									
	PM4B	277.	4.08	22.	5.	5.	0.14		
3 COMBINED AT									
	CPHV4	1062.	4.17	116.	29.	28.	0.57		
ROUTED TO									
	RRHV11	1062.	4.17	116.	29.	28.	0.57		
								1119.25	4.17
HYDROGRAPH AT									
	WC22B	14.	4.08	1.	0.	0.	0.01		
ROUTED TO									
	RRHV12	13.	4.25	1.	0.	0.	0.01		
								1123.65	4.25
2 COMBINED AT									
	CPHV5	1075.	4.17	118.	30.	28.	0.57		
ROUTED TO									
	RRHV13	1042.	4.17	118.	30.	28.	0.57		
								1116.17	4.17
HYDROGRAPH AT									
	WC23B	926.	4.08	119.	30.	29.	0.40		
ROUTED TO									
	RRHV14	912.	4.17	119.	30.	29.	0.40		
								1122.03	4.17
2 COMBINED AT									
	CPHV6	1954.	4.17	237.	60.	57.	0.97		
ROUTED TO									
	RRHV15	1841.	4.25	237.	60.	57.	0.97		
								1107.02	4.25

HYDROGRAPH AT	PM5B	197.	4.25	23.	6.	6.	0.13
2 COMBINED AT	CPHV7	2037.	4.25	260.	65.	63.	1.10

*** NORMAL END OF HEC-1 ***

APPENDIX J

HEC-1 Input/Output Data

(PMEAST1 Model)

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            SEPTEMBER 1990             *
*             VERSION 4.0               *
*                                       *
*  RUN DATE  THU. AUG 22 1991           *
*  RUN TIME  14:58:15                   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*         609 SECOND STREET             *
*       DAVIS, CALIFORNIA 95616         *
*          (916) 756-1104               *
*                                       *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X       X     X        XX
X     X  X       X              X
XXXXXXX  XXXX    X       XXXXX  X
X     X  X       X              X
X     X  X       X     X        X
X     X  XXXXXXX   XXXXX        XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID   LAVEEN ADMS (FINAL HEC-1)                    CBA FILE # 40916-02-30
  2           ID   PROSPECT MOUNTAIN EAST DRAINAGE AREA
  3           ID   INPUT FILE NAME  PMEAST1                     JULY 23.1991
  4           IT       5                    300
  5           IO       5       0
              *DIAGRAM

  6           KK   WC15A
  7           KM   SUB-BASIN WC15A-NATURAL DESERT HILLSLOPES MINOR DEVELOPMENT-
  8           KM   6-HOUR RAINFALL. PATTERN NO. 1.07 WAS USED TO FIND TC & R FOR THIS BASIN
  9           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
 10           BA     .360
 11           IN      15
 12           KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 13           PB   3.474
 14           KM   THE FOLLOWING PC RECORD REPRESENTS A 6-HOUR STROM WITH A PATTERN No. OF 1.07
 15           PC    .000    .008    .015    .025    .033    .041    .050    .058    .066    .074
 16           PC    .087    .099    .118    .140    .218    .382    .924    .906    .929    .949
```

```
17        PC    .961    .971    .982    .991   1.000
18        LG    .150    .320   3.350    .784  50.000
19        UC    .200    .147
20        UA       0       3       5       8      12      20      43      75      90      96
21        UA     100

22        KK  RD3515
23        KM   ROUTE RUNOFF FROM SUB-BASIN WC15A TO COMPUTATION POINT CD35.8
24        RS       1    ELEV    1132
25        RC   0.030   0.035   0.030    1250   0.014    1136
26        RX       0      30      50      70      85     100     140     200
27        RY    1140    1138    1136    1134    1132    1134    1135    1136

28        KK    PM2A
29        KM   SUB-BASIN PM2A-NATURAL DESERT HILLSLOPES MINOR DEVELOPMENT-
30        KM   6-HOUR RAINFALL. PATTERN NO. 1.07 WAS USED TO FIND TC & R FOR THIS BASIN
31        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
32        BA    .070
33        LG    .150    .332   4.100    .502  15.000
34        UC    .200    .180
35        UA       0       3       5       8      12      20      43      75      90      96
36        UA     100

37        KK  CD35.8
38        KM   COMBINE ROUTED FLOW FROM SUB-BASIN WC15A TO RUNOFF FROM SUB-BASIN PM2A
39        HC       2

40        KK  RD3516
41        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.8 TO COMPUTATION POINT CD35.7
42        RS       1    ELEV    1122
43        RC   0.035   0.040   0.030    1400   0.008    1126
44        RX       0      25      35      50     130     150     200     260
45        RY    1130    1126    1124    1122    1122    1124    1125    1126
```



```
LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

46        KK   WC13A
47        KM   SUB-BASIN WC13A-NATURAL DESERT HILLSLOPES MINOR DEVELOPMENT-
48        KM   6-HOUR RAINFALL. PATTERN NO. 1.07 WAS USED TO FIND TC & R FOR THIS BASIN
49        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
50        BA    .013
51        LG    .150    .250   8.600    .066    .000
52        UC    .183    .242
53        UA       0       3       5       8      12      20      43      75      90      96
54        UA     100

55        KK  RD3517
56        KM   ROUTE RUNOFF FROM SUB-BASIN WC13A TO COMPUTATION POINT CD35.7
57        RS       3    ELEV    1131
58        RC   0.035   0.035   0.035    1280   0.023
59        RX       0     115     180     225     270     350     435     530
60        RY    1132  1131.5  1131.2    1131  1131.2  1131.5  1131.8    1132

61        KK   WC14A
62        KM   SUB-BASIN WC14A-NATURAL DESERT HILLSLOPES MINOR DEVELOPMENT-
63        KM   6-HOUR RAINFALL. PATTERN NO. 1.07 WAS USED TO FIND TC & R FOR THIS BASIN
```

```
64          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
65          BA    .050
66          LG    .150    .290   4.000    .520    .000
67          UC    .250    .279
68          UA       0       3       5       8      12      20      43      75      90      96
69          UA     100

70          KK  RO3518
71          KM   ROUTE RUNOFF FROM SUB-BASIN WC14A TO COMPUTATION POINT CO35.7
72          RS       6    ELEV  1133.4
73          RC   0.040   0.040   0.040    2000   0.013
74          RX       0      60     150     220     250     280     310     350
75          RY    1134  1133.9  1133.7  1133.4  1133.7  1133.8  1133.9    1134

76          KK    PM1A
77          KM   SUB-BASIN PM1A-NATURAL DESERT HILLSLOPES MINOR DEVELOPMENT-
78          KM   6-HOUR RAINFALL. PATTERN NO. 1.07 WAS USED TO FIND TC & R FOR THIS BASIN
79          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
80          BA    .070
81          LG    .380    .097   4.210    .597   2.000
82          UC    .257    .197
83          UA       0       3       5       8      12      20      43      75      90      96
84          UA     100

85          KK  CO35.9
86          KM   COMBINE ROUTED FLOWS FROM SUB-BASINS WC13A. WC14A AND COMPUTATION POINT
87          KM   CO35.8 WITH FLOW FROM SUB-BASIN PM1A
88          HC       4
89          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   5       WC15A
               V
               V
  22      RO3515
               .
               .
  28           .        PM2A
               .           .
               .           .
  37      CO35.8............
          -    V
               V
  40      RO3518
               .
               .
  46           .       WC13A
               .           V
               .           V
  55           .      RO3517
               .           .
               .           .
  61           .           .      WC14A
```

```
                .          .          V
                .          .          V
   70           .          .       RD351S
                .          .          .
                .          .          .
   75           .          .          .        PM1A
                .          .          .          .
                .          .          .          .
   85      CD35.S.......................................
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*          SEPTEMBER 1990               *
*           VERSION 4.0                 *
*                                       *
*  RUN DATE  THU. AUG 22 1991           *
*  RUN TIME  14:58:15                   *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*         609 SECOND STREET             *
*      DAVIS, CALIFORNIA 95616          *
*         (916) 756-1104                *
*                                       *
*                                       *
*****************************************
```

LAVEEN AOMS (FINAL HEC-1) CBA FILE # 40916-02-30
PROSPECT MOUNTAIN EAST DRAINAGE AREA
INPUT FILE NAME PMEAST1 JULY 23,1991

```
5 IO        OUTPUT CONTROL VARIABLES
                 IPRNT          5  PRINT CONTROL
                 IPLOT          0  PLOT CONTROL
                 OSCAL         0.  HYDROGRAPH PLOT SCALE

  IT        HYDROGRAPH TIME DATA
                  NMIN          5  MINUTES IN COMPUTATION INTERVAL
                 IDATE      1   0  STARTING DATE
                 ITIME       0000  STARTING TIME
                    NO        300  NUMBER OF HYDROGRAPH ORDINATES
                NODATE      2   0  ENDING DATE
                NOTIME       0055  ENDING TIME
                 ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL    0.08 HOURS
                 TOTAL TIME BASE   24.92 HOURS

      ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT
```

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND

TIME IN HOURS.. AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	WC15A	988.	4.08	92.	23.	22.	0.36		
ROUTED TO	RD3515	916.	4.17	91.	23.	22.	0.36		
								1135.53	4.17
HYDROGRAPH AT	PM2A	157.	4.08	14.	3.	3.	0.07		
2 COMBINED AT	CD35.8	1065.	4.17	105.	26.	25.	0.43		
ROUTED TO	RD3516	1042.	4.17	105.	25.	25.	0.43		
								1124.13	4.17
HYDROGRAPH AT	WC13A	33.	4.08	3.	1.	1.	0.01		
ROUTED TO	RD3517	29.	4.25	3.	1.	1.	0.01		
								1131.27	4.25
HYDROGRAPH AT	WC14A	91.	4.17	8.	2.	2.	0.05		
ROUTED TO	RD3518	77.	4.42	8.	2.	2.	0.05		
								1133.88	4.42
HYDROGRAPH AT	PM1A	153.	4.17	12.	3.	3.	0.07		
4 COMBINED AT	CD35.9	1241.	4.17	123.	32.	31.	0.56		

*** NORMAL END OF HEC-1 ***

APPENDIX K

HEC-1 Input/Output Data

(SWSM.NEW Model)

```
1****************************************
*                                      *
   FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *
*            SEPTEMBER 1990            *
*             VERSION 4.0              *
*                                      *
*  RUN DATE  TUE. JUL 23 1991          *
*  RUN TIME  10:51:10                  *
*                                      *
****************************************
```

```
****************************************
*                                      *
*   U.S. ARMY CORPS OF ENGINEERS       *
*   HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET            *
*      DAVIS. CALIFORNIA 95616         *
*          (916) 756-1104              *
*                                      *
*                                      *
****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X       XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY.
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID      LAVEEN ADMS                                      CBA FILE#40916-02-30 3
  2           ID      SOUTHWEST SOUTH MOUNTAIM WATERSHED (FINAL HEC-1)  JULY 23, 1991
  3           ID      HEC-1 FILE NAME IS SWSM.NEW
  4           IT      5                   300
  5           IO      5       0
              *DIAGRAM

  6           KK   SWSM1-LAND USE- NATURAL DESERT(MOUNTAIN)
  7           KM   SUB-BASIN SWSM1
  8           KM   6-HOUR RAINFALL. PATTERN NO. 1.89 WAS USED TO FIND TC & R FOR THIS BASIN
  9           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .98
 10           BA   1.990
 11           IN      15
 12           KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 13           PB   3.423
 14           KM   THE FOLLOWING PC RECORD USED A 6-HOUR STROM WITH A PATTERN No. OF 1.80
 15           PC    .000    .009    .016    .025    .034    .042    .051    .059    .067    .076
 16           PC    .087    .100    .120    .160    .248    .443    .709    .845    .903    .939
```

```
17          PC    .951    .964    .976    .988   1.000
18          LG    .150    .345   3.550    .686  60.000
19          UC    .517    .258
20          UA       0       3       5       8      12      20      43      75      90      96
21          UA     100

22          KK   RSWSM1
23          KM   ROUTE FLOW FROM SUB-BASIN SWSM1 TO COMPUTATION POINT SWSM4
24          RS       2    ELEV    1168
25          RC   0.040   0.050   0.040    8600    0.02    1174
26          RX       0      30      40      50      80     100     110     210
27          RY    1174    1172    1170    1168    1168    1170    1172    1174

28          KK   SWSM4
29          KM   SUB-BASIN SWSM4-LAND USE- NATURAL DESERT(HILLSLOPE)
30          KM   6-HOUR RAINFALL. PATTERN NO. 1.89 WAS USED TO FIND TC & R FOR THIS BASIN
31          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .98
32          BA    .340
33          LG    .150    .350   3.750    .293    .300
34          UC    .583    .556
35          UA       0       3       5       8      12      20      43      75      90      96
36          UA     100

37          KK   CSWSM1
38          KM   COMBINE ROUTED FLOW FROM SUB-BASIN SWSM1 AND SWSM4
39          HC       2

40          KK   DSWSM4
41          KM   RUNOFF FROM COMPUTATION POINT CSWSM1 DRAINS OUTSIDE OF THE STUDY AREA
42          KM   HYDROGRAPH IS DIVERTED
43          DT   DIV.4
44          DI       0     100     500    1000    2000    2500    3000    3500
45          DO       0     100     500    1000    2000    2500    3000    3500
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

46          KK   SWSM2
47          KM   SUB-BASIN SWSM2-LAND USE- NATURAL DESERT(HILLSLOPE.MOUNTAIN)
48          KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
49          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
50          BA    .440
51          IN      15
52          KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
53          PB   3.480
54          KM   THE FOLLOWING PC RECORD USED A 6-HOUR STROM WITH A PATTERN No. OF 1.00
55          PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
56          PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
57          PC    .962    .972    .983    .991   1.000
58          LG    .150    .263   3.100    .942  25.000
59          UC    .317    .244
60          UA       0       3       5       8      12      20      43      75      90      96
61          UA     100

62          KK   DSWSM2
63          KM   RUNOFF FROM SUB-BASIN SWSM2 DRAINS OUTSIDE OF THE STUDY AREA.
64          KM   HYDROGRAPH IS DIVERTED
```

```
114     KM   6-HOUR RAINFALL. PATTERN NO. 1.37 WAS USED TO FIND TC & R FOR THIS BASIN
115     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
116     BA    .950
117     IN      15
118     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
119     PB   3.457
120     KM   THE FOLLOWING PC RECORD USED A 6-HOUR STROM WITH A PATTERN No. OF 1.37
121     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .075
122     PC    .087    .099    .119    .147    .229    .405    .782    .883    .919    .946
123     PC    .958    .969    .980    .990   1.000
124     LG    .150    .316   4.950    .564  40.000
125     UC    .417    .314
126     UA       0       3       5       8      12      20      43      75      90      96
127     UA     100

128     KK   DSWSM6
129     KM   RUNOFF FROM SUB-BASIN SWSM6 DRAINS OUTSIDE OF THE STUDY AREA.
130     KM   HYDROGRAPH IS DIVERTED
131     DT   DIV.6
132     DI       0     100     500    1000    1500    2000    2500    3000
133     DO       0     100     500    1000    1500    2000    2500    3000

134     KK   SWSM7
135     KM   SUB-BASIN SWSM7-LAND USE- NATURAL DESERT(HILLSLOPE.MOUNTAIN)
136     KM   6-HOUR RAINFALL, PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
137     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
138     BA    .100
139     IN      15
140     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
141     PB   3.495
142     KM   THE FOLLOWING PC RECORD USED A 6-HOUR STROM WITH A PATTERN No. OF 1.00
143     PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
144     PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
145     PC    .962    .972    .983    .991   1.000
146     LG    .150    .258   7.670    .096  40.000
```



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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

147     UC    .133    .099
148     UA       0       3       5       8      12      20      43      75      90      96
149     UA     100

150     KK   DSWSM7
151     KM   RUNOFF FROM SUB-BASIN SWSM7 DRAINS OUTSIDE OF STUDY AREA.
152     KM   HYDROGRAPH IS DIVERTED
153     DT   DIV.7
154     DI       0      50     100     200     500     700     800    1000
155     DO       0      50     100     200     500     700     800    1000

156     KK   SWSM8
157     KM   SUB-BASIN SWSM8-LAND USE- NATURAL DESERT(MOUNTAIN)
158     KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
159     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
160     BA    .030
161     IN      15
162     KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
163     PB   3.499
```

```
65    DT   DIV.2
66    DI      0     100     200     500    1000    1500    2000    2500
67    DO      0     100     200     500    1000    1500    2000    2500

68    KK   SWSM3
69    KM   SUB-BASIN SWSM3-LAND USE- NATURAL DESERT(HILLSLOPE)
70    KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
71    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
72    BA    .280
73    IN      15
74    KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
75    PB   3.487
76    KM   THE FOLLOWING PC RECORD USED A 6-HOUR STROM WITH A PATTERN No. OF 1.00
77    PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
78    PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
79    PC    .962    .972    .983    .991   1.000
80    LG    .150    .300   3.750    .633    .000
81    UC    .500    .423
82    UA      0       3       5       8      12      20      43      75      90      96
83    UA    100

84    KK   DSWSM3
85    KM   RUNOFF FROM SUB-BASIN SWSM3 DRAINS OUTSIDE OF THE STUDY AREA.
86    KM   HYDROGRAPH IS DIVERTED
87    DT   DIV.3
88    DI      0      50     200     300     400     500     700    1000
89    DO      0      50     200     300     400     500     700    1000

90    KK   SWSM5
91    KM   SUB-BASIN SWSM5-LAND USE- NATURAL DESERT(HILLSLOPE)
92    KM   6-HOUR RAINFALL. PATTERN NO. 1.00 WAS USED TO FIND TC & R FOR THIS BASIN
93    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
94    BA    .090
95    IN      15
```



```
LINE  ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

96    KM   RAINFALL DEPTH OF 3.50 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
97    PB   3.496
98    KM   THE FOLLOWING PC RECORD USED A 6-HOUR STROM WITH A PATTERN No. OF 1.00
99    PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
100   PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
101   PC    .962    .972    .983    .991   1.000
102   LG    .150    .250   8.600    .066    .000
103   UC    .383    .450
104   UA      0       3       5       8      12      20      43      75      90      96
105   UA    100

106   KK   DSWSM5
107   KM   RUNOFF FROM SUB-BASIN SWSM5 DRAINS OUTSIDE OF THE STUTY AREA.
108   KM   HYDROGRAPH IS DIVERTED
109   DT   DIV.5
110   DI      0      10      50      70     100     150     200     300
111   DO      0      10      50      70     100     150     200     300

112   KK   SWSM6
113   KM   SUB-BASIN SWSM6-LAND USE- NATURAL DESERT(HILLSLOPE.MOUNTAI)
```

```
164          KM   THE FOLLOWING PC RECORD USED A 6-HOUR STROM WITH A PATTERN No. OF 1.00
165          PC    .000    .008    .016    .025    .033    .041    .050    .058    .066    .074
166          PC    .087    .099    .118    .138    .216    .377    .834    .911    .931    .950
167          PC    .962    .972    .983    .991   1.000
168          LG    .150    .110   8.600    .066  55.000
169          UC    .117    .133
170          UA       0       3       5       8      12      20      43      75      90      96
171          UA     100

172          KK   DSWSM8
173          KM   RUNOFF FROM SUB-BASIN SWSM8 DRAINS OUTSIDE OF THE STUDY AREA.
174          KM   HYDROGRAPH IS DIVERTED
175          DT   DIV.8
176          DI       0      10      30      50      70      90     150
177          DO       0      10      30      50      70      90     150
178          ZZ
```

```
1
        SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
LINE    (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

 NO.    (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

  6      SWSM1
             V
             V
 22      RSWSM
             .
             .
 28          .       SWSM4
             .           .
             .           .
 37      CSWSM............
             .
             .
 43          .-------->  DIV.4
 40      DSWSM
             .
             .
 46          .       SWSM2
             .           .
             .           .
 65          .           .-------->  DIV.2
 62          .       DSWSM
             .           .
             .           .
 68          .           .       SWSM3
             .           .           .
             .           .           .
 87          .           .           .-------->  DIV.3
 84          .           .       DSWSM
             .           .           .
             .           .           .
 90          .           .           .       SWSM5
             .           .           .           .
             .           .           .           .
109          .           .           .           .-------->  DIV.5
106          .           .           .       DSWSM
```

```
                .         .         .         .
                .         .         .         .
 112            .         .         .         .        SWSM6
                .         .         .         .          .
                .         .         .         .          .
 131            .         .         .         .          .-------> DIV.6
 128            .         .         .         .        DSWSM
                .         .         .         .          .
                .         .         .         .          .
 134            .         .         .         .          .      SWSM7
                .         .         .         .          .        .
                .         .         .         .          .        .
 153            .         .         .         .          .        .-------> DIV.7
 150            .         .         .         .          .      DSWSM
                .         .         .         .          .        .
                .         .         .         .          .        .
 156            .         .         .         .          .        .      SWSM8
                .         .         .         .          .        .        .
                .         .         .         .          .        .        .
 175            .         .         .         .          .        .        .-------> DIV.8
 172            .         .         .         .          .        .      DSWSM
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*            SEPTEMBER 1990             *
*             VERSION 4.0               *
*                                       *
*  RUN DATE  TUE. JUL 23 1991           *
*  RUN TIME  10:51:10                   *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS. CALIFORNIA 95616      *
*         (916) 756-1104            *
*                                   *
*                                   *
*************************************
```

```
                    LAVEEN ADMS                                        CBA FILE#40916-02-30 3
                    SOUTHWEST SOUTH MOUNTAIM WATERSHED (FINAL HEC-1)   JULY 23. 1991
                    HEC-1 FILE NAME IS SWSM.NEW

  5 IO        OUTPUT CONTROL VARIABLES
                    IPRNT          5  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    OSCAL         0.  HYDROGRAPH PLOT SCALE

   IT         HYDROGRAPH TIME DATA
                     NMIN          5  MINUTES IN COMPUTATION INTERVAL
                    IDATE      1   0  STARTING DATE
                    ITIME       0000  STARTING TIME
                       NO        300  NUMBER OF HYDROGRAPH ORDINATES
                   NDDATE      2   0  ENDING DATE
                   NDTIME       0055  ENDING TIME
                    ICENT         19  CENTURY MARK

              COMPUTATION INTERVAL    0.08 HOURS
                   TOTAL TIME BASE   24.92 HOURS
```

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SWSM1	2846.	4.33	519.	131.	126.	1.99		
ROUTED TO	RSWSM	2595.	4.50	515.	131.	126.	1.99		
								1172.41	4.50
HYDROGRAPH AT	SWSM4	315.	4.42	58.	15.	14.	0.34		
2 COMBINED AT	CSWSM	2908.	4.50	573.	145.	140.	2.33		
DIVERSION TO	DIV.4	2908.	0.08	573.	145.	140.	2.33		
HYDROGRAPH AT	DSWSM	0.	0.08	0.	0.	0.	2.33		
HYDROGRAPH AT	SWSM2	866.	4.17	86.	22.	21.	0.44		
DIVERSION TO	DIV.2	866.	0.08	86.	22.	21.	0.44		
HYDROGRAPH AT	DSWSM	0.	0.08	0.	0.	0.	0.44		
HYDROGRAPH AT	SWSM3	370.	4.33	44.	11.	11.	0.28		
DIVERSION TO	DIV.3	370.	0.08	44.	11.	11.	0.28		
HYDROGRAPH AT	DSWSM	0.	0.08	0.	0.	0.	0.28		
HYDROGRAPH AT	SWSM5	163.	4.25	23.	6.	5.	0.09		

	DIVERSION TO						
+		DIV.5	163.	0.08	23.	6.	5.	0.09
	HYDROGRAPH AT						
+		OSWSM	0.	0.08	0.	0.	0.	0.09
	HYDROGRAPH AT						
+		SWSM6	1532.	4.25	215.	54.	52.	0.95
	DIVERSION TO						
+		DIV.6	1532.	0.08	215.	54.	52.	0.95
	HYDROGRAPH AT						
+		OSWSM	0.	0.08	0.	0.	0.	0.95
	HYDROGRAPH AT						
+		SWSM7	342.	4.00	30.	7.	7.	0.10
	DIVERSION TO						
+		DIV.7	342.	0.08	30.	7.	7.	0.10
	HYDROGRAPH AT						
+		OSWSM	0.	0.08	0.	0.	0.	0.10
	HYDROGRAPH AT						
+		SWSM8	101.	4.00	10.	2.	2.	0.03
	DIVERSION TO						
		DIV.8	101.	0.08	10.	2.	2.	0.03
	HYDROGRAPH AT						
+		OSWSM	0.	0.08	0.	0.	0.	0.03

*** NORMAL END OF HEC-1 ***

APPENDIX L

HEC-1 Input/Output Data
(Champion 24)

```
*                                        *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *
*            SEPTEMBER 1990              *
*             VERSION 4.0                *
*                                        *
*  RUN DATE  WED. OCT 02 1991            *
*  RUN TIME  13:45:19                    *
*                                        *
******************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X       X    X        XX
X     X  X       X              X
XXXXXXX  XXXX    X       XXXXX  X
X     X  X       X              X
X     X  X       X    X         X
X     X  XXXXXXX   XXXXX        XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73).

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USEI
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION,
OSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AM
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.....

  1           ID    LAVEEN ADMS (FINAL HEC-1) 100-YR 24-HR STORM          CBA
  2           ID    HIDDEN VALLEY WATERSHED/CHAMPION DRAIN WATERSHED
  3           ID    INPUT FILE NAME  CHAMPION24                         DATE
  4           ID    24-HOUR SCS TYPE II RAINFALL
              *DIAGRAM
  5           IT       5                    300
  6           IO       5       0

  7           KK   WC16B
  8           KM   SUB-BASIN WC16B -LAND USE - NATURAL DESERT HILLSLOPES.MINC
  9           KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
 10           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
 11           BA    .023
 12           IN      30
 13           KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN ON T-
```

```
 19          PC    .854    .868    .880    .891    .902    .912    .921
 20          PC    .952    .959    .965    .972    .978    .984    .989
 21          LG    .150    .255   7.200    .123    .000
 22          UC    .233    .266
 23          UA       0       3       5       8      12      20      43
 24          UA     100

 25          KK   RRHV1
 26          KM   ROUTE FLOW FROM SUB-BASIN WC16B TO COMPUTATION POINT CPHV
 27          RS       1    ELEV    1141
 28          RC   0.035   0.040   0.035     540   0.011    1146
 29          RX       0      25      80     120     140     170     240
 30          RY    1146    1144    1142    1141    1141    1142    1144

 31          KK   WC17B
 32          KM   SUB-BASIN WC17B -LAND USE - DESERT MOUNTAIN.DESERT HILLS:M
 33          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
 34          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
 35          BA    .035
 36          LG    .150    .276   4.050    .361   5.000
 37          UC    .267    .424
 38          UA       0       3       5       8      12      20      43
 39          UA     100

 40          KK   RRHV2
 41          KM   ROUTE FLOW FROM SUB-BASIN WC17B TP COMPUTATION POINT CPHV
 42          RS       1    ELEV    1140
 43          RC   0.035   0.040   0.035     230   0.030    1142
 44          RX       0      40      80      90     100     110     150
 45          RY    1143    1142    1140    1140    1140    1140    1141
                                           HEC-1 INPUT

LINE         ID.......1.......2.......3.......4.......5.......6.......7.....


 46          KK   CPHV1
 47          KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC16B AND WC17B
 48          HC       2

 49          KK   RRHV3
 50          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV1 TO COMPUTATION PO
 51          RS       1    ELEV    1137
 52          RC   0.035   0.040   0.035     400   0.010    1140
 53          RX       0      30      40      60      70     110     150
 54          RY    1141    1140    1138    1137    1137    1138    1139

 55          KK   RRHV4
 56          KM   ROUTE FLOW FROM COMPUTATION POINT CPHV1 TO COMPUTATION PO
 57          RS       1    ELEV    1141
 58          RC   0.035   0.040   0.035     400   0.010    1146
 59          RX       0      50     100     130     150     170     220
 60          RY    1146    1144    1142    1141    1141    1142    1144
```

```
 66          LG    .150    .265   4.100    .236    .000
 67          UC    .300    .338
 68          UA       0       3       5       8      12      20      43
 69          UA     100

 70          KK   RRHV5
 71          KM   ROUTE FLOW FROM SUB-BASIN WC18B TO COMPUTATION POINT CPHV:
 72          RS       1    ELEV    1136
 73          RC   0.035   0.040   0.035     650   0.017    1140
 74          RX       0      60     120     140     160     190     220
 75          RY    1140    1139    1138    1136    1136    1138    1139

 76          KK   WC19B
 77          KM   SUB-BASIN WC19B -LAND USE - DESERT MOUNTAIN.DESERT HILLS;
 78          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
 79          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
 80          BA    .210
 81          LG    .150    .276   3.520    .265  40.000
 82          UC    .217    .162
 83          UA       0       3       5       8      12      20      43
 84          UA     100

 85          KK   RRHV6
 86          KM   ROUTE FLOW FROM SUB-BASIN WC19B TO COMPUTATION POINT CPHV2
 87          RS       1    ELEV    1137
 88          RC   0.035   0.040   0.035     640   0.018    1139
 89          RX       0      10      30      45      60      75     110
 90          RY    1139  1138.5    1138    1137    1137    1138    1139
                                          HEC-1 INPUT

LINE         ID.......1.......2.......3.......4.......5.......6.......7.....

 91          KK    PM3B
 92          KM   SUB-BASIN PM3B -LAND USE - NATURAL DESERT HILLSLOPES.MINOR
 93          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
 94          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
 95          BA    .060
 96          LG    .150    .345   3.100    .946   5.000
 97          UC    .283    .273
 98          UA       0       3       5       8      12      20      43
 99          UA     100

100          KK   CPHV2
101          KM   COMBINE ROUTED FLOW FROM CPHV1. WC18B. WC19B WITH RUNOFF
102          HC       4

103          KK   RRHV7
104          KM   ROUTE FLOW FROM COMPUTATION CPHV2 TO COMPUTATION POINT CP
105          RS       1    ELEV.   1126
106          RC   0.035   0.040   0.035     750   0.011    1130
107          RX       0      40      90     160     190     210     250
108          RY    1130    1129    1128    1126    1126    1128    1132
```

```
113          BA    .014
114          LG    .150    .250   8.600    .066    .000
115          UC    .233    .259
116          UA       0       3       5       8      12      20      43
117          UA     100

118          KK   RRHV8
119          KM   ROUTE FLOW FROM SUB-BASIN WC20B TO COMPUTATION POINT CPHV:
120          RS       1    ELEV    1132
121          RC   0.035   0.035   0.035     850   0.022  1134.5
122          RX       0      10      20      30      40      60     170
123          RY  1134.5    1134    1133    1132    1132    1134    1134  11:

124          KK   CPHV3
125          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC20B AND  COMPUTATION
126          HC       2

127          KK   RRHV9
128          KM   ROUTE FLOW FROM COMPUTATION CPHV3 TO COMPUTATION POINT CP:
129          RS       1    ELEV    1121
130          RC   0.035   0.040   0.035     780   0.008    1126
131          RX       0     100     130     150     165     180     290
132          RY    1126    1124    1122    1121    1121    1122    1124     :
1                                          HEC-1 INPUT

LINE         ID.......1.......2.......3.......4.......5.......6.......7.....

133          KK   WC21B
134          KM   SUB-BASIN WC21B -LAND USE - NATURAL DESERT HILLSLOPES.MINC
135          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
136          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
137          BA    .024
138          LG    .150    .265   4.100    .236    .000
139          UC    .283    .382
140          UA       0       3       5       8      12      20      43
141          UA     100

142          KK  RRHV10
143          KM   ROUTE FLOW FROM SUB-BASIN WC21B TO COMPUTATION POINT CPHV4
144          RS       2    ELEV    1129
145          RC   0.035   0.035   0.035    1110   0.022    1130
146          RX       0      25      50      75     100     125     175
147          RY    1130 1129.75  1129.5    1129    1129  1129.5 1129.75

148          KK    PM4B
149          KM   SUB-BASIN PM4B -LAND USE - NATURAL DESERT HILLSLOPES.MINO:
150          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
151          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
152          BA    .140
153          LG    .150    .327   3.450    .764  15.000
154          UC    .283    .188
155          UA       0       3       5       8      12      20      43
156          UA     100
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160          KK  RRHV11
161          KM   ROUTE FLOW FROM COMPUTATION CPHV4 TO COMPUTATION POINT CP
162          RS       1    ELEV    1116
163          RC   0.035   0.040   0.035     340   0.006    1121
164          RX       0     100     150     170     190     220     280
165          RY    1121    1120    1118    1116    1116    1118    1120

166          KK   WC22B
167          KM   SUB-BASIN WC22B -LAND USE - NATURAL DESERT HILLSLOPES.MIN
168          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
169          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
170          BA    .007
171          LG    .150    .260   5.800    .179    .000
172          UC    .217    .304
173          UA       0       3       5       8      12      20      43
174          UA     100

175          KK  RRHV12
176          KM   ROUTE FLOW FROM SUB-BASIN WC22B TO COMPUTATION POINT CPHV
177          RS       3    ELEV  1123.5
178          RC   0.035   0.040   0.035    1020   0.023  1124.5
179          RX       0      30      70      90     100     120     135
180          RY  1124.5    1124  1123.5  1123.5  1123.5  1123.5    1124  11
1                                                HEC-1 INPUT

LINE         ID.......1.......2.......3.......4.......5.......6.......7....


181          KK   CPHV5
182          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC22B AND  COMPUTATIO
183          HC       2

184          KK  RRHV13
185          KM   ROUTE FLOW FROM COMPUTATION CPHV5 TO COMPUTATION POINT CP
186          RS       1    ELEV    1114
187          RC   0.035   0.040   0.035     430   0.005    1116
188          RX       0      70     130     160     180     220     340
189          RY    1117    1116    1116    1114    1114    1115    1115

190          KK   WC23B
191          KM   SUB-BASIN WC23B -LAND USE - DESERT MOUNTAIN.DESERT HILLS:
192          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
193          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
194          BA    .400
195          LG    .150    .300   4.120    .253  60.000
196          UC    .300    .247
197          UA       0       3       5       8      12      20      43
198          UA     100

199          KK  RRHV14
200          KM   ROUTE FLOW FROM SUB-BASIN WC23B AND TO COMPUTATION POINT
201          RS       1    ELEV    1120
202          RC   0.035   0.035   0.035    1020   0.027  1123.5
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206          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC23B AND  COMPUTATION
207          HC       2

208          KK  RRHV15
209          KM   ROUTE FLOW FROM COMPUTATION CPHV6 TO COMPUTATION POINT CPH
210          RS       2    ELEV    1105
211          RC   0.035   0.040   0.035    1980   0.008    1110
212          RX       0     170     430     470     490     530     580
213          RY    1110    1106    1106    1105    1105    1106    1108

214          KK    PM5B
215          KM   SUB-BASIN PM5B -LAND USE - NATURAL DESERT HILLSLOPES,MINOR
216          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
217          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
218          BA    .130
219          LG    .150    .310   4.200    .518  15.000
220          UC    .433    .307
221          UA       0       3       5       8      12      20      43
222          UA     100
1                                          HEC-1 INPUT

LINE         ID.......1.......2.......3.......4.......5.......6.......7.....

223          KK   CPHV7
224          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN PM5B AND  COMPUTATION
225          HC       2

226          KK  RRHV16
227          KM   ROUTE FLOW FROM COMPUTATION CPHV7 TO COMPUTATION POINT CPH
228          RS       1    ELEV    1097
229          RC   0.065   0.065   0.065     400   0.008    1100
230          RX       0     210     315     430     540     640     800
231          RY    1100    1098    1098    1097    1097    1098    1099

232          KK  A43A2B
233          KM   SUB-BASIN A43A2B -LAND USE - DESERT MOUNTAIN,DESERT HILLS:
234          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
235          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
236          BA    .090
237          LG    .150    .279   6.300    .174  30.000
238          UC    .317    .274
239          UA       0       3       5       8      12      20      43
240          UA     100

241          KK  RRHV17
242          KM   ROUTE FLOW FROM SUB-BASIN A43A2B TO COMPUTATION POINT CPH
243          RS       1    ELEV    1099
244          RC   0.065   0.065   0.065     440   0.015    1100
245          RX       0     105     135     165     190     210     260
246          RY    1100    1099    1099    1099    1099    1099    1099

247          KK   CPHV8
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252          RS       3    ELEV    1086
253          RC   0.065   0.065   0.065    2200   0.008    1088
254          RX       0      80     200     300     360     440     550
255          RY    1088    1086    1086    1086    1086    1086    1086

256          KK  NWSM1B
257          KM   SUB-BASIN NWSM1B -LAND USE - DESERT MOUNTAIN:UNDEVELOPED
258          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
259          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
260          BA    .130
261          LG    .150    .345   2.500   1.143  60.000
262          UC    .267    .226
263          UA       0       3       5       8      12      20      43
264          UA     100
                                          HEC-1 INPUT

LINE         ID.......1.......2.......3.......4.......5.......6.......7.....

265          KK  RR43B1
266          KM   ROUTE FLOW FROM SUB-BASIN NWSM1B TO COMPUTATION POINT CPH
267          RS       1    ELEV    1168
268          RC   0.035   0.040   0.035    1850    0.47    1172
269          RX       0      40     100     120     135     150     190
270          RY    1172  1171.5    1170    1168    1168    1170  1171.5

271          KK  RR43B2
272          KM   ROUTE FLOW FROM SUB-BASIN NWSM1B TO COMPUTATION POINT CPH
273          RS       2    ELEV    1118
274          RC   0.035   0.040   0.035    1000   0.034    1120
275          RX       0      50     110     410     580     850     970
276          RY    1120    1119    1119    1118    1118    1118    1119

277          KK  A43A1B
278          KM   SUB-BASIN A43A1B -LAND USE - DESERT MOUNTAINS.DESERT HILLS
279          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
280          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
281          BA    .170
282          LG    .150    .285   4.100    .463  15.000
283          UC    .283    .151
284          UA       0       3       5       8      12      20      43
285          UA     100

286          KK   CPHV9
287          KM   COMBINE ROUTED FLOW FROM SUB-BASIN NWSM1B WITH RUNOFF FRO
288          HC       2

289          KK  RRHV19
290          KM   ROUTE FLOW FROM COMPUTATION CPHV9 TO COMPUTATION POINT CP
291          RS       5    ELEV    1091
292          RC   0.065   0.065   0.065    1700   0.014    1092
293          RX       0      60     450     530     610     690     830
294          RY    1092    1091    1091    1091    1091    1091    1091
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298          KK  RRHV20
299          KM     ROUTE FLOW FROM COMPUTATION CPHV10 TO COMPUTATION POIN
300          RS      2    ELEV  1074.5
301          RC  0.065   0.065   0.065   1100  0.0085    1078
302          RX      0      90     480     510     520     530     870
303          RY   1078    1076  1074.5  1074.5  1074.5  1074.5    1076

304          KK  ED47B
305          KM  SUB-BASIN ED47B -LAND USE - AGRICULTURE.DESERT MOUNTAIN,DE
306          KM  DEVELOPMENT
307          KM  24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
308          KM  THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
309          BA   .810
310          LG   .330    .094   4.100    .629  10.000
311          UC   .283    .114
                                        HEC-1 INPUT

LINE         ID.......1.......2.......3.......4.......5.......6.......7....

312          UA      0       3       5       8      12      20      43
313          UA    100

314          KK  CPHV11
315          KM  COMBINE ROUTED FLOWS FROM COMPUTATION POINT CPHV10 TO RUNC
316          KM  ED47B
317          HC      2

318          KK  DFED47
319          KM  RATE CHANNEL CROSSECTION AT COMPUTATION POINT ED47B FOR SP
320          KM  DIVERTED FLOW IS ROUTED THROUGH SUB BASIN IR55B
321          DT  DIR55B
322          DI      0     139     558    1324    2507
323          DO      0      20     126     372     801

324          KK  RRHV21
325          KM  ROUTE FLOW FROM COMPUTATION POINT CPHV11 TO COMPUTATION PC
326          KM  (1ST REACH)
327          RS      5    ELEV  1059.5
328          RC  0.015   0.065   0.065    2660   0.006  1060.7
329          RX      0      30      60     150     180     600     660
330          RY 1060.7  1060.0    1060    1060  1059.5  1059.5    1060  109

331          KK  RRHV22
332          KM  ROUTE FLOW FROM COMPUTATION POINT CPHV11 TO COMPUTATION PC
333          KM   (2ND REACH)
334          RS      7    ELEV  1039.5
335          RC    .07     .07     .07    2724   0.007  1040.1
336          RX      0     230     700     701    1260    1261    1480
337          RY 1040.1    1039  1039.5  1039.5  1039.5  1039.5    1040  10

338          KK  IR59B
339          KM  SUB-BASIN IR59B -LAND USE - AGRICULTURE: MINOR DEVELOPMENT
340          KM  24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
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344          UC    .883    .610
345          UA       0     1.6       5    10.6    19.5      32      44      56      70      82
346          UA     100

347          KK  CPHV12
348          KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPHV11 TO RUNOFF FROM SUB-BASIN
349          KM    IR59B
350          HC       2

351          KK  DIHV12
352          KM    THE WESTERN EDGE OF SUB-BASIN IR59B WHICH IS ALSO THE WESTERN EDGE OF THE
353          KM    STUDY AREA IS BOUNDED  BY A CONCRETE IRRIGATION CANAL AND EARTHEN ROADWAY
354          KM    THE EARTHEN ROADWAY HAS A CAPACITY TO CONVEY  APPROXIMATELY 65 CFS TO THE
355          KM    NORTH WEST BEFORE THE CONCRETE IRRIGATION CANAL IS OVERTOPPED AND FLOW
356          KM    CONTINUES TO DRAIN TO THE WEST. THEREFORE APPROXIMATELY 65 CFS WILL
357          KM    CONCENTRATE AT COMPUTATION POINT CPHV12. AT COMPUTATION POINT CPHV12
358          KM    A DIP SECTION IN THE EARTHEN ROADWAY WILL DRAIN APPROXIMATELY 684 CFS
359          KM    TO THE WEST. ALL OF THE FLOW CONCENTRATED AT COMPUTATION CPHV12 PASSES
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

360          KM    OUT OF THE STUDY AREA.
361          DT  RCHV12
362          DI       0     100     200     400     600     800     900    1000    1200    1400
363          DO       0     100     200     400     600     800     900    1000    1200    1400

364          KK  REED47
365          KM   RETRIVE DIVERTED FLOW FROM COMPUTATION POINT CPHV11
366          DR  DIR55B

367          KK  RRHV23
368          KM   ROUTE DIVERTED FLOW FROM COMPUTATION POINT CPHV11 THROUGH SUB-BASIN IR55B
369          RS      19    ELEV    1061
370          RC    0.07    0.07    0.07    4800   0.006
371          RX       0     240     470     620     830    1200    1520    1740
372          RY    1062    1061    1061    1061    1061    1061    1061    1062

373          KK   IR55B
374          KM   SUB-BASIN IR55B -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
375          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
376          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
377          BA    .530
378          LG    .480    .079   3.650    .502   5.000
379          UC    .850    .554
380          UA       0       3       5       8      12      20      43      75      90      96
381          UA     100

382          KK  CIR55B
383          KM    COMBINE ROUTED DIVERTED FLOW FROM COMPUTATION POINT CPHV11 WITH RUNOFF FROM
384          KM    SUB-BASIN IR55B
385          HC       2

386          KK  DIR55B
387          KM    THE WESTERN EDGE OF SUB-BASIN IR55B WHICH IS ALSO THE WESTERN EDGE OF THE
388          KM    STUDY AREA IS BOUNDED BY AN EARTHEN IRRIGATION CANAL. MINOR CONTAINMENT OF
389          KM    RUNOFF AND ROUTED FLOW WILL BE REALIZED. THEREFORE TOTAL FLOW AT COMPUTATION
390          KM    POINT CIR55B IS DIVERTED BECAUSE FLOW FROM THIS POINT DOES NOT CONTRIBUTE
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391          KM    TO RUNOFF COMPUTATIONS DOWNSTREAM.
392          DT  RCIREB
393          DI       0     100     200     400     600     800
394          DO       0     100     200     400     600     800

395          KK   IR62B
396          KM   SUB-BASIN  IR62B -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
397          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
398          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
399          BA    .550
400          LG    .500    .000   5.000    .371    .000
401          UC    .850    .594
402          UA       0       3       9      18      28      42      59      73      87      92
403          UA     100
1                                        HEC-1 INPUT                                          PAGE 10

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


404          KK   DR43C
405          KM   SUB-BASIN DR43C -LAND USE- AGRICULTURE. DESERT HILLS; MINOR DEVELOPMENT
406          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
407          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
408          BA    .940
409          IN      30
410          KM   RAINFALL DEPTH OF 4.2 WAS SPACIALLY REDUCED AS SHOWN ON THE PB RECORD
411          PB   3.780
412          KM   THE FOLLOWING PC RECORDS REPRESENTS A 24-HR SCS TYPE II STORM
413          PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
414          PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
415          PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
416          PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
417          PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
418          LG    .360    .053   4.450    .391  20.000
419          UC    .617    .325
420          UA       0       3       5       8      12      20      43      75      90      96
421          UA     100

422          KK  DDR43C
423          KM   SPLIT FLOW.RESULTANT HYDROGRAPH IS THE ESTIMATED FLOW THAT DRAINS THE TO WEST
424          KM   OF THE SOUTHWEST CORNER OF 43RD AVENUE AND DOBBINS ROAD
425          DT  RDR43C
426          DI       0      50     100     119     300     500     600     800     900
427          DO       0      50     100     119     181     381     481     681     781

428          KK  ROA51B
429          KM   ROUTE SPLIT FLOW FROM SUB-BASIN DR43B TO COMPUTATION POINT COA51B (1ST REACH)
430          RS      10    ELEV    1041
431          RC    0.07    0.07    0.07    2790  0.0042
432          RX       0     300     440     480     560     590     615     640
433          RY    1042    1041    1041    1041    1041    1041    1041    1042

434          KK  ROA51B
435          KM   ROUTE SPLIT FLOW FROM SUB-BASIN DR43B TO COMPUTATION POINT COA51B (2ND REACH)
436          RS      24    ELEV    1037
437          RC   0.065   0.065   0.065    3600  0.0017
438          RX       0      90     320     490     690    1060    1950    1960
439          RY    1038  1037.8  1037.4    1037    1037  1037.1  1037.8    1038
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440          KK   OA51B
441          KM   SUB-BASIN  OA51B-LAND USE - AGRICULTURE. RURAL DEVELOPMEN
442          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
443          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
444          BA   1.370
445          IN      30
446          KM   RAINFALL DEPTH OF 4.2 WAS SPACIALLY REDUCED AS SHOWN ON T
447          PB   4.074
448          PC    .000    .005    .011    .016    .022    .028    .035
449          PC    .068    .071    .080    .089    .098    .109    .120
450          PC    .181    .204    .235    .283    .663    .735    .772
451          PC    .854    .868    .880    .891    .902    .912    .921
452          PC    .952    .959    .965    .972    .978    .984    .989
453          LG    .360    .098   5.300    .312    10.0
                                            HEC-1 INPUT

LINE         ID.......1.......2.......3.......4.......5.......6.......7....

454          UC   0.883    .320
455          UA       0       3       9      18      28      42      59
456          UA     100

457          KK  COA51B
458          KM    COMBINE ROUTED SPLIT FLOW FROM SUB-BASIN DR43C TO RUNOFF
459          KM    OA51B
460          HC       2

461          KK  DFO51B
462          KM    RATE CHANNEL CROSS-SECTION AT CONCENTRATION POINT OA51B F
463          KM    DIVERTED FLOW IS ROUTED THROUGH CHAMPION DRAIN WATERSHED
464          DT  DOA55C
465          DI       0       8      24      93     219     461     852
466          DO       0       4      11      43     102     262     479

467          KK   RE55B
468          KM    ROUTE SPLIT FLOW FROM SUB-BASIN OA51B TO COMPUTATION POI
469          RS      18    ELEV  1028.8
470          RC    0.07    0.07    0.07    3840  0.0013
471          RX       0      30     370     530     680     860    1120
472          RY    1032    1030  1029.7  1029.4  1029.2    1029  1028.8

473          KK   ER55B
474          KM   SUB-BASIN ER55B-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
475          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
476          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
477          BA    .250
478          LG    .500    .000   7.800    .150    .000
479          UC    .983    .669
480          UA       0       3       9      18      28      42      59
481          UA     100

482          KK  CER55B
483          KM   COMBINE ROUTED DIVERTED FLOW FROM SUB-BASIN OA51B TO RUNO
484          KM   ER55B
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RS       1    ELEV    1024
RC    0.07    0.07    0.07    2600   0.002
RX       0      30      50      90     180     270     360
RY  1026.5    1024    1024    1024    1025  1025.3  1025.5  10:

KK   ER59B
KM   SUB-BASIN ER59B-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
BA    .280
LG    .500    .000   3.790    .454    .000
UC    .933    .586
UA       0       3       9      18      28      42      59
UA     100
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HEC-1 INPUT

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LINE          ID.......1.......2.......3.......4.......5.......6.......7....

KK  CER59B
KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CRE55B TO RUNOr
KM   ER59B
HC       2

KK  RIR63B
KM   ROUTE FLOW FROM COMPUTATION POINT CER59B TO COMPUTATION PC
KM   END POINTS OF CROSSECTION WERE ADJUSTED SO THAT FLOW WOUL:
KM   WITHIN THE GIVEN ROUTING REACH
RS       7    ELEV    1019
RC    0.07    0.07    0.07    3100   0.002
RX       0      40      80     120     160     210     290
RY  1022.7    1020  1019.7  1019.7    1020  1020.2  1020.9  10:

KK   IR63B
KM   SUB-BASIN IR63B-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .97
BA    .130
LG    .500    .000   3.500    .470    .000
UC    .767    .647
UA       0       3       9      18      28      42      59
UA     100

KK  CIR63B
KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CER59B AND RUN
KM    IR63B AND IR62B
HC       3

KK  DIR63B
KM    COMPUTATION POINT CIR63B IS LOCATED ON THE WESTERN EDGE :
KM    WHICH IS BOUNDED BY A CONCRETE IRRIGATION CANAL AND EART
KM    EARTHEN ROADWAY HAS A CAPACITY OF APPROXIMATELY 45 CFS B:
KM    IRRIGATION  CANAL IS OVERTOPPED AND FLOW CONTINUES ITS N:
KM    PATH TO THE WEST. THE DIVERTED FLOW OF APPROXIMATELY 45 C
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535          DO      0     45     45     45     45     45     45

536          KK  CDIVER
537          KM   COMBINE HYDROGRAPHS THAT LEAVE THE STUDY TO CLEAN UP HYDROGAPH STACK IN
538          KM   THE HEC1 MODEL
539          HC      3

540          KK   SA19C
541          KM   !!!!!!! START CHAMPION DRAIN WATERSHED  !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
542          KM   SUB-BASIN SA19C-LAND USE- URBAN.AGRICULTURE
543          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
544          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
545          BA    .480
546          IN      30
547          KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
548          PB   3.780
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

549          KM   THE FOLLOWING PC RECORD USED A 24-HOUR SCS TYPE II STORM
550          PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
551          PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
552          PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
553          PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
554          PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
555          LG    .400    .093   3.750    .484   5.800
556          UC    .700    .599
557          UA       0       3       9      18      28      42      59      73      87      92
558          UA     100

559          KK  DSA19C
560          KM   DIVERT CAPACITY OF STORMDRAIN AT CONCENTRARION POINT
561          DT   SA19C
562          DI      10      30      70     100     200     300
563          DO      10      30      70      70      70      70

564          KK  RR23C1
565          KM   ROUTE FLOW FROM SUB-BASIN SA19C TO COMPUTATION POINT CPC23C ( 1ST REACH )
566          RS       4    ELEV  1075.8
567          RC   0.035   0.035   0.035    1200  0.0083    1076
568          RX       0      50     120     220    1020    1080    1180    1250
569          RY    1076  1075.8  1075.8  1075.8  1075.8  1075.8  1075.8    1076

570          KK  RR23C2
571          KM   ROUTE FLOW FROM SUB-BASIN SA19C TO COMPUTATION POINT CPC23C ( 2ND REACH )
572          RS       8    ELEV  1063.5
573          RC   0.100   0.100   0.100    1600  0.0088    1066
574          RX       0     150     560     820    1230    1470    1700    1870
575          RY    1066    1064    1064  1063.6  1063.5    1064    1064    1066

576          KK  RR23C3
577          KM   ROUTE FLOW FROM SUB-BASIN SA19C TO COMPUTATION POINT CPC23C ( 3RD REACH )
578          RS      10    ELEV  1052.8
579          RC   0.070   0.070   0.070    1900  0.0053    1056
580          RX       0      40     110     590    1210    1490    1770    2040
581          RY    1058    1054    1054  1052.8  1052.8    1054  1054.8    1056
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582        KK   CR23C
583        KM   SUB-BASIN CR23C-LAND USE- URBAN,AGRICULTURE
584        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
585        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
586        BA    .580
587        LG    .320    .114   5.550    .234   3.300
588        UC    .433    .214
589        UA       0       3       9      18      28      42      59      73      87      92
590        UA     100

591        KK  CPC23C
592        KM    COMBINE ROUTED FLOW FROM SUB-BASIN SA19C TO RUNOFF FROM SUB-BASIN CR23C
593        HC       2
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

594        KK   RF27C
595        KM   ROUTE FLOW FROM COMPUTATION POINT CPC23C TO COMPUTATION POINT CPR27C
596        RS      11    ELEV    1047
597        RC   0.070   0.070   0.070    3000  0.0020    1049
598        RX       0     200     460     680     880     985    1220    2110
599        RY    1049  1048.2    1048    1047    1047    1048    1048    1049

600        KK   RR27C
601        KM   SUB-BASIN RR27C-LAND USE- URBAN.AGRICULTURE
602        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
603        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
604        BA    .480
605        LG    .460    .036   3.780    .432    .000
606        UC    .633    .314
607        UA       0       3       9      18      28      42      59      73      87      92
608        UA     100

609        KK  CPR27C
610        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPC23C WITH RUNOFF FROM SUB-
611        KM   BASIN RR27C
612        HC       2

613        KK  RR35C1
614        KM   ROUTE FLOW FROM COMPUTATION POINT CPR27C TO COMPUTATION POINT CPR35C
615        RS      18    ELEV    1137
616        RC   0.070   0.070   0.070    5320  0.0030    1140
617        RX       0     270     540     630     790     870    1260    1300
618        RY    1140    1138    1137    1137    1137    1137    1138    1140

619        KK   BR19C
620        KM   SUB-BASIN BR19C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
621        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
622        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
623        BA    .390
624        LG    .430    .027   4.050    .619   3.300
625        UC    .517    .319
626        UA       0       3       9      18      28      42      59      73      87      92
627        UA     100

628        KK  RRS27C
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629          KM   ROUTE FLOW FROM SUB-BASIN BR19C TO COMPUTATION POINT CPS27C
630          RS      33    ELEV    1085
631          RC   0.070   0.070   0.070    7400  0.0077    1086
632          RX       0     730    1080    1340    1710    2380    2850    3350
633          RY    1086  1085.9  1085.7  1085.5    1085  1085.6  1085.6    1086

634          KK   SA27C
635          KM   SUB-BASIN SA27C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
636          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
637          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
638          BA    .623
639          LG    .500    .000   3.520    .476    .000
640          UC    .683    .444
641          UA       0       3       9      18      28      42      59      73      87      92
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

642          UA     100

643          KK  CPS27C
644          KM    COMBINE ROUTED FLOW FROM SUB-BASIN BR19C TO RUNOFF FROM SUB-BASIN SA27C
645          HC       2

646          KK  RR35C3
647          KM   ROUTE FLOW FROM COMPUTATION POINT CPS27C TO COMPUTATION POINT CPR35C
648          RS       8    ELEV  1040.8
649          RC   0.070   0.070   0.070    3400  0.0072    1042
650          RX       0     200     420     520     630     750    1120    1360
651          RY    1042  1041.5    1041  1040.8  1040.9    1041  1041.5    1042

652          KK  CPR35C
653          KM   COMBINE ROUTED FLOW FROM  COMPUTATION POINTS CPR27C AND CPS27C
654          HC       2

655          KK    SM5C
656          KM   SUB-BASIN SM5C-LAND USE-URBAN
657          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
658          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
659          BA    .200
660          LG    .200    .349   4.300    .555  18.000
661          UC    .383    .355
662          UA       0       5      15      30      65      77      84      90      94      97
663          UA     100

664          KK    RSM7
665          KM   ROUTE FLOW FROM SUB-BASIN SM5C TO COMPUTATION POINT CPS15C
666          RS      10    ELEV    1178
667          RC   0.070   0.070   0.070    4000  0.0145
668          RX       0     110     180     270     330     420     510     600
669          RY    1180    1179  1178.5    1178    1178  1178.5    1179    1180

670          KK  SMA15C
671          KM   SUB-BASIN SMA15C-LAND USE- URBAN.AGRICULTURE
672          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
673          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
674          BA    .360
675          LG    .400    .045   3.700    .547    .000
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676          UC    .417    .292
677          UA       0       3       9      18      28      42      59      73      87      92
678          UA     100

679          KK  CPS15C
680          KM   COMBINE ROUTED FLOW FROM SUB-BASIN SM5C WITH RUNOFF FROM SUB-BASIN SMA15C
681          HC       2

682          KK  RSM19C
683          KM   ROUTE FLOW FROM SUB-BASIN SA15C TO COMPUTATION POINT CPS19C
684          RS       4    ELEV  1139.2
685          RC   0.070   0.070   0.070    2030    0.01    1140
686          RX       0      50     110     160     210     260     350     430
687          RY    1140  1139.5  1139.2  1139.2  1139.2  1139.2  1139.5    1140
1                                          HEC-1 INPUT                                          PAGE 16

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


688          KK  SMA19C
689          KM   SUB-BASIN SMA19C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
690          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
691          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
692          BA    .156
693          LG    .500    .000   4.200    .777    .000
694          UC    .833   1.212
695          UA       0       3       9      18      28      42      59      73      87      92
696          UA     100

697          KK  CPS19C
698          KM   COMBINE ROUTED FLOW FROM SUB-BASIN SMA15C TO RUNOFF FROM SUB-BASIN SMA19C
699          HC       2

700          KK  RRB27C
701          KM   ROUTE FLOW FROM COMPUTATION POINT CPS19C TO COMPUTATION POINT CPB27C
702          RS      22    ELEV  1107.8
703          RC   0.070   0.070   0.070    7400  0.0090    1110
704          RX       0     260     550     770     920    1170    1320    1500
705          RY    1110    1109    1109    1108    1108  1107.8    1108    1110

706          KK    SM1C
707          KM   SUB-BASIN SM1C-LAND USE- NATURAL DESERT(MOUNTAIN)
708          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
709          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
710          BA   1.840
711          LG    .150    .346   3.800    .623  50.000
712          UC    .450    .220
713          UA       0       3       5       8      12      20      43      75      90      96
714          UA     100

715          KK   SM1AC
716          KM   SUB-BASIN SM1AC-LAND USE- NATURAL DESERT(MOUNTAIN)
717          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
718          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
719          BA    .280
720          LG    .150    .343   4.050    .528  10.000
721          UC    .367    .288
722          UA       0       3       5       8      12      20      43      75      90      96
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723          UA     100

724          KK    CSM1
725          KM   COMBINE FLOW FROM SUB-BASIN SM1C WITH SM1AC AT COMPUTATOIN
726          KM   POINT CSM1
727          HC       2

728          KK    RSM1
729          KM   ROUTE FLOW FROM COMPUTATION POINT CSM1  TO COMPUTATION POINT CSM2
730          RS       2    ELEV  1375.5
731          RC   0.035   0.035   0.035    4300   0.017
732          RX       0      90     160     230     310     380     490     590
733          RY    1390    1380    1377  1375.5    1377    1380    1383    1390
1                                          HEC-1 INPUT                                                    PAGE 17

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


734          KK    SM2C
735          KM   SUB-BASIN SM2C-LAND USE- NATURAL DESERT(MOUNTAIN)
736          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
737          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
738          BA   2.190
739          LG    .150    .350   3.310    .820  86.000
740          UC    .383    .134
741          UA       0       3       5       8      12      20      43      75      90      96
742          UA     100

743          KK    CSM2
744          KM   COMBINE RUNOFF FROM SUB-BASIN SM2C TO ROUTED FLOW FROM COMPUTATION
745          KM   POINT CSM1
746          HC       2

747          KK   RDENT
748          KM   ROUTE INFLOW HYDROGRAPH THROUGH SOUTH MOUNTAIN DETENTION BASIN
749          RS       1    ELEV    1292
750          SA    2.30    7.80   15.91   19.96   24.08   28.27   30.45   31.91
751          SE    1292    1294    1300    1305    1310    1315    1318    1320
752          SL    1298    7.06    0.58     0.5
753          SS    1318     200     2.7     1.5

754          KK    RSM2
755          KM   ROUTE FLOW FROM COMPUTATOIN POINT CSM2 TO COMPUTATOIN POINT CSM3
756          RS      12    ELEV    1226
757          RC   0.040   0.040   0.040    6600   0.019    1228
758          RX       0      70     100     140     160     190     240     320
759          RY    1228  1227.5    1227    1226    1228  1228.5    1229    1230

760          KK    SM3C
761          KM   SUB-BASIN SM3C-LAND USE- NATURAL DESERT(HILLSLOPE,MOUNTAIN),MINOR DEVELOPMENT
762          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
763          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
764          BA    .480
765          LG    .160    .348   3.950    .507   1.500
766          UC    .333    .159
767          UA       0       3       5       8      12      20      43      75      90      96
768          UA     100
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769          KK    CSM3
770          KM   COMBINE RUNOFF FROM SUB-BASIN SM3C TO ROUTED FLOW FROM COMPUTATION
771          KM   POINT CSM2
772          HC       2

773          KK    RSM3
774          KM   ROUTE FLOW FROM COMPUTATION POINT CSM3 TO COMPUTATION POINT CSM4
775          RS       4    ELEV    1176
776          RC   0.040   0.040   0.040    3000  0.0095
777          RX       0     120     190     270    330     400     470     530
778          RY    1178  1177.5    1177    1176   1176    1177  1177.5    1178
1                                          HEC-1 INPUT                                                    PAGE 18

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


779          KK    SM4C
780          KM   SUB-BASIN SM4C-LAND USE-URBAN
781          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
782          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
783          BA    .240
784          LG    .260    .350   4.600    .592  14.400
785          UC    .417    .387
786          UA       0       5      16      30      65      77      84      90      94      97
787          UA     100

788          KK    RSM4
789          KM   ROUTE FLOW FROM SUB-BASIN SM4C TO COMPUTATION POINT CSM4
790          RS       2    ELEV    1168
791          RC   0.035   0.035   0.035    1200   0.012
792          RX       0      50      80     110     130     160     180     200
793          RY    1170  1169.5    1169  1168.5    1168  1168.5    1169    1170

794          KK   DRW2C
795          KM   SUB-BASIN DRW2C-LAND USE- NATURAL DESERT(HILLSLOPE,MOUNTAIN)
796          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
797          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
798          BA    .530
799          LG    .150    .340   3.250    .859  30.000
800          UC    .517    .377
801          UA       0       3       5       8      12      20      43      75      90      96
802          UA     100

803          KK  DRWC1C
804          KM   SUB-BASIN DRWC1C-LAND USE-AGRICULTURE
805          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
806          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
807          BA   .120
808          LG   .500    .000   4.250    .727    .000
809          UC   .600    .720
810          UA       0       3       9      18      28      42      59      73      87      92
811          UA     100

812          KK    CSM4
813          KM   COMBINE RUNOFF FROM SUB-BASINS DRW2C AND DRWC1C WITH ROUTED FLOW FROM SM4C
814          KM   AND COMPUTATION POINT CSM3
815          HC       4
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816          KK    RSM5
817          KM   ROUTE FLOW FROM COMPUTATION POINT CSM4 TO COMPUTATION POINT CSM5
818          RS       1    ELEV    1156
819          RC   0.045   0.045   0.045    1800  0.0078
820          RX       0      80     130     160     180     190     220     260
821          RY    1160    1159  1158.5    1158    1156    1156    1158    1160
1                                          HEC-1 INPUT                                                    PAGE 19

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

822          KK    DR1C
823          KM   SUB-BASIN DR1C-LAND USE-NATURAL DESERT(HILLSLOPE)
824          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
825          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
826          BA    .160
827          LG    .150    .265   5.300    .198    .000
828          UC    .417    .442
829          UA       0       3       5       8      12      20      43      75      90      96
830          UA     100

831          KK    WC1A
832          KM   SUB-BASIN WC1A-LAND USE- NATURAL DESERT(HILLSLOPE)
833          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
834          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
835          BA    .250
836          LG    .150    .264   4.680    .217    40.0
837          UC    .400    .404
838          UA       0       3       5       8      12      20      43      75      90      96
839          UA     100

840          KK    RSM6
841          KM   ROUTE FLOW FROM SUB-BASIN WC1A TO COMPUTATION POINT CPDR2C
842          RS       1    ELEV    1146
843          RC   0.045   0.045   0.045    1150   0.012    1150
844          RX       0      30      50      70      90     110     130     170
845          RY    1152    1151    1150    1148    1146    1146    1148    1150

846          KK    DR2C
847          KM   SUB-BASIN DR2C-LAND USE- NATURAL DESERT(HILLSLOPE),AGRICULTURAL
848          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
849          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
850          BA    .050
851          LG    .150    .325   4.255    .423    .000
852          UC    .350    .318
853          UA       0       3       5       8      12      20      43      75      90      96
854          UA     100

855          KK  CPDR2C
856          KM   COMBINE FLOW FROM SUB-BASINS DR2C AND DR1C TO ROUTED FLOW FROM SUB-BASIN WC1A
857          KM   AND COMPUTATION POINT CSM4
858          HC       4

859          KK  RRB27C
860          KM   ROUTE FLOW FROM COMPUTATION POINT CPDR2C TO COMPUTATION POINT CPB27C
861          RS      15    ELEV  1107.8
862          RC   0.070   0.070   0.070    7400   0.009    1110
863          RX       0     260     550     770     920    1170    1320    1500
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 864          RY    1110    1109    1109    1108    1108  1107.8    1108    1110

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 865          KK   BR27C
 866          KM   SUB-BASIN BR27C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
 867          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
 868          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
 869          BA    .780
 870          LG    .500    .000   4.150    .695    .000
 871          UC    .700    .416
 872          UA       0       3       9      18      28      42      59      73      87      92
 873          UA     100

 874          KK  CPB27C
 875          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPS19C TO RUNOFF FROM SUB-BASIN
 876          KM   BR27C
 877          HC       3

 878          KK  RR35C2
 879          KM   ROUTE FLOW FROM COMPUTATION POINT CPB27C TO COMPUTATION POINT CPR35C
 880          RS      20    ELEV  1057.0
 881          RC   0.070   0.070   0.070    8800  0.0065  1058.5
 882          RX       0     230     480     580     680     770     910    1600
 883          RY  1058.5    1057    1057    1057    1057    1057    1057  1059.3

 884          KK   RR35C
 885          KM   SUB-BASIN RR35C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
 886          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
 887          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
 888          BA   1.890
 889          LG    .500    .000   5.500    .348    .000
 890          UC    .983    .310
 891          UA       0       3       9      18      28      42      59      73      87      92
 892          UA     100

 893          KK  CPR35C
 894          KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CP827C TO RUNOFF FROM SUB-BASIN
 895          KM    RR35C
 896          HC       3

 897          KK  RRS37C
 898          KM   ROUTE FLOW FROM COMPUTATION POINT CPR35C TO COMPUTATION POINT CPS37C
 899          RS       8    ELEV    1025
 900          RC    0.10    0.10    0.10    2400  0.0025
 901          RX       0     280     470     630     700     840    1390    1860
 902          RY    1028    1026    1026    1025    1025    1025    1026    1028

 903          KK   SA37C
 904          KM   SUB-BASIN SA37C-LAND USE- URBAN. AGRICULTURE
 905          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
 906          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
 907          BA    .590
 908          LG    .320    .130   4.900    .323  15.000
 909          UC    .750    .337
 910          UA       0       5      16      30      65      77      84      90      94      97
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911          UA     100

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

912          KK  CPS37C
913          KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPS37C WITH RUNOFF FROM SUB-
914          KM    BASIN SA37C
915          HC       2

916          KK  RAV431
917          KM   ROUTE FLOW FROM COMPUTATION POINT CPS37C TO COMPUTATION POINT CAV43C
918          RS      15    ELEV  1020.6
919          RC    0.10    0.10    0.10    3200  0.0012
920          RX       0     380     620     980    1320    1560    1700    2200
921          RY  1022.8    1021  1020.6  1020.9  1021.4  1021.6  1021.8  1022.8

922          KK  AVR43C
923          KM   SUB-BASIN AVR43C -LAND USE- URBAN. AGRICULTURE
924          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
925          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
926          BA   1.030
927          LG    .430    .059   4.000    .396   6.250
928          UC    .717    .321
929          UA       0       5      16      30      65      77      84      90      94      97
930          UA     100

931          KK  CAV43C
932          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPS37C AND RUNOFF FROM SUB-
933          KM   BASIN AVR43C
934          HC       2

935          KK    WC2A
936          KM   SUB-BASIN WC2A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
937          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
938          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
939          BA    .080
940          LG    .150    .251   8.600    .070    .000
941          UC    .383    .530
942          UA       0       3       5       8      12      20      43      75      90      96
943          UA     100

944          KK  RD27.1
945          KM   ROUTE FLOW FROM SUB-BASIN WC2A  TO COMPUTATION POINT CD27.1
946          RS       1    ELEV    1147
947          RC   0.035   0.035   0.035     960   0.016    1150
948          RX       0      30      40      55      70      85     105     130
949          RY    1150    1150    1148    1147    1148    1149    1150    1151

950          KK  WC2.1A
951          KM   SUB-BASIN WC2.1A-LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
952          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
953          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
954          BA    .080
955          LG    .150    .290   4.000    .520    .000
956          UC    .350    .310
957          UA       0       3       5       8      12      20      43      75      90      96
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958          UA     100

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

959          KK  RD27.2
960          KM   ROUTE FLOW FROM SUB-BASIN WC2.1A TO COMPUTATION POINT CD27.1
961          RS       1    ELEV    1148
962          RC   0.035   0.035   0.035    1000   0.015    1153
963          RX       0      35      75     100     135     145     165     195
964          RY    1153    1152    1150    1149    1148    1150    1152    1154

965          KK  CD27.1
966          KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC2A AND WC2.1A
967          HC       2

968          KK  RD27.3
969          KM   ROUTE FLOW FROM COMPUTATION POINT CP27.1 TO COMPUTATION POINT CP27.2
970          RS       1    ELEV    1141
971          RC   0.035   0.035   0.035     450   0.011    1144
972          RX       0      50     115     125     140     150     160     180
973          RY    1144    1143    1142    1141    1142    1144    1146    1148

974          KK    WC3A
975          KM   SUB-BASIN WC3A--LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
976          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
977          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
978          BA    .014
979          LG    .150    .250   8.600    .066    .000
980          UC    .300    .467
981          UA       0       3       5       8      12      20      43      75      90      96
982          UA     100

983          KK  RD27.4
984          KM   ROUTE FLOW FROM SUB-BASIN WC3A TO COMPUTATION POINT CD27.2
985          RS       1    ELEV  1141.8
986          RC   0.035   0.040   0.035     640   0.022
987          RX       0      40      80     100     110     120     150     200
988          RY    1145    1144    1143    1142  1141.8    1142    1144    1145

989          KK  CD27.2
990          KM   COMBINE ROUTED FLOWS FROM SUB-BASIN WC3A AND COMPUTATION POINT CD27.1
991          HC       2

992          KK  RD27.5
993          KM   ROUTE FLOW FROM COMPUTATION POINT CD27.2 TO COMPUTATION POINT CD27.3
994          RS       1    ELEV    1121
995          RC   0.035   0.035   0.035    1400   0.014
996          RX       0      40     100     160     175     190     240     260
997          RY    1126    1124    1123    1122    1121    1122    1124    1126

998          KK    WC4A
999          KM   SUB-BASIN WC4A -LAND USE- DESERT MOUNTAIN. DESERT HILLS;  MINOR DEVELOPMENT
1000         KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1001         KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1002         BA    .360
1003         LG    .150    .297   3.950    .546  25.000
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1004        UC    .383    .273
1005        UA       0       3       5       8      12      20      43      75      90      96
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1006        UA     100

1007        KK  RD27.6
1008        KM   ROUTE FLOW FROM SUB-BASIN WC4A TO COMPUTATION POINT CD27.3
1009        RS       3    ELEV    1140
1010        RC   0.035   0.035   0.035    2200   0.016
1011        RX       0      60     100     180     225     300     435     500
1012        RY    1142    1141  1140.5    1140    1140  1140.5    1141    1142

1013        KK  CD27.3
1014        KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINT CD27.2 AND SUB-BASIN WC4A
1015        HC       2

1016        KK  RD27.7
1017        KM   ROUTE FLOW FROM COMPUTATION POINT CD27.3 TO COMPUTATION POINT CD27.4
1018        RS       2    ELEV    1115
1019        RC   0.040   0.050   0.035     950   0.006
1020        RX       0      20     135     170     220     280     400     460
1021        RY  1116.5    1116  1115.5    1115  1115.5  1115.8    1116  1116.5

1022        KK   DR27C
1023        KM   SUB-BASIN DR27C-LAND USE- AGRICULTURE. DESERT HILLS; MINOR DEVELOMENT
1024        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1025        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1026        BA    .230
1027        LG    .210    .345   3.996    .509    .000
1028        UC    .467    .352
1029        UA       0       3       5       8      12      20      43      75      90      96
1030        UA     100

1031        KK  CD27.4
1032        KM   COMBINE RUNOFF FROM SUB-BASIN DR27C WITH ROUTED FLOW FROM COMPUTATION POINT
1033        KM   CD27.3
1034        HC       2

1035        KK  RB35C2
1036        KM   ROUTE FLOW FROM COMPUTATION POINT CD27.3 TO COMPUTATION POINT CPB352
1037        RS      20    ELEV    1069
1038        RC   0.070   0.070   0.070    7680   0.007    1070
1039        RX       0     280     660     850    1000    1130    1180    1320
1040        RY    1070  1069.8  1069.7    1069    1069    1069  1069.7    1070

1041        KK  BR35C2
1042        KM   SUB-BASIN BR35C2-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1043        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1044        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1045        BA    .730
1046        LG    .500    .000   3.550    .439    .000
1047        UC    .867    .689
1048        UA       0       3       9      18      28      42      59      73      87      92
1049        UA     100
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1050        KK  CPB352
1051        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CD27.4 TO RUNOFF FROM SUB-BASIN
1052        KM   BR35C2
1053        HC       2

1054        KK  BR35C1
1055        KM    SUB-BASIN BR35C1-LAND USE- AGRICULTURE: MINOR DEVELOPMENT
1056        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1057        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1058        BA    .550
1059        LG    .500    .000   5.100    .368    .000
1060        UC    .933    .670
1061        UA       0       3       9      18      28      42      59      73      87      92
1062        UA     100

1063        KK  CPB352
1064        KM    COMBINE RUNOFF FROM SUB-BASIN BR35C1 TO FLOW AT COMPUTATION POINT CPB352
1065        HC       2

1066        KK  RAV432
1067        KM   ROUTE FLOW FROM COMPUTATION POINT CPB352 TO COMPUTATION POINT CAV43C( 1ST.
1068        KM   REACH )
1069        RS       9    ELEV  1041.2
1070        RC    0.07    0.07    0.07    3400  0.0056
1071        RX       0      90      91     360     640    1015    1016    1475
1072        RY    1044    1042    1042  1041.2  1041.2    1042    1042    1044

1073        KK  RAV433
1074        KM   ROUTE FLOW FROM COMPUTATION POINT CPB352 TO COMPUTATION POINT CAV43C (2ND.
1075        KM   REACH )
1076        RS       8    ELEV    1028
1077        RC    0.07    0.07    0.07    3000  0.0060
1078        RX       0     300     301     570     630    1220    1400    1650
1079        RY    1030    1029    1029    1028    1028    1029    1029    1030

1080        KK  CAV43C
1081        KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPB352 TO FLOW AT COMPUTATION
1082        KM    POINT CAV43C
1083        HC       2

1084        KK  RVR471
1085        KM   ROUTE FLOW FROM COMPUTATION POINT CAV43C TO COMPUTATION POINT CPV47C
1086        RS       6    ELEV  1016.5
1087        RC    0.07    0.07    0.07    2800  0.0030
1088        RX       0     280     500     700     920    1130    1520    1750
1089        RY  1018.5    1017    1017  1016.5  1016.5  1017.2  1017.2  1018.5

1090        KK    WC5A
1091        KM   SUB-BASIN WC5A -LAND USE- DESERT HILLS: MINOR DEVELOMENT
1092        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1093        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1094        BA    .420
1095        LG    .150    .346   2.880   1.050  28.000
1096        UC    .500    .359
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1097          UA       0       3       5       8      12      20      43      75      90      96
1098          UA     100

1099          KK  RD35.1
1100          KM   ROUTE RUNOFF FROM SUB-BASIN WC5A TO COMPUTATION POINT CD35.1
1101          RS      10    ELEV    1125
1102          RC   0.040   0.055   0.035    4800   0.012
1103          RX       0     130     270     330     400     460     530     625
1104          RY    1126  1125.9  1125.7  1125.5    1125  1125.5  1125.7    1126

1105          KK    WC6A
1106          KM   SUB-BASIN WC6A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1107          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1108          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1109          BA    .014
1110          LG    .150    .270   3.750    .293    .000
1111          UC    .233    .259
1112          UA       0       3       5       8      12      20      43      75      90      96
1113          UA     100

1114          KK  RD35.2
1115          KM   ROUTE RUNOFF FROM SUB-BASIN WC6A TO COMPUTATION POINT CD35.1
1116          RS      13    ELEV  1117.8
1117          RC   0.070   0.070   0.070    3800   0.015
1118          RX       0     130     240     280     340     440     530     655
1119          RY    1122    1120    1118  1117.8    1118    1119    1120    1122

1120          KK  CD35.1
1121          KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC5A AND WC6A
1122          HC       2

1123          KK  RD35.3
1124          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.1 TO COMPUTATION POINT CD35.2
1125          RS       6    ELEV  1089.6
1126          RC   0.035   0.035   0.035    2480   0.005  1090.5
1127          RX       0     100     200     350     435     480     500     525
1128          RY    1092    1091    1090  1089.8  1089.7  1089.6    1090  1090.5

1129          KK    WC7A
1130          KM   SUB-BASIN WC7A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1131          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1132          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1133          BA    .050
1134          LG    .150    .270   7.000    .141    .000
1135          UC    .317    .332
1136          UA       0       3       5       8      12      20      43      75      90      96
1137          UA     100

1138          KK  RD35.4
1139          KM   ROUTE RUNOFF FROM SUB-BASIN WC7A TO COMPUTATION POINT CD35.3
1140          RS       4    ELEV  1125.8
1141          RC   0.035   0.035   0.035    2800   0.018  1128.5
1142          RX       0     100     170     240     250     260     330     360
1143          RY    1129    1128    1127    1126  1125.8    1126    1128  1128.5
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1144          KK    WC8A
1145          KM   SUB-BASIN WC8A -LAND USE- DESERT MOUNTAIN. DESERT HILLS: MINOR DEVELOMENT
1146          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1147          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1148          BA    .350
1149          LG    .150    .321   3.700    .651  30.000
1150          UC    .433    .366
1151          UA       0       3       5       8      12      20      43      75      90      96
1152          UA     100

1153          KK  RD35.5
1154          KM   ROUTE FLOW FROM SUB-BASIN WC8A TO COMPUTATION POINT CD35.3
1155          RS       2    ELEV    1137
1156          RC   0.030   0.030   0.030    2200   0.022    1139
1157          RX       0      50     125     190     240     370     400     450
1158          RY    1139    1138  1137.5    1137  1137.5    1138    1140    1141

1159          KK  CD35.3
1160          KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC7A AND WC8A
1161          HC       2

1162          KK  RD35.6
1163          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.3 TO COMPUTATION POINT CD35.4
1164          RS       1    ELEV    1101
1165          RC   0.030   0.035   0.035     700   0.011
1166          RX       0      30      60     110     140     180     240     350
1167          RY    1103  1101.8  1101.6  1101.4    1101  1101.4  1101.7    1103

1168          KK    WC9A
1169          KM   SUB-BASIN WC9A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1170          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1171          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1172          BA    .025
1173          LG    .150    .250   8.600    .066    .000
1174          UC    .300    .420
1175          UA       0       3       5       8      12      20      43      75      90      96
1176          UA     100

1177          KK  RD35.7
1178          KM   ROUTE RUNOFF FROM SUB-BASIN WC9A TO COMPUTATION POINT CD35.5
1179          RS       1    ELEV    1128
1180          RC   0.035   0.035   0.035    1000   0.025    1130
1181          RX       0      30      40      60      70      90     120     140
1182          RY    1130    1130    1129    1128  1128.5    1129    1130  1130.5

1183          KK   WC10A
1184          KM   SUB-BASIN WC10A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1185          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1186          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1187          BA    .020
1188          LG    .150    .260   5.800    .059    .000
1189          UC    .233    .289
1190          UA       0       3       5       8      12      20      43      75      90      96
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1191        UA     100
                                    HEC-1 INPUT                                          PAGE 27

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


1192        KK  RD35.8
1193        KM   ROUTE RUNOFF FROM SUB-BASIN WC10A TO COMPUTATION POINT CD35.5
1194        RS       1    ELEV    1132
1195        RC   0.035   0.035   0.035    1000   0.025
1196        RX       0      30      50      70     100     140     210     260
1197        RY    1134    1134    1133    1132    1132    1133  1133.5    1134

1198        KK  CD35.5
1199        KM   COMBINE ROUTED FLOW FROM SUB-BASINS WC9A AND WC10A
1200        HC       2

1201        KK  RD35.9
1202        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.5 TO COMPUTATION POINT CD35.6
1203        RS       2    ELEV  1114.8
1204        RC   0.030   0.030   0.030    1200   0.015
1205        RX       0      60     110     170     210     240     330     370
1206        RY    1116  1115.8  1115.5    1115  1114.8    1115  1115.8    1116

1207        KK   WC11A
1208        KM   SUB-BASIN WC11A -LAND USE- DESERT MOUNTAINS. DESERT HILLS; MINOR DEVELOPMENT
1209        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1210        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1211        BA    .290
1212        LG    .150    .335   3.600    .703  53.000
1213        UC    .367    .357
1214        UA       0       3       5       8      12      20      43      75      90      96
1215        UA     100

1216        KK  RD3510
1217        KM   ROUTE RUNOFF FROM SUB-BASIN WC11A TO COMPUTATION POINT CD35.7
1218        RS       1    ELEV    1131
1219        RC   0.050   0.050   0.050    1100   0.024
1220        RX       0      50     170     180     225     260     380     460
1221        RY    1132  1131.8  1131.5  1131.5    1131  1131.5  1131.8    1132

1222        KK   WC12A
1223        KM   SUB-BASIN WC12A -LAND USE- DESERT MOUNTAIN. DESERT HILLS: MINOR DEVELOPMENT
1224        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1225        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1226        BA    .260
1227        LG    .150    .320   3.800    .532  28.000
1228        UC    .333    .217
1229        UA       0       3       5       8      12      20      43      75      90      96
1230        UA     100

1231        KK  RD3511
1232        KM   ROUTE RUNOFF FROM SUB-BASIN WC12A TO COMPUTATION POINT CD35.7
1233        RS       1    ELEV    1143
1234        RC   0.040   0.040   0.040    1200   0.022    1144
1235        RX       0      10      25      45      70     120     235     290
1236        RY  1144.5    1144  1143.5    1143  1143.5  1143.7  1143.8    1144
                                    HEC-1 INPUT                                          PAGE 28
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1237          KK  CD35.7
1238          KM   COMBINE ROUTED FLOWS FROM SUB-BASINS WC11A AND WC12A
1239          HC       2

1240          KK  RD3512
1241          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.7 TO COMPUTATION POINT CD35.6
1242          RS       2    ELEV  1120.5
1243          RC   0.055   0.055   0.055    1080   0.006
1244          RX       0      20      50      70     130     180     400     460
1245          RY  1122.5    1122    1121  1120.5    1121  1121.5    1122  1122.5

1246          KK  CD35.6
1247          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINTS CD35.5 AND CD35.7
1248          HC       2

1249          KK  RD3513
1250          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.6 TO COMPUTATION POINT CD35.4
1251          RS       1    ELEV    1101
1252          RC   0.040   0.035   0.030    1000   0.012
1253          RX       0      40     130     210     280     340     570     615
1254          RY  1102.5    1102  1101.8  1101.5    1101  1101.5    1102  1102.5

1255          KK  CD35.4
1256          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINTS CD35.3 AND CD35.6
1257          HC       2

1258          KK  RD3514
1259          KM   ROUTE FLOW FROM COMPUTATION POINT CD35.4 TO COMPUTATION POINT CD35.2
1260          RS       3    ELEV  1192.5
1261          RC   0.070   0.070   0.070    1400   0.006    1194
1262          RX       0     120     200     300     400     470     560     660
1263          RY    1194  1193.0  1192.8  1192.5  1192.5  1192.8    1193    1194

1264          KK   WC15A
1265          KM   SUB-BASIN WC15A -LAND USE- DESERT MOUNTAIN. DESERT HILLS; MINOR DEVELOMENT
1266          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1267          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1268          BA    .360
1269          LG    .150    .320   3.350    .784  50.000
1270          UC    .317    .245
1271          UA       0       3       5       8      12      20      43      75      90      96
1272          UA     100

1273          KK  RD3515
1274          KM   ROUTE RUNOFF FROM SUB-BASIN WC15A TO COMPUTATION POINT CD35.8
1275          RS       1    ELEV    1132
1276          RC   0.030   0.035   0.030    1250   0.014    1136
1277          RX       0      30      50      70      85     100     140     200
1278          RY    1140    1138    1136    1134    1132    1134    1135    1136
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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1279        KK    PM2A
1280        KM   SUB-BASIN PM2A -LAND USE- DESERT MOUNTAIN. DESERT HILLS: MINOR DEVELOMENT
1281        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1282        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1283        BA    .070
1284        LG    .150    .332   4.100    .502  15.000
1285        UC    .300    .282
1286        UA       0       3       5       8      12      20      43      75      90      96
1287        UA     100

1288        KK  CD35.8
1289        KM   COMBINE ROUTED FLOW FROM SUB-BASIN WC15A TO SUB-BASIN PM2A
1290        HC       2

1291        KK  RD3516
1292        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.8 TO COMPUTATION POINT CD35.9
1293        RS       1    ELEV    1122
1294        RC   0.035   0.040   0.030    1400   0.008    1126
1295        RX       0      25      35      50     130     150     200     260
1296        RY    1130    1126    1124    1122    1122    1124    1125    1126

1297        KK   WC13A
1298        KM   SUB-BASIN WC13A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1299        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1300        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1301        BA    .013
1302        LG    .150    .250   8.600    .066    .000
1303        UC    .250    .341
1304        UA       0       3       5       8      12      20      43      75      90      96
1305        UA     100

1306        KK  RD3517
1307        KM   ROUTE RUNOFF FROM SUB-BASIN WC13A TO COMPUTATION POINT CD35.9
1308        RS       3    ELEV    1131
1309        RC   0.035   0.035   0.035    1280   0.023
1310        RX       0     115     180     225     270     350     435     530
1311        RY    1132  1131.5  1131.2    1131  1131.2  1131.5  1131.8    1132

1312        KK   WC14A
1313        KM   SUB-BASIN WC14A -LAND USE- NATURAL DESERT HILLSLOPES: MINOR DEVELOPMENT
1314        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1315        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1316        BA    .050
1317        LG    .150    .290   4.000    .520    .000
1318        UC    .367    .427
1319        UA       0       3       5       8      12      20      43      75      90      96
1320        UA     100

1321        KK  RD3518
1322        KM   ROUTE RUNOFF FROM SUB-BASIN WC14A TO COMPUTATION POINT CD35.9
1323        RS       6    ELEV  1133.4
1324        RC   0.040   0.045   0.040    2000   0.013
1325        RX       0      60     150     220     250     280     310     360
1326        RY    1134  1133.9  1133.7  1133.4  1133.7  1133.8  1133.9    1134
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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1327        KK    PM1A
1328        KM   SUB-BASIN PM1A -LAND USE- AGRICULTURE. DESERT HILLS; MINOR DEVELOPMENT
1329        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1330        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1331        BA    .070
1332        LG    .380    .097   4.210    .697    2.00
1333        UC    .383    .279
1334        UA       0       3       5       8      12      20      43      75      90      96
1335        UA     100

1336        KK  CD35.9
1337        KM   COMBINE ROUTED FLOWS FROM SUB-BASINS WC13A AND WC14A. COMPUTATION POINT
1338        KM   CD35.8 WITH RUNOFF FROM SUB-BASIN PM1A
1339        HC       4

1340        KK  RD3519
1341        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.9 TO COMPUTATION POINT CD35.2
1342        RS       1    ELEV    1101
1343        RC   0.040   0.045   0.040     288   0.012
1344        RX       0      80     190     270     310     335     440     480
1345        RY  1102.5    1102  1101.7  1101.5    1101  1101.5    1102  1102.5

1346        KK   DR35C
1347        KM   SUB-BASIN DR35C -LAND USE- AGRICULTURE: MINOR DEVELOPMENT
1348        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1349        KM   THIS BASIN USED RAINFALL REDUCTION FATOR OF .90
1350        BA    .600
1351        LG    .360    .221   4.200    .454    .000
1352        UC    .717    .443
1353        UA       0       3       5       8      12      20      43      75      90      96
1354        UA     100

1355        KK  CD35.2
1356        KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINTS CD35.1. CD35.4 AND CD35.9 WITH
1357        KM   RUNOFF FROM SUB-BASIN DR35C
1358        HC       4

1359        KK  RB43C1
1360        KM   ROUTE FLOW FROM COMPUTATION POINT CD35.2 TO COMPUTATION POINT CBR43C
1361        RS      10    ELEV    1041
1362        RC    0.07    0.07    0.07    7200   0.006
1363        RX       0     300     540     770    1020    1220    1400    1650
1364        RY  1042.2  1041.5  1041.5    1041    1041    1041  1041.5  1042.2

1365        KK  SMA43C
1366        KM   SUB-BASIN SMA43C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1367        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1368        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1369        BA    .130
1370        LG    .500    .000   6.960    .244    .000
1371        UC    .400    .261
1372        UA       0       3       9      18      28      42      59      73      87      92
1373        UA     100
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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1374          KK  RB43C2
1375          KM   ROUTE RUNOFF FROM SUB-BASIN SMA43C TO COMPUTATION POINT CBR43C
1376          RS       3    ELEV  1043.3
1377          RC    0.02    0.07    0.07    2600   0.003  1044.2
1378          RX       0       1      55      56      65      70      90     120
1379          RY  1044.2  1043.2  1043.2  1044.1  1043.5  1043.7  1043.8  1044.2

1380          KK   BR43C
1381          KM   SUB-BASIN BR43C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT-LAND USE
1382          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1383          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1384          BA    .850
1385          LG    .500    .000   6.350    .259    .000
1386          UC    .883    .538
1387          UA       0       3       9      18      28      42      59      73      87      92
1388          UA     100

1389          KK  CBR43C
1390          KM   COMBINE ROUTED FLOWS FROM COMPUTATION POINT CD35.2 AND SUB-BASIN SMA43C
1391          HC       3

1392          KK  RVR472
1393          KM    ROUTE FLOW FROM COMPUTATION POINT CBR43C TO COMPUTATION POINT CVR47C
1394          RS      10    ELEV    1015
1395          RC    0.07    0.07    0.07    3720   0.006    1016
1396          RX       0     280     540     730    1000    1250    1470    1650
1397          RY    1016    1015    1015    1015    1015    1015    1015    1016

1398          KK   VR47C
1399          KM   SUB-BASIN VR47C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1400          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1401          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1402          BA    .890
1403          LG    .500    .000   4.950    .385    .000
1404          UC    .933    .407
1405          UA       0       3       9      18      28      42      59      73      87      92
1406          UA     100

1407          KK  CVR47C
1408          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINTS CAV43C AND CBR43C WITH RUNOFF
1409          KM   FROM SUB-BASIN VR47C
1410          HC       3

1411          KK  RBR511
1412          KM   ROUTE FLOW FROM COMPUTATION POINT CVR47C TO COMPUTATION POINT CB51C
1413          RS      11    ELEV  1011.7
1414          RC    0.07    0.07    0.07    3200   0.001    1014
1415          RX       0     530     650    1460    2220    2400    2640    3000
1416          RY    1014    1012  1011.7  1011.8  1011.7    1012  1013.7    1014
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1417          KK  AVR51C
1418          KM   SUB-BASIN AVR51C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1419          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
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1420    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1421    BA    .280
1422    LG    .500    .000   6.200    .304    .000
1423    UC    .767    .457
1424    UA       0       3       9      18      28      42      59      73      87      92
1425    UA     100

1426    KK  RBR512
1427    KM    ROUTE FLOW FROM SUB-BASIN AVR51C TO COMPUTATION POINT CB51C
1428    RS      24    ELEV    1009
1429    RC    0.07    0.07    0.07    3600   0.001  1010.5
1430    RX       0     120     240     380     570     640     670     740
1431    RY  1010.5  1009.7  1009.5  1009.4  1009.1  1009.1    1009  1010.5

1432    KK   BR51C
1433    KM   SUB-BASIN BR51C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1434    KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1435    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1436    BA    .700
1437    LG    .500    .000   3.650    .459    .000
1438    UC   0.900    .324
1439    UA       0       3       9      18      28      42      59      73      87      92
1440    UA     100

1441    KK  CB51C
1442    KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CVR47C AND SUB-BASIN AVR51C
1443    KM    WITH RUNOFF FROM SUB-BASIN BR51C
1444    HC       3

1445    KK  RB1591
1446    KM    ROUTE FLOW FROM COMPUTATION POINT CB51C TO COMPUTATION POINT CB159C
1447    RS      13    ELEV  1004.5
1448    RC    0.07    0.07    0.07    5200  0.0016    1007
1449    RX       0      10      60     115     160     400    2635    3110
1450    RY    1007    1005    1005  1004.5  1004.5    1005    1006    1007

1451    KK  AVR55C
1452    KM   SUB-BASIN AVR55C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1453    KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1454    KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1455    BA    .230
1456    LG    .500    .000   6.330    .295    .000
1457    UC    .917    .623
1458    UA       0       3       9      18      28      42      59      73      87      92
1459    UA     100
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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1460    KK  RB1592
1461    KM    ROUTE FLOW FROM SUBASIN AVR55C TO COMPUTATION POINT CB159C
1462    RS      28    ELEV    1003
1463    RC    0.07    0.07    0.07    5040  0.0018    1004
1464    RX       0     170     340     540     750     940    1120    1320
1465    RY    1004    1003    1003  1003.5  1003.5  1003.7  1008.8    1004

1466    KK   VR59C
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1467          KM   SUB-BASIN VR59C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1468          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1469          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1470          BA    .250
1471          LG    .500    .000   6.470    .298    .000
1472          UC    .967    .630
1473          UA       0       3       9      18      28      42      59      73      87      92
1474          UA     100

1475          KK  RB1593
1476          KM   ROUTE FLOW FROM SUB-BASIN VR59C TO COMPUTATION POINT CB159C
1477          RS      22    ELEV  1001.4
1478          RC    0.07    0.07    0.07    3000  0.0015    1002
1479          RX       0     280     660     840    1020    1120    1220    1250
1480          RY    1002  1001.3  1001.4  1001.4  1001.5  1001.5  1001.6    1002

1481          KK  BR159C
1482          KM   SUB-BASIN BR159C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1483          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1484          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1485          BA    .680
1486          LG    .500    .000   3.750    .462    .000
1487          UC    .983    .527
1488          UA       0       3       9      18      28      42      59      73      87      92
1489          UA     100

1490          KK  CB159C
1491          KM     COMBINE ROUTED FLOWS FROM COMPUTATION POINT CB51C AND SUB-BASINS AVR51C
1492          KM     AND VR59C WITH RUNOFF FROM SUB-BASIN BR159C
1493          HC       4

1494          KK  RBR163
1495          KM   ROUTE FLOW FROM COMPUTATION POINT CB1591 TO COMPUTATION POINT CB163C
1496          RS       6    ELEV   996.5
1497          RC    0.07    0.07    0.07    2900  0.0019
1498          RX       0      50     550     980    1340    1750    2200    2780
1499          RY     999   996.5   996.9     998     998   998.9     999    1000

1500          KK  RET43C
1501          KM    RETRIEVE SPLIT FLOW FROM DIVERSION POINT DDR43C
1502          DR  RDR43C
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1503          KK   RS51C
1504          KM    ROUTE SPLIT FLOW FROM SUB-BASIN DR43C TO COMPUTATION POINT CS51C
1505          RS      20    ELEV    1039
1506          RC    0.07    0.07    0.07    6000  0.0026
1507          RX       0     240     420     580     760     890    1030    1150
1508          RY    1041  1039.2  1039.3  1039.5  1039.2    1039  1039.4    1041

1509          KK   SM51C
1510          KM   SUB-BASIN SM51C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1511          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1512          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1513          BA    .500
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1514        LG    .500    .000   5.850    .330    .000
1515        UC   1.017    .599
1516        UA       0       3       9      18      28      42      59      73      87      92
1517        UA     100

1518        KK   CS51C
1519        KM   COMBINE ROUTED FLOW FROM SUB-BASIN DR43C TO RUNOFF FROM SUB-BASIN SM51C
1520        HC       2

1521        KK  RB2591
1522        KM   ROUTE FLOW FROM COMPUTATION POINT CS51C TO COMPUTATION POINT CB259C
1523        KM   FIRST REACH
1524        RS      13    ELEV  1027.5
1525        RC    0.07    0.07    0.07    4200  0.0036
1526        RX       0     612    1085    1155    1595    1670    1765    2130
1527        RY  1029.6    1029    1028  1027.5  1027.5    1028    1028  1029.6

1528        KK  RB2592
1529        KM   ROUTE FLOW FROM COMPUTATION POINT CS51C TO COMPUTATION POINT CB259C
1530        KM   2ND REACH
1531        RS      10    ELEV    1001
1532        RC    0.07    0.07    0.07    3000  0.0063
1533        RX       0      50     140     335    1120    1770    1825    1870
1534        RY    1006    1004    1003    1002    1001    1001    1002  1002.5

1535        KK  BR259C
1536        KM   SUB-BASIN BR259C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1537        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1538        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1539        BA   1.000
1540        LG    .500    .000   3.550    .475    .000
1541        UC    .967    .506
1542        UA       0       3       9      18      28      42      59      73      87      92
1543        UA     100

1544        KK  CB259C
1545        KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CS51C AND RUNOFF FROM SUB-
1546        KM    BASIN BR259C
1547        HC       2
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1548        KK  DOA55C
1549        KM   RETRIEVE FLOW FROM HIDDEN VALLEY WATERSHED AT SUB-BASIN OA51B
1550        DR  DOA55C

1551        KK   RO55C
1552        KM   ROUTE SPLIT FLOW FROM SUB-BASIN OA51B ( HIDDEN VALLEY WATERSHED ) TO
1553        KM   COMPUTATION POINT CPO55C
1554        RS       9    ELEV  1031.5
1555        RC   0.065   0.065   0.065    2600  0.0014
1556        RX       0      90     190     260     350     450     580     910
1557        RY  1033.8  1031.8  1031.5  1031.5  1031.5  1031.5  1031.5  1033.8

1558        KK   OA55C
1559        KM   SUB-BASIN OA55C -LAND USE- RUAL DEVELEMENT
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1560        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1561        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1562        BA    .250
1563        LG    .500    .000   3.550    .466    .000
1564        UC    .800    .468
1565        UA       0       3       9      18      28      42      59      73      87      92
1566        UA     100

1567        KK  CPO55C
1568        KM    COMBINE ROUTED DIVERTED FLOW FROM SUB-BASIN OA51B TO RUNOFF FROM SUB-
1569        KM    BASIN OA55C
1570        HC       2

1571        KK   RD57C
1572        KM   ROUTE FLOW FROM COMPUTATION POINT CPO55C TO COMPUTAION CDR57C
1573        RS      12    ELEV  1028.4
1574        RC    0.07    0.07    0.07    2920   0.001
1575        RX       0     230     370     520     720     870     990    1230
1576        RY    1030  1028.6  1028.4  1028.6  1028.6  1028.8  1028.9    1030

1577        KK   DR57C
1578        KM   SUB-BASIN DR57C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1579        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1580        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1581        BA    .120
1582        LG    .500    .000   3.500    .470    .000
1583        UC    .950    .704
1584        UA       0       3       9      18      28      42      59      73      87      92
1585        UA     100

1586        KK  CDR57C
1587        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPO55C TO RUNOFF FROM SUB-BASIN
1588        KM   DR57C
1589        HC       2
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1590        KK   RD59C
1591        KM   ROUTE FLOW FROM COMPUTATION POINT CDR57C TO COMPUTATION POINT CDR59C
1592        RS       3    ELEV  1025.5
1593        RC    0.07    0.07    0.07    1200  0.0025
1594        RX       0     130     250     360     480     600     700     740
1595        RY  1027.2    1027    1027    1026  1025.5  1025.5    1026  1027.2

1596        KK   DR59C
1597        KM   SUB-BASIN DR59C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1598        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1599        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1600        BA    .110
1601        LG    .500    .000   3.500    .470    .000
1602        UC    .817    .626
1603        UA       0       3       9      18      28      42      59      73      87      92
1604        UA     100

1605        KK  CDR59C
1606        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CDR57C TO RUNOFF FROM SUB-BASIN
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1607        KM   DR59C
1608        HC       2

1609        KK   RB259
1610        KM   ROUTE FLOW FROM COMPUTATION POINT CDR59C TO COMPUTATION POINT CB259C
1611        RS       2    ELEV  1017.2
1612        RC    0.07    0.02    0.07    5280  0.0046
1613        RX       0      10      20      35      70      80     120     180
1614        RY    1019  1017.7  1017.2  1017.2  1017.2  1017.7    1018    1019

1615        KK  CB259C
1616        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CDR59C TO PREVIOUSLY
1617        KM   COMPUTED FLOW AT COMPUTATION POINT CB1592
1618        HC       2

1619        KK  RB1631
1620        KM   ROUTE FLOW FROM COMPUTATION POINT CB259C TO COMPUTATION POINT CB163C
1621        RS      13    ELEV     997
1622        RC    0.07    0.07    0.07    2640  0.0008
1623        RX       0      50     320     620     980    1270    1350    1400
1624        RY    1002     998     997     997     997     997     997   998.9

1625        KK  BR163C
1626        KM   SUB-BASIN BR163C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1627        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1628        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1629        BA    .260
1630        LG    .500    .000   4.700    .411    .000
1631        UC    .967    .642
1632        UA       0       3       9      18      28      42      59      73      87      92
1633        UA     100
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1634        KK  BR263C
1635        KM   SUB-BASIN BR263C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1636        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN.
1637        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1638        BA    .500
1639        LG    .500    .000   3.500    .463    .000
1640        UC    .933    .639
1641        UA       0       3       9      18      28      42      59      73      87      92
1642        UA     100

1643        KK  CB163C
1644        KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CB159C WITH RUNOFF FROM SUB-BASINS
1645        KM   BR163C AND BR263C AND ROUTED FLOW FROM COMPUTATION POINT  CB259C
1646        HC       4

1647        KK   RCD1C
1648        KM   ROUTE FLOW FROM COMPUTATION POINT CB163C TO COMPUTATION POINT CPCD1C
1649        RS       8    ELEV   993.4
1650        RC    0.07    0.07   0.070    3240  0.0015
1651        RX       0     140     580    1190    2100    2500    2890    3300
1652        RY     996     994   993.4   993.4   993.9     994     995     996
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1653        KK   BR67C
1654        KM   SUB-BASIN BR67C-LAND USE - RURAL DEVELEMENT
1655        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1656        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1657        BA    .130
1658        LG    .500    .220   6.200    .305    15.0
1659        UC    .667    .454
1660        UA       0       3       9      18      28      42      59      73      87      92
1661        UA     100

1662        KK  RCD1C2
1663        KM    ROUTE FLOW FROM SUBASIN BR67C TO COMPUTATION POINT CPCD1C
1664        RS      17    ELEV     993
1665        RC    0.07    0.07    0.07    2100  0.0014
1666        RX       0      75     260     490     670     830    1000    1130
1667        RY     994   993.5   993.5     993     993     993     993     994

1668        KK    CD1C
1669        KM   SUB-BASIN CD1C -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1670        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1671        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1672        BA    .470
1673        LG    .500    .000   5.320    .351    .000
1674        UC    .933    .369
1675        UA       0       3       9      18      28      42      59      73      87      92
1676        UA     100
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1677        KK  CPCD1C
1678        KM    COMBINE ROUTED FLOWS FROM COMPUTATION POINT CB163C AND SUB-BASIN BR67C
1679        KM    WITH RUNOFF FROM SUB-BASIN CD1C
1680        HC       3

1681        KK  RCD2C1
1682        KM    ROUTE FLOW FROM COMPUTATION POINT CPCD1C TO COMPUTATION POINT CCD2C
1683        RS      14    ELEV   987.4
1684        RC    0.07    0.07    0.07    4600  0.0018
1685        RX       0      70     330     880    1130    1750    2250    2630
1686        RY     990     988   987.4   987.6     988   989.4   989.4     990

1687        KK    CD2C
1688        KM   SUB-BASIN CD2C -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1689        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1690        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1691        BA    .580
1692        LG    .500    .000   6.500    .277    .000
1693        UC    .867    .451
1694        UA       0       3       9      18      28      42      59      73      87      92
1695        UA     100

1696        KK   CCD2C
1697        KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CPCD1C TO RUNOFF FROM SUB-BASIN
1698        KM    CD2C
1699        HC       2
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KK  RIR63B
KM   RETRIEVE SPLIT FLOW FROM COMPUTATION POINT CIR63B
DR  RIR63B

KK  RIR65C
KM    ROUTE RETRIEVED FLOW FROM SUB-BASIN IR63B TO COMPUTATION POINT CIR65C
RS       7    ELEV     4.7
RC   0.030   0.030   0.030    3300  0.0010
RX       0       1      11      21      26      31      41      46
RY       6       5     4.7     4.7       5     5.5     5.5     6.2

KK   IR65C
KM   SUB-BASIN IR65C -LAND USE - AGRICULTURE:MINOR DEVELOPMENT
KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
KM   6-HOUR RAINFALL. PATTERN NO. 3.35 WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
BA    .170
LG    .500    .000   3.500    .470    .000
UC    .933    .873
UA       0       3       9      18      28      42      59      73      87      92
UA     100
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  CIR65C
KM   COMBINE RETRIEVED ROUTED FLOW FROM SUB-BASIN IR63B TO RUNOFF FROM SUB-BASIN
KM   IR65C
HC       2

KK   RIRDC
KM   ROUTE FLOW FROM COMPUTATION POINT CIR65C TO COMPUTATION POINT CIRDC
RS       4    ELEV    1013
RC    0.03    0.03    0.03    3200  0.0018
RX       0       1      10      20      30      40      50      51
RY  1014.5    1013    1013    1013    1013    1013    1013  1014.5

KK  DIIRDC
KM    ROUTED FLOW FROM COMPUTATION POINT CIR65C IS SPLIT AT COMPUTATION POINT
KM    CIRDC
DT  RIR65C
DI       0      16      34      51      71      80     100     120     150
DO       0      16      25      32      40      49      69      89     119

KK    IRDC
KM   SUB-BASIN IRDC-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
BA    .520
LG    .500    .000   3.500    .470    .000
UC   1.333    .968
UA       0       3       9      18      28      42      59      73      87      92
UA     100

KK   CIRDC
KM    COMBINE ROUTED FLOW FROM COMPUTATION POINT CIR65C TO RUNOFF FROM SUB-BASIN
KM    IRDC
```

```
1747          HC       2

1748          KK  RIRSMC
1749          KM    ROUTE FLOW COMPUTATION POINT CIRDC TO COMPUTATION POINT CIRSMC
1750          RS      11    ELEV  1005.5
1751          RC    0.07    0.07    0.07    3400  0.0058
1752          RX       0     160     240     470     530     780     900    1000
1753          RY  1006.2  1005.7  1005.7  1005.7  1005.6  1005.5  1005.7  1006.2

1754          KK   IRSMC
1755          KM   SUB-BASIN IRSMC-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1756          KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1757          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1758          BA    .250
1759          LG    .290    .177   3.890    .488    .000
1760          UC    .650    .469
1761          UA       0       3       9      18      28      42      59      73      87      92
1762          UA     100
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1763          KK  CIRSMC
1764          KM
1765          HC       2

1766          KK  RCD2C2
1767          KM    ROUTE FLOW FROM COMPUTATION POINT CIRSMC TO COMPUTATION POINT CCD2C
1768          RS       4    ELEV   987.6
1769          RC    0.07    0.07    0.07    1000  0.0040
1770          RX       0     100     300     400     560     620     750     870
1771          RY     989   987.6   987.6   987.6   987.6   987.6   987.6     989

1772          KK   CCD2C
1773          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CIRSMC TO PREVIOUSLY COMPUTED
1774          KM   FLOW AT COMPUTATION POINT CCD2C
1775          HC       2

1776          KK   RPOND
1777          KM   ROUTE INFLOW HYDROGRAPH AT COMPUTATION POINT CCD2C THROUGH DEPRESSED AREA
1778          KM   OF SUB-BASIN CD2C
1779          RS       1    ELEV     983
1780          SA       0    20.4     124
1781          SE     983     984   986.9
1782          SS   985.8    1000     2.7     1.5

1783          KK   RBASE
1784          KM    ROUTE FLOW FROM OUTFALL OF PONDING AREA 700 FEET DOWN STREAM TO POINT OF
1785          KM    SPLIT FLOW AT BASELINE ROAD AND CHAMPION DRAIN
1786          RS       1    ELEV     984
1787          RC   0.065   0.065   0.065     700   0.004
1788          RX       0      60     230     350     480     580     720    1000
1789          RY   986.2     984     984     984     984     984     985   986.2

1790          KK  DIBASE
1791          KM    AT BASELINE ROAD SPLIT FLOW OCCURS. FLOW THAT EXCEEDS FLOW PATH CAPACITY FOR
1792          KM    ROUTING REACH TO COMPUTATION POINT CCD3C LEAVES THE STUDY AREA
```

```
1793        DT  REDIVE
1794        DI      0      38      59     154     337     584     890    1113    1594    1862
1795        DO      0       0       0      54     171     335     542     785    1064    1215

1796        KK  RCD3C1
1797        KM   ROUTE FLOW FROM DIVERSION POINT AT BASELINE ROAD TO COMPUTATION
1798        KM   POINT CPCD3C
1799        RS      6    ELEV   981.6
1800        RC   0.07    0.07    0.07    3000  0.0025
1801        RX      0      90     100     170     250     400     660     840
1802        RY    984   982.9     982   981.6     982   982.5     983     984

1803        KK   A67AC
1804        KM   SUB-BASIN 67AC-LAND USE - AGRICULTURE. RURAL
1805        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1806        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1807        BA    .610
1808        LG    .500    .000   4.400    .416    .000
1809        UC   1.100    .631
```



```
LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

1810        UA      0       3       9      18      28      42      59      73      87      92
1811        UA    100

1812        KK  RCD4C1
1813        KM   ROUTE FLOW FROM SUB-BASIN 67AC CPCD4C TO COMPUTATION POINT CPCD4C
1814        RS     11    ELEV     984
1815        RC   0.07    0.07    0.07    2600  0.0024
1816        RX      0      80     230     340     590     730     850     920
1817        RY    988     984     984     984     984     984     984   987.8

1818        KK    CD4C
1819        KM   SUB-BASIN CD4C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1820        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1821        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
1822        BA    .190
1823        LG    .500    .000   3.800    .451    .000
1824        UC    .967    .553
1825        UA      0       3       9      18      28      42      59      73      87      92
1826        UA    100

1827        KK  CPCD4C
1828        KM    COMBINE ROUTED FLOW FROM SUB-BASIN 67AC TO RUNOFF FROM SUB-BASIN CD4C
1829        HC      2

1830        KK  RCD3C2
1831        KM   ROUTE FLOW FROM COMPUTATION POINT CPCD4C TO COMPUTATION POINT CPCD3C
1832        RS     22    ELEV     984
1833        RC   0.07    0.07    0.07    5200  0.0024
1834        RX      0      80     230     340     590     730     850     920
1835        RY    988     984     984     984     984     984     984   987.8

1836        KK    CD3C
1837        KM   SUB-BASIN CD3C-LAND USE - AGRICULTURE:MINOR DEVELOPMENT
1838        KM   24-HOUR TYPE II RAINFALL WAS USED TO FIND TC & R FOR THIS BASIN
1839        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .90
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1840          BA    .480
1841          LG    .500    .000   4.800    .350    .000
1842          UC   0.983    .578
1843          UA       0       3       9      18      28      42      59      73      87      92
1844          UA     100

1845          KK  CPCD3C
1846          KM   COMBINE ROUTED FLOW FROM COMPUTATION POINT CPCD4C. ROUTED FLOW FROM DIVERSION
1847          KM   POINT AT BASELINE ROAD WITH RUNOFF FROM SUB-BASIN CD3C
1848          HC       3
1849          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   7       WC16B
               V
               V
  25       RRHV1
               .
               .
  31           .        WC17B
               .            V
               .            V
  40           .        RRHV2
               .            .
               .            .
  46       CPHV1............
               V
               V
  49       RRHV3
               V
               V
  55       RRHV4
               .
               .
  61           .        WC18B
               .            V
               .            V
  70           .        RRHV5
               .            .
               .            .
  76           .            .        WC19B
               .            .            V
               .            .            V
  85           .            .        RRHV6
               .            .            .
               .            .            .
  91           .            .            .        PM39
               .            .            .          .
               .            .            .          .
 100       CPHV2.......................................
               V
               V
 103       RRHV7
```

```
                .
                .
109             .        WC20B
                .           V
                .           V
118             .       RRHV8
                .           .
                .           .
124        CPHV3............
                V
                V
127        RRHV9
                .
                .
133             .       WC21B
                .           V
                .           V
142             .      RRHV10
                .           .
                .           .
148             .           .        PM4B
                .           .          .
                .           .          .
157        CPHV4........................
                V
                V
160       RRHV11
                .
                .
166             .       WC22B
                .           V
                .           V
175             .      RRHV12
                .           .
                .           .
181        CPHV5............
                V
                V
184       RRHV13
                .
                .
190             .       WC23B
                .           V
                .           V
199             .      RRHV14
                .           .
                .           .
205        CPHV6............
                V
                V
208       RRHV15
                .
                .
214             .        PM5B
                .           .
                .           .
223        CPHV7............
                V
```

```
                V
226       RRHV16
                .
                .
232             .       A43A2B
                .           V
                .           V
241             .       RRHV17
                .           .
                .           .
247        CPHV8............
                V
                V
250       RRHV18
                .
                .
256             .       NWSM1B
                .           V
                .           V
265             .       RR43B1
                .           V
                .           V
271             .       RR43B2
                .           .
                .           .
277             .           .       A43A1B
                .           .           .
                .           .           .
286             .        CPHV9............
                .           V
                .           V
289             .       RRHV19
                .           .
                .           .
295       CPHV10...........
                V
                V
298       RRHV20
                .
                .
304             .        ED47B
                .           .
                .           .
314       CPHV11...........
                .
                .
321             .-------> DIR55B
318       DFED47
                V
                V
324       RRHV21
                V
                V
331       RRHV22
                .
                .
338             .        IR59B
                .           .
```

```
                .          .
347     CPHV12............
                .
                .
361             .-------> RCHV12
351     DIHV12
                .
                .
366             .          .<------- DIR55B
364             .     REED47
                .          V
                .          V
367             .     RRHV23
                .          .
                .          .
373             .          .      IR55B
                .          .          .
                .          .          .
382             .     CIR55B............
                .          .
                .          .
392             .          .-------> RCIREB
386             .     DIR55B
                .          .
                .          .
395             .          .      IR62B
                .          .          .
                .          .          .
404             .          .          .      DR43C
                .          .          .          .
                .          .          .          .
425             .          .          .          .-------> RDR43C
422             .          .          .      DDR43C
                .          .          .          V
                .          .          .          V
428             .          .          .      ROA51B
                .          .          .          V
                .          .          .          V
434             .          .          .      ROA51B
                .          .          .          .
                .          .          .          .
440             .          .          .          .      OA51B
                .          .          .          .          .
                .          .          .          .          .
457             .          .          .      COA51B............
                .          .          .          .
                .          .          .          .
464             .          .          .          .-------> DOA55C
461             .          .          .      DFO51B
                .          .          .          V
                .          .          .          V
467             .          .          .      RE55B
                .          .          .          .
                .          .          .          .
473             .          .          .          .      ER55B
                .          .          .          .          .
                .          .          .          .          .
482             .          .          .      CER55B............
```

```
                .         .         .         V
                .         .         .         V
486             .         .         .      RE59B
                .         .         .         .
                .         .         .         .
492             .         .         .         .      ER59B
                .         .         .         .         .
                .         .         .         .         .
501             .         .         .     CER59B.........
                .         .         .         V
                .         .         .         V
505             .         .         .     RIR63B
                .         .         .         .
                .         .         .         .
513             .         .         .         .      IR63B
                .         .         .         .         .
                .         .         .         .         .
522             .         .     CIR63B.......................
                .         .         .
                .         .         .
533             .         .         .-------> RIR63B
526             .         .     DIR63B
                .         .         .
                .         .         .
536     CDIVER......................
                .
                .
540             .      SA19C
                .         .
                .         .
561             .         .-------> SA19C
559             .     DSA19C
                .         V
                .         V
564             .     RR23C1
                .         V
                .         V
570             .     RR23C2
                .         V
                .         V
576             .     RR23C3
                .         .
                .         .
582             .         .     CR23C
                .         .         .
                .         .         .
591             .     CPC23C............
                .         V
                .         V
594             .      RF27C
                .         .
                .         .
600             .         .     RR27C
                .         .         .
                .         .         .
609             .     CPR27C............
                .         V
                .         V
```

```
613          .     RR35C1
             .        .
             .        .
619          .        .     BR19C
             .        .        V
             .        .        V
628          .        .     RRS27C
             .        .        .
             .        .        .
634          .        .        .     SA27C
             .        .        .        .
             .        .        .        .
643          .        .     CPS27C............
             .        .        V
             .        .        V
646          .        .     RR35C3
             .        .        .
             .        .        .
652          .     CPR35C............
             .        .
             .        .
655          .        .      SM5C
             .        .        V
             .        .        V
664          .        .      RSM7
             .        .        .
             .        .        .
670          .        .        .     SMA15C
             .        .        .        .
             .        .        .        .
679          .        .     CPS15C............
             .        .        V
             .        .        V
682          .        .     RSM19C
             .        .        .
             .        .        .
688          .        .        .     SMA19C
             .        .        .        .
             .        .        .        .
697          .        .     CPS19C............
             .        .        V
             .        .        V
700          .        .     RRB27C
             .        .        .
             .        .        .
706          .        .        .      SM1C
             .        .        .        .
             .        .        .        .
715          .        .        .        .      SM1AC
             .        .        .        .        .
             .        .        .        .        .
724          .        .        .      CSM1............
             .        .        .        V
             .        .        .        V
728          .        .        .      RSM1
             .        .        .        .
             .        .        .        .
734          .        .        .        .      SM2C
```

```
743   .   .   .   CSM2............
      .   .   .      V
      .   .   .      V
747   .   .   .   RDENT
      .   .   .      V
      .   .   .      V
754   .   .   .   RSM2
      .   .   .      .
      .   .   .      .
760   .   .   .      .      SM3C
      .   .   .      .        .
      .   .   .      .        .
769   .   .   .   CSM3............
      .   .   .      V
      .   .   .      V
773   .   .   .   RSM3
      .   .   .      .
      .   .   .      .
779   .   .   .      .      SM4C
      .   .   .      .        V
      .   .   .      .        V
788   .   .   .      .      RSM4
      .   .   .      .        .
      .   .   .      .        .
794   .   .   .      .        .      DRW2C
      .   .   .      .        .        .
      .   .   .      .        .        .
803   .   .   .      .        .        .      DRWC1C
      .   .   .      .        .        .        .
      .   .   .      .        .        .        .
812   .   .   .   CSM4..................................
      .   .   .      V
      .   .   .      V
816   .   .   .   RSM5
      .   .   .      .
      .   .   .      .
822   .   .   .      .      DR1C
      .   .   .      .        .
      .   .   .      .        .
831   .   .   .      .        .      WC1A
      .   .   .      .        .        V
      .   .   .      .        .        V
840   .   .   .      .        .      RSM6
      .   .   .      .        .        .
      .   .   .      .        .        .
846   .   .   .      .        .        .      DR2C
      .   .   .      .        .        .        .
      .   .   .      .        .        .        .
855   .   .   .   CPDR2C...............................
      .   .   .      V
      .   .   .      V
859   .   .   .   RRB27C
      .   .   .      .
      .   .   .      .
865   .   .   .      .      BR27C
      .   .   .      .        .
```

```
874     .       .       CPB27C.......................
        .       .          V
        .       .          V
878     .       .       RR35C2
        .       .          .
        .       .          .
884     .       .          .       RR35C
        .       .          .          .
        .       .          .          .
893     .   CPR35C.........................
        .       V
        .       V
897     .   RRS37C
        .       .
        .       .
903     .       .       SA37C
        .       .          .
        .       .          .
912     .   CPS37C............
        .       V
        .       V
916     .   RAV431
        .       .
        .       .
922     .       .       AVR43C
        .       .          .
        .       .          .
931     .   CAV43C............
        .       .
        .       .
935     .       .        WC2A
        .       .          V
        .       .          V
944     .       .       RD27.1
        .       .          .
        .       .          .
950     .       .          .     WC2.1A
        .       .          .        V
        .       .          .        V
959     .       .          .     RD27.2
        .       .          .        .
        .       .          .        .
965     .       .       CD27.1............
        .       .          V
        .       .          V
968     .       .       RD27.3
        .       .          .
        .       .          .
974     .       .          .       WC3A
        .       .          .        V
        .       .          .        V
983     .       .          .     RD27.4
        .       .          .        .
        .       .          .        .
989     .       .       CD27.2............
        .       .          V
        .       .          V
```

```
992          .          .      RD27.5
             .          .          .
             .          .          .
998          .          .          .        WC4A
             .          .          .           V
             .          .          .           V
1007         .          .          .      RD27.6
             .          .          .           .
             .          .          .           .
1013         .          .      CD27.3............
             .          .          V
             .          .          V
1016         .          .      RD27.7
             .          .          .
             .          .          .
1022         .          .          .       DR27C
             .          .          .           .
             .          .          .           .
1031         .          .      CD27.4............
             .          .          V
             .          .          V
1035         .          .      RB35C2
             .          .          .
             .          .          .
1041         .          .          .      BR35C2
             .          .          .           .
             .          .          .           .
1050         .          .      CPB352............
             .          .          .
             .          .          .
1054         .          .          .      BR35C1
             .          .          .           .
             .          .          .           .
1063         .          .      CPB352............
             .          .          V
             .          .          V
1066         .          .      RAV432
             .          .          V
             .          .          V
1073         .          .      RAV433
             .          .          .
             .          .          .
1080         .      CAV43C............
             .          V
             .          V
1084         .      RVR471
             .          .
             .          .
1090         .          .       WC5A
             .          .          V
             .          .          V
1099         .          .      RD35.1
             .          .          .
             .          .          .
1105         .          .          .        WC6A
             .          .          .           V
             .          .          .           V
1114         .          .          .      RD35.2
```

```
                .         .         .         .
                .         .         .         .
1120            .         .   CD35.1...........
                .         .       V
                .         .       V
1123            .         .   RD35.3
                .         .       .
                .         .       .
1129            .         .       .     WC7A
                .         .       .       V
                .         .       .       V
1138            .         .       .   RD35.4
                .         .       .       .
                .         .       .       .
1144            .         .       .       .     WC8A
                .         .       .       .       V
                .         .       .       .       V
1153            .         .       .       .   RD35.5
                .         .       .       .       .
                .         .       .       .       .
1159            .         .       .   CD35.3...........
                .         .       .       V
                .         .       .       V
1162            .         .       .   RD35.6
                .         .       .       .
                .         .       .       .
1168            .         .       .       .     WC9A
                .         .       .       .       V
                .         .       .       .       V
1177            .         .       .       .   RD35.7
                .         .       .       .       .
                .         .       .       .       .
1183            .         .       .       .       .     WC10A
                .         .       .       .       .       V
                .         .       .       .       .       V
1192            .         .       .       .       .   RD35.8
                .         .       .       .       .       .
                .         .       .       .       .       .
1198            .         .       .       .   CD35.5...........
                .         .       .       .       V
                .         .       .       .       V
1201            .         .       .       .   RD35.9
                .         .       .       .       .
                .         .       .       .       .
1207            .         .       .       .       .     WC11A
                .         .       .       .       .       V
                .         .       .       .       .       V
1216            .         .       .       .       .   RD3510
                .         .       .       .       .       .
                .         .       .       .       .       .
1222            .         .       .       .       .       .     WC12A
                .         .       .       .       .       .       V
                .         .       .       .       .       .       V
1231            .         .       .       .       .       .   RD3511
                .         .       .       .       .       .       .
                .         .       .       .       .       .       .
1237            .         .       .       .       .   CD35.7...........
                .         .       .       .       .       V
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                                                                  V
1240                                                           RD3512
                                                                  .
                                                                  .
1246                                                      CD35.6............
                                                                  V
                                                                  V
1249                                                      RD3513
                                                                  .
                                                                  .
1255                                           CD35.4............
                                                              V
                                                              V
1258                                           RD3514
                                                              .
                                                              .
1254                                                      WC15A
                                                                  V
                                                                  V
1273                                                      RD3515
                                                                  .
                                                                  .
1279                                                           PM2A
                                                                  .
                                                                  .
1288                                                      CD35.8............
                                                                  V
                                                                  V
1291                                                      RD3516
                                                                  .
                                                                  .
1297                                                           WC13A
                                                                  V
                                                                  V
1306                                                           RD3517
                                                                  .
                                                                  .
1312                                                                  WC14A
                                                                          V
                                                                          V
1321                                                                  RD3518
                                                                          .
                                                                          .
1327                                                                          PM1A
                                                                                  .
                                                                                  .
1336                                                      CD35.9.................................
                                                                  V
                                                                  V
1340                                                      RD3519
                                                                  .
                                                                  .
1346                                                           DR35C
                                                                  .
                                                                  .
1355                                       CD35.2.................................
                                                  V
                                                  V
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1359          .          .      RB43C1
              .          .          .
              .          .          .
1365          .          .          .      SMA43C
              .          .          .          V
              .          .          .          V
1374          .          .          .      RB43C2
              .          .          .          .
              .          .          .          .
1380          .          .          .          .      BR43C
              .          .          .          .          .
              .          .          .          .          .
1389          .          .      CBR43C.......................
              .          .          V
              .          .          V
1392          .          .      RVR472
              .          .          .
              .          .          .
1398          .          .          .      VR47C
              .          .          .          .
              .          .          .          .
1407          .     CVR47C.......................
              .          V
              .          V
1411          .     RBR511
              .          .
              .          .
1417          .          .      AVR51C
              .          .          V
              .          .          V
1426          .          .      RBR512
              .          .          .
              .          .          .
1432          .          .          .      BR51C
              .          .          .          .
              .          .          .          .
1441          .     CB51C .......................
              .          V
              .          V
1445          .     RB1591
              .          .
              .          .
1451          .          .      AVR55C
              .          .          V
              .          .          V
1460          .          .      RB1592
              .          .          .
              .          .          .
1466          .          .          .      VR59C
              .          .          .          V
              .          .          .          V
1475          .          .          .      RB1593
              .          .          .          .
              .          .          .          .
1483          .          .          .          .      BR159C
              .          .          .          .          .
              .          .          .          .          .
1490          .     CB159C.....................................
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                .          V
                .          V
1494            .     RBR163
                .          .
                .          .
1502            .          .          .<------- RDR43C
1500            .          .     RET43C
                .          .          V
                .          .          V
1503            .          .     RS51C
                .          .          .
                .          .          .
1509            .          .          .      SM51C
                .          .          .          .
                .          .          .          .
1518            .          .     CS51C............
                .          .          V
                .          .          V
1521            .          .     RB2591
                .          .          V
                .          .          V
1528            .          .     RB2592
                .          .          .
                .          .          .
1535            .          .          .      BR259C
                .          .          .          .
                .          .          .          .
1544            .          .     CB259C............
                .          .          .
                .          .          .
1550            .          .          .          .<------- DOA55C
1548            .          .          .      DOA55C
                .          .          .          V
                .          .          .          V
1551            .          .          .      RO55C
                .          .          .          .
                .          .          .          .
1558            .          .          .          .      OA55C
                .          .          .          .          .
                .          .          .          .          .
1567            .          .          .      CPO55C............
                .          .          .          V
                .          .          .          V
1571            .          .          .      RD57C
                .          .          .          .
                .          .          .          .
1577            .          .          .          .      DR57C
                .          .          .          .          .
                .          .          .          .          .
1586            .          .          .      CDR57C............
                .          .          .          V
                .          .          .          V
1590            .          .          .      RD59C
                .          .          .          .
                .          .          .          .
1596            .          .          .          .      DR59C
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1605   .        .        .     CDR59C............
       .        .        .        V
       .        .        .        V
1609   .        .        .     RB259
       .        .        .        .
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1615   .        .     CB259C............
       .        .        V
       .        .        V
1619   .        .     RB1631
       .        .        .
       .        .        .
1625   .        .        .     BR163C
       .        .        .        .
       .        .        .        .
1634   .        .        .        .     BR263C
       .        .        .        .        .
       .        .        .        .        .
1643   .     CB163C.................................
       .        V
       .        V
1647   .     RCD1C
       .        .
       .        .
1653   .        .     BR67C
       .        .        V
       .        .        V
1662   .        .     RCD1C2
       .        .        .
       .        .        .
1668   .        .        .     CD1C
       .        .        .        .
       .        .        .        .
1677   .     CPCD1C........................
       .        V
       .        V
1681   .     RCD2C1
       .        .
       .        .
1687   .        .     CD2C
       .        .        .
       .        .        .
1696   .     CCD2C............
       .        .
       .        .
1702   .        .        .<------- RIR63B
1700   .        .     RIR63B
       .        .        V
       .        .        V
1703   .        .     RIR65C
       .        .        .
       .        .        .
1709   .        .        .     IR65C
       .        .        .        .
       .        .        .        .
1719   .        .     CIR65C............
       .        .        V
       .        .        V
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1723          .          .      RIRDC
              .          .        .
              .          .        .
1732          .          .        .-------> RIR65C
1729          .          .     DIIRDC
              .          .        .
              .          .        .
1735          .          .        .       IRDC
              .          .        .         .
              .          .        .         .
1744          .          .      CIRDC............
              .          .        V
              .          .        V
1748          .          .     RIRSMC
              .          .        .
              .          .        .
1754          .          .        .      IRSMC
              .          .        .         .
              .          .        .         .
1763          .          .     CIRSMC............
              .          .        V
              .          .        V
1766          .          .     RCD2C2
              .          .        .
              .          .        .
1772          .       CCD2C............
              .          V
              .          V
1776          .       RPOND
              .          V
              .          V
1783          .       RBASE
              .          .
              .          .
1793          .          .-------> REDIVE
1790          .      DIBASE
              .          V
              .          V
1796          .      RCD3C1
              .          .
              .          .
1803          .          .      A67AC
              .          .        V
              .          .        V
1812          .          .     RCD4C1
              .          .        .
              .          .        .
1818          .          .        .       CD4C
              .          .        .         .
              .          .        .         .
1827          .          .     CPCD4C............
              .          .        V
              .          .        V
1830          .          .     RCD3C2
              .          .        .
              .          .        .
1836          .          .        .       CD3C
              .          .        .         .
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1845          .      CPCD3C.......................

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1*****************************************                    ************************************
*                                       *                    *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *                    *   U.S. ARMY CORPS OF ENGINEERS
*            SEPTEMBER 1990             *                    *   HYDROLOGIC ENGINEERING CENTER
*             VERSION 4.0               *                    *        609 SECOND STREET
*                                       *                    *      DAVIS. CALIFORNIA 95616
*  RUN DATE  WED. OCT 02 1991           *                    *        (916) 756-1104
*  RUN TIME  13:45:19                   *                    *
*                                       *                    *
*****************************************                    ************************************
```

LAVEEN ADMS (FINAL HEC-1) 100-YR 24-HR STORM — CBA FILE # 40916-02-30
HIDDEN VALLEY WATERSHED/CHAMPION DRAIN WATERSHED
INPUT FILE NAME CHAMPION24 — DATE: SEPTEMBER 27,1991
24-HOUR SCS TYPE II RAINFALL

```
5 IO        OUTPUT CONTROL VARIABLES
                 IPRNT          5  PRINT CONTROL
                 IPLOT          0  PLOT CONTROL
                 OSCAL         0.  HYDROGRAPH PLOT SCALE

  IT        HYDROGRAPH TIME DATA
                  NMIN          5  MINUTES IN COMPUTATION INTERVAL
                 IDATE      1   0  STARTING DATE
                 ITIME       0000  STARTING TIME
                    NO        300  NUMBER OF HYDROGRAPH ORDINATES
                NODATE      2   0  ENDING DATE
                NOTIME       0055  ENDING TIME
                 ICENT         19  CENTURY MARK

            COMPUTATION INTERVAL    0.08 HOURS
                 TOTAL TIME BASE   24.92 HOURS

      ENGLISH UNITS
          DRAINAGE AREA          SQUARE MILES
          PRECIPITATION DEPTH    INCHES
          LENGTH, ELEVATION      FEET
          FLOW                   CUBIC FEET PER SECOND
          STORAGE VOLUME         ACRE-FEET
          SURFACE AREA           ACRES
          TEMPERATURE            DEGREES FAHRENHEIT
1
                                   RUNOFF SUMMARY
                              FLOW IN CUBIC FEET PER SECOND
                           TIME IN HOURS,  AREA IN SQUARE MILES

                                PEAK   TIME OF    AVERAGE FLOW FOR MAXIMUM PERIOD     BASIN    MAXIMUM    TIME OF
     OPERATION      STATION     FLOW    PEAK                                          AREA     STAGE    MAX STAGE
                                                   6-HOUR     24-HOUR     72-HOUR
```

HYDROGRAPH AT									
+	WC16B	33.	12.08	4.	1.	1.	0.02		
ROUTED TO									
+	RRHV1	32.	12.17	4.	1.	1.	0.02		
+								1141.45	12.17
HYDROGRAPH AT									
+	WC17B	35.	12.17	5.	1.	1.	0.03		
ROUTED TO									
+	RRHV2	35.	12.17	5.	1.	1.	0.03		
+								1140.32	12.17
2 COMBINED AT									
+	CPHV1	67.	12.17	9.	2.	2.	0.06		
ROUTED TO									
+	RRHV3	66.	12.17	9.	2.	2.	0.06		
+								1137.82	12.17
ROUTED TO									
+	RRHV4	65.	12.25	9.	2.	2.	0.06		
+								1141.72	12.25
HYDROGRAPH AT									
+	WC18B	72.	12.17	9.	2.	2.	0.06		
ROUTED TO									
+	RRHV5	71.	12.17	9.	2.	2.	0.06		
+								1136.73	12.17
HYDROGRAPH AT									
+	WC19B	350.	12.08	44.	14.	13.	0.21		
ROUTED TO									
+	RRHV6	349.	12.08	44.	14.	13.	0.21		
+								1138.57	12.08
HYDROGRAPH AT									
+	PM3B	46.	12.17	5.	1.	1.	0.06		
4 COMBINED AT									
+	CPHV2	516.	12.08	67.	20.	19.	0.39		
ROUTED TO									
+	RRHV7	508.	12.17	67.	20.	19.	0.39		
+								1127.74	12.17
HYDROGRAPH AT									
+	WC20B	21.	12.08	3.	1.	1.	0.01		
ROUTED TO									
+	RRHV8	21.	12.17	3.	1.	1.	0.01		
+								1132.45	12.17
2 COMBINED AT									
+	CPHV3	528.	12.17	70.	20.	20.	0.40		

ROUTED TO									
+	RRHV9	523.	12.17	70.	20.	20.	0.40		
+								1123.09	12.17
HYDROGRAPH AT									
+	WC21B	27.	12.17	4.	1.	1.	0.02		
ROUTED TO									
+	RRHV10	26.	12.25	4.	1.	1.	0.02		
+								1129.29	12.25
HYDROGRAPH AT									
+	PM4B	151.	12.08	17.	5.	5.	0.14		
3 COMBINED AT									
+	CPHV4	695.	12.17	91.	26.	25.	0.57		
ROUTED TO									
+	RRHV11	692.	12.17	91.	26.	25.	0.57		
+								1118.75	12.17
HYDROGRAPH AT									
+	WC22B	9.	12.08	1.	0.	0.	0.01		
ROUTED TO									
+	RRHV12	9.	12.25	1.	0.	0.	0.01		
+								1123.61	12.25
2 COMBINED AT									
+	CPHV5	700.	12.17	92.	26.	25.	0.57		
ROUTED TO									
+	RRHV13	686.	12.17	92.	26.	25.	0.57		
+								1115.86	12.17
HYDROGRAPH AT									
+	WC23B	604.	12.17	97.	32.	31.	0.40		
ROUTED TO									
+	RRHV14	604.	12.17	97.	32.	31.	0.40		
+								1121.74	12.17
2 COMBINED AT									
+	CPHV6	1290.	12.17	189.	58.	56.	0.97		
ROUTED TO									
+	RRHV15	1217.	12.25	188.	58.	56.	0.97		
+								1106.76	12.25
HYDROGRAPH AT									
+	PM5B	134.	12.25	18.	5.	5.	0.13		
2 COMBINED AT									
+	CPHV7	1351.	12.25	207.	63.	61.	1.10		
ROUTED TO									
+	RRHV16	1345.	12.33	207.	63.	61.	1.10		

								1098.72	12.33
HYDROGRAPH AT	A43A2B	127.	12.17	18.	5.	5.	0.09		
ROUTED TO	RRHV17	123.	12.17	18.	5.	5.	0.09		
								1099.44	12.17
2 COMBINED AT	CPHV8	1450.	12.33	224.	69.	66.	1.19		
ROUTED TO	RRHV18	1325.	12.50	224.	68.	65.	1.19		
								1087.18	12.50
HYDROGRAPH AT	NWSM1B	168.	12.08	28.	9.	9.	0.13		
ROUTED TO	RR43B1	166.	12.17	28.	9.	9.	0.13		
								1168.55	12.17
ROUTED TO	RR43B2	161.	12.17	28.	9.	9.	0.13		
								1118.16	12.17
HYDROGRAPH AT	A43A1B	235.	12.08	25.	7.	7.	0.17		
2 COMBINED AT	CPHV9	382.	12.08	52.	16.	16.	0.30		
ROUTED TO	RRHV19	348.	12.33	52.	16.	16.	0.30		
								1091.34	12.33
2 COMBINED AT	CPHV10	1622.	12.50	276.	84.	81.	1.49		
ROUTED TO	RRHV20	1541.	12.58	276.	84.	81.	1.49		
								1076.16	12.58
HYDROGRAPH AT	ED47B	1159.	12.08	112.	31.	30.	0.81		
2 COMBINED AT	CPHV11	1601.	12.58	388.	115.	110.	2.30		
DIVERSION TO	DIR55B	472.	12.58	97.	27.	26.	2.30		
HYDROGRAPH AT	DFED47	1129.	12.58	291.	88.	85.	2.30		
ROUTED TO	RRHV21	1050.	12.83	290.	87.	83.	2.30		

+								1060.55	12.83
ROUTED TO									
+	RRHV22	977.	13.25	290.	93.	90.	2.30		
+								1040.00	13.25
HYDROGRAPH AT									
+	IR59B	435.	12.67	87.	22.	21.	0.66		
2 COMBINED AT									
+	CPHV12	1182.	13.17	376.	115.	111.	2.96		
DIVERSION TO									
+	RCHV12	1182.	0.08	376.	115.	111.	2.96		
HYDROGRAPH AT									
+	DIHV12	0.	0.08	0.	0.	0.	2.96		
HYDROGRAPH AT									
+	REED47	472.	12.58	97.	27.	26.	0.00		
ROUTED TO									
+	RRHV23	363.	13.75	93.	26.	25.	0.00		
+								1061.34	13.75
HYDROGRAPH AT									
+	IR55B	415.	12.50	73.	19.	18.	0.53		
2 COMBINED AT									
+	CIR55B	429.	13.67	163.	45.	44.	0.53		
DIVERSION TO									
+	RCIREB	429.	0.08	163.	45.	44.	0.53		
HYDROGRAPH AT									
+	DIR55B	0.	0.08	0.	0.	0.	0.53		
HYDROGRAPH AT									
+	IR62B	431.	12.50	87.	22.	21.	0.55		
HYDROGRAPH AT									
+	DR43C	1025.	12.33	152.	44.	42.	0.94		
DIVERSION TO									
+	RDR43C	906.	12.00	128.	38.	36.	0.94		
HYDROGRAPH AT									
+	DDR43C	119.	12.00	24.	6.	6.	0.94		
ROUTED TO									
+	ROA51B	115.	13.33	24.	6.	6.	0.94		
+								1041.42	13.33
ROUTED TO									
+	ROA51B	67.	15.75	21.	6.	6.	0.94		
+								1037.30	15.75
HYDROGRAPH AT									

+		OA51B	1334.	12.50	223.	60.	58.	1.37		
	2 COMBINED AT								
+		COA51B	1334.	12.50	237.	66.	63.	2.31		
	DIVERSION TO								
+		DOA55C	711.	12.50	126.	35.	33.	2.31		
	HYDROGRAPH AT								
+		DFO51B	623.	12.50	111.	31.	30.	2.31		
	ROUTED TO								
+		RE55B	443.	13.83	107.	30.	29.	2.31		
+									1029.97	13.83
	HYDROGRAPH AT								
+		ER55B	207.	12.67	54.	13.	13.	0.25		
	2 COMBINED AT								
+		CER55B	511.	13.75	155.	44.	42.	2.56		
	ROUTED TO								
+		RE59B	440.	14.50	154.	43.	42.	2.56		
+									1025.96	14.50
	HYDROGRAPH AT								
+		ER59B	206.	12.58	42.	10.	10.	0.28		
	2 COMBINED AT								
+		CER59B	452.	14.42	194.	54.	52.	2.84		
	ROUTED TO								
+		RIR63B	425.	15.00	190.	53.	51.	2.84		
+									1021.48	15.00
	HYDROGRAPH AT								
+		IR63B	94.	12.50	19.	5.	5.	0.13		
	3 COMBINED AT								
+		CIR63B	526.	12.50	289.	79.	76.	3.52		
	DIVERSION TO								
+		RIR63B	45.	12.50	45.	18.	18.	3.52		
	HYDROGRAPH AT								
+		DIR63B	481.	12.50	244.	61.	59.	3.52		
	3 COMBINED AT								
+		CDIVER	481.	12.50	244.	61.	59.	7.01		
	HYDROGRAPH AT								
+		SA19C	316.	12.42	61.	16.	15.	0.48		
	DIVERSION TO								
+		SA19C	70.	12.42	28.	8.	8.	0.48		
	HYDROGRAPH AT								
+		DSA19C	246.	12.42	32.	8.	8.	0.48		

ROUTED TO	RR23C1	235.	12.58	32.	8.	8.	0.48	1075.97	12.58
ROUTED TO	RR23C2	189.	13.25	32.	8.	8.	0.48	1063.98	13.25
ROUTED TO	RR23C3	156.	13.92	32.	8.	8.	0.48	1053.12	13.92
HYDROGRAPH AT	CR23C	734.	12.17	85.	22.	21.	0.58		
2 COMBINED AT	CPC23C	734.	12.17	116.	30.	29.	1.06		
ROUTED TO	RF27C	489.	13.08	113.	30.	29.	1.06	1048.25	13.08
HYDROGRAPH AT	RR27C	460.	12.33	62.	16.	15.	0.48		
2 COMBINED AT	CPR27C	561.	13.00	173.	45.	44.	1.54		
ROUTED TO	RR35C1	490.	14.17	163.	45.	43.	1.54	1137.88	14.17
HYDROGRAPH AT	BR19C	364.	12.25	47.	12.	12.	0.39		
ROUTED TO	RRS27C	196.	14.58	47.	12.	12.	0.39	1085.53	14.58
HYDROGRAPH AT	SA27C	513.	12.33	82.	21.	20.	0.62		
2 COMBINED AT	CPS27C	513.	12.33	126.	33.	31.	1.01		
ROUTED TO	RR35C3	407.	13.08	123.	32.	31.	1.01	1041.53	13.08
2 COMBINED AT	CPR35C	611.	14.00	280.	77.	74.	2.55		
HYDROGRAPH AT	SM5C	164.	12.08	24.	7.	7.	0.20		
ROUTED TO	RSM7	130.	12.75	24.	7.	7.	0.20		

								1178.58	12.75
HYDROGRAPH AT	SMA15C	368.	12.17	43.	11.	10.	0.36		
2 COMBINED AT	CPS15C	372.	12.17	57.	18.	17.	0.56		
ROUTED TO	RSM19C	327.	12.50	57.	18.	17.	0.56	1139.93	12.50
HYDROGRAPH AT	SMA19C	59.	12.58	17.	4.	4.	0.16		
2 COMBINED AT	CPS19C	385.	12.50	84.	22.	21.	0.72		
ROUTED TO	RRB27C	270.	14.08	80.	21.	21.	0.72	1108.35	14.08
HYDROGRAPH AT	SM1C	2160.	12.25	341.	112.	109.	1.84		
HYDROGRAPH AT	SM1AC	253.	12.17	31.	9.	8.	0.28		
2 COMBINED AT	CSM1	2401.	12.17	373.	121.	117.	2.12		
ROUTED TO	RSM1	2321.	12.33	372.	121.	117.	2.12	1378.07	12.33
HYDROGRAPH AT	SM2C	3451.	12.17	561.	196.	189.	2.19		
2 COMBINED AT	CSM2	5481.	12.17	933.	317.	306.	4.31		
ROUTED TO	RDENT	146.	17.33	146.	86.	83.	4.31	1317.80	17.42
ROUTED TO	RSM2	146.	17.67	146.	83.	80.	4.31	1227.21	17.08
HYDROGRAPH AT	SM3C	455.	12.17	43.	11.	10.	0.48		
2 COMBINED AT	CSM3	533.	12.17	176.	94.	90.	4.79		
ROUTED TO	RSM3	496.	12.33	174.	92.	88.	4.79	1177.13	12.33

HYDROGRAPH AT	SM4C	168.	12.17	26.	7.	7.	0.24		
ROUTED TO	RSM4	164.	12.17	26.	7.	7.	0.24	1169.02	12.17
HYDROGRAPH AT	DRW2C	401.	12.33	71.	22.	22.	0.53		
HYDROGRAPH AT	DRWC1C	70.	12.33	14.	3.	3.	0.12		
4 COMBINED AT	CSM4	1117.	12.25	279.	125.	120.	5.68		
ROUTED TO	RSM5	1048.	12.42	278.	124.	119.	5.68	1159.48	12.42
HYDROGRAPH AT	DR1C	152.	12.25	22.	5.	5.	0.16		
HYDROGRAPH AT	WC1A	274.	12.25	49.	15.	15.	0.25		
ROUTED TO	RSM6	268.	12.25	49.	15.	15.	0.25	1147.73	12.25
HYDROGRAPH AT	DR2C	46.	12.17	5.	1.	1.	0.05		
4 COMBINED AT	CPDR2C	1469.	12.33	351.	146.	140.	6.14		
ROUTED TO	RRB27C	1179.	13.25	344.	131.	126.	6.14	1108.91	13.25
HYDROGRAPH AT	BR27C	594.	12.33	91.	23.	22.	0.78		
3 COMBINED AT	CPB27C	1282.	13.25	430.	175.	169.	7.64		
ROUTED TO	RR35C2	1036.	14.58	464.	153.	147.	7.64	1057.86	14.58
HYDROGRAPH AT	RR35C	1694.	12.50	277.	69.	67.	1.89		
3 COMBINED AT	CPR35C	1723.	12.58	934.	299.	288.	12.08		
ROUTED TO									

+	RRS37C	1577.	13.17	913.	289.	279.	12.08		
+								1026.94	13.17
HYDROGRAPH AT									
+	SA37C	571.	12.25	89.	25.	24.	0.59		
2 COMBINED AT									
+	CPS37C	1661.	13.17	947.	314.	302.	12.67		
ROUTED TO									
+	RAV431	1394.	14.33	929.	293.	282.	12.67		
+								1022.55	14.33
HYDROGRAPH AT									
+	AVR43C	1009.	12.25	143.	38.	36.	1.03		
2 COMBINED AT									
+	CAV43C	1401.	14.33	933.	330.	318.	13.70		
HYDROGRAPH AT									
+	WC2A	78.	12.25	14.	3.	3.	0.08		
ROUTED TO									
+	RD27.1	76.	12.25	14.	3.	3.	0.08		
+								1148.15	12.25
HYDROGRAPH AT									
+	WC2.1A	70.	12.17	8.	2.	2.	0.08		
ROUTED TO									
+	RD27.2	67.	12.25	8.	2.	2.	0.08		
+								1149.00	12.25
2 COMBINED AT									
+	CD27.1	143.	12.25	21.	5.	5.	0.16		
ROUTED TO									
+	RD27.3	141.	12.25	21.	5.	5.	0.16		
+								1142.56	12.25
HYDROGRAPH AT									
+	WC3A	15.	12.17	2.	1.	1.	0.01		
ROUTED TO									
+	RD27.4	15.	12.25	2.	1.	1.	0.01		
+								1142.18	12.25
2 COMBINED AT									
+	CD27.2	155.	12.25	24.	6.	6.	0.17		
ROUTED TO									
+	RD27.5	146.	12.33	24.	6.	6.	0.17		
+								1122.49	12.33
HYDROGRAPH AT									
+	WC4A	369.	12.17	52.	16.	15.	0.36		
ROUTED TO									

+	RD27.6	351.	12.33	52.	16.	15.	0.36		
+								1140.69	12.33
2 COMBINED AT									
+	CD27.3	498.	12.33	75.	21.	21.	0.53		
ROUTED TO									
+	RD27.7	483.	12.42	75.	21.	21.	0.53		
+								1116.30	12.42
HYDROGRAPH AT									
+	DR27C	157.	12.25	19.	5.	5.	0.23		
2 COMBINED AT									
+	CD27.4	608.	12.42	94.	26.	25.	0.76		
ROUTED TO									
+	RB35C2	398.	13.92	93.	25.	24.	0.76		
+								1069.76	13.92
HYDROGRAPH AT									
+	BR35C2	460.	12.58	99.	25.	24.	0.73		
2 COMBINED AT									
+	CPB352	483.	13.83	190.	50.	48.	1.49		
HYDROGRAPH AT									
+	BR35C1	361.	12.58	79.	20.	19.	0.55		
2 COMBINED AT									
+	CPB352	823.	12.58	269.	70.	67.	2.04		
ROUTED TO									
+	RAV432	750.	13.08	264.	69.	67.	2.04		
+								1042.14	13.08
ROUTED TO									
+	RAV433	646.	13.83	250.	69.	66.	2.04		
+								1029.06	13.83
2 COMBINED AT									
+	CAV43C	1910.	14.25	1180.	399.	384.	15.74		
ROUTED TO									
+	RVR471	1819.	14.75	1166.	388.	374.	15.74		
+								1018.01	14.75
HYDROGRAPH AT									
+	WC5A	290.	12.25	51.	16.	16.	0.42		
ROUTED TO									
-	RD35.1	239.	12.92	50.	16.	15.	0.42		
-								1125.88	12.92
HYDROGRAPH AT									
-	WC6A	17.	12.08	2.	0.	0.	0.01		
ROUTED TO									

+	RD35.2	7.	13.42	2	0.	0.	0.01		
+								1118.01	13.42
2 COMBINED AT									
+	CD35.1	242.	12.92	52.	16.	16.	0.43		
ROUTED TO									
+	RD35.3	229.	13.17	52.	16.	16.	0.43		
+								1090.25	13.17
HYDROGRAPH AT									
+	WC7A	57.	12.17	7.	2.	2.	0.05		
ROUTED TO									
+	RD35.4	51.	12.42	7.	2.	2.	0.05		
+								1126.41	12.42
HYDROGRAPH AT									
+	WC8A	307.	12.25	51.	16.	15.	0.35		
ROUTED TO									
+	RD35.5	287.	12.33	51.	16.	15.	0.35		
+								1137.78	12.33
2 COMBINED AT									
+	CD35.3	338.	12.33	58.	18.	17.	0.40		
ROUTED TO									
+	RD35.6	336.	12.42	58.	18.	17.	0.40		
+								1101.97	12.42
HYDROGRAPH AT									
+	WC9A	28.	12.17	4.	1.	1.	0.02		
ROUTED TO									
+	RD35.7	27.	12.25	4.	1.	1.	0.02		
+								1128.65	12.25
HYDROGRAPH AT									
+	WC10A	28.	12.08	4.	1.	1.	0.02		
ROUTED TO									
+	RD35.8	26.	12.17	4.	1.	1.	0.02		
+								1132.27	12.17
2 COMBINED AT									
+	CD35.5	52.	12.17	8.	2.	2.	0.04		
ROUTED TO									
+	RD35.9	50.	12.33	8.	2.	2.	0.04		
+								1115.17	12.33
HYDROGRAPH AT									
+	WC11A	295.	12.17	55.	18.	18.	0.29		
ROUTED TO									
+	RD3510	274.	12.25	55.	18.	18.	0.29		
+								1131.90	12.25

HYDROGRAPH AT									
+	WC12A	280.	12.17	37.	11.	11.	0.26		
ROUTED TO									
+	RD3511	262.	12.25	37.	11.	11.	0.26		
+								1143.99	12.25
2 COMBINED AT									
+	CD35.7	536.	12.25	92.	30.	29.	0.55		
ROUTED TO									
+	RD3512	499.	12.33	92.	30.	28.	0.55		
+								1122.15	12.33
2 COMBINED AT									
+	CD35.6	549.	12.33	100.	32.	30.	0.59		
ROUTED TO									
+	RD3513	530.	12.42	100.	32.	30.	0.59		
+								1101.99	12.42
2 COMBINED AT									
+	CD35.4	866.	12.42	158.	49.	47.	0.99		
ROUTED TO									
+	RD3514	808.	12.67	158.	49.	47.	0.99		
+								1193.75	12.67
HYDROGRAPH AT									
+	WC15A	411.	12.17	65.	22.	21.	0.36		
ROUTED TO									
+	RD3515	403.	12.17	65.	22.	21.	0.36		
+								1134.77	12.17
HYDROGRAPH AT									
+	PM2A	68.	12.17	9.	2.	2.	0.07		
2 COMBINED AT									
+	CD35.8	471.	12.17	74.	24.	23.	0.43		
ROUTED TO									
+	RD3516	455.	12.25	74.	24.	23.	0.43		
+								1123.33	12.25
HYDROGRAPH AT									
+	WC13A	16.	12.08	2.	1.	1.	0.01		
ROUTED TO									
+	RD3517	15.	12.33	2.	1.	1.	0.01		
+								1131.21	12.33
HYDROGRAPH AT									
+	WC14A	37.	12.17	5.	1.	1.	0.05		
ROUTED TO									
+	RD3518	32.	12.58	5.	1.	1.	0.05		

							1133.78	12.58
HYDROGRAPH AT	PM1A	54.	12.17	7.	2.	2.	0.07	
4 COMBINED AT	CD35.9	542.	12.25	88.	28.	27.	0.56	
ROUTED TO	RD3519	539.	12.25	88.	28.	27.	0.56	
							1102.22	12.25
HYDROGRAPH AT	DR35C	435.	12.42	63.	16.	15.	0.60	
4 COMBINED AT	CD35.2	1548.	12.50	360.	108.	104.	2.59	
ROUTED TO	RB43C1	1084.	13.83	358.	104.	100.	2.59	
							1041.92	13.83
HYDROGRAPH AT	SMA43C	168.	12.17	21.	5.	5.	0.13	
ROUTED TO	RB43C2	152.	12.33	21.	6.	5.	0.13	
							1043.99	12.33
HYDROGRAPH AT	BR43C	680.	12.50	138.	34.	33.	0.85	
3 COMBINED AT	CBR43C	1206.	13.75	511.	144.	139.	3.57	
ROUTED TO	RVR472	1147.	14.33	503.	140.	135.	3.57	
							1015.70	14.33
HYDROGRAPH AT	VR47C	727.	12.50	126.	32.	30.	0.89	
3 COMBINED AT	CVR47C	2828.	14.67	1698.	560.	539.	20.20	
ROUTED TO	RBR511	2672.	15.42	1671.	532.	513.	20.20	
							1013.28	15.42
HYDROGRAPH AT	AVR51C	244.	12.42	43.	11.	10.	0.28	
ROUTED TO	RBR512	162.	14.08	42.	11.	10.	0.28	
							1009.93	14.08
HYDROGRAPH AT	BR51C	505.	12.50	94.	23.	23.	0.70	

3 COMBINED AT									
+	CB51C	2728.	15.42	1714.	566.	546.	21.18		
ROUTED TO									
+	RB1591	2502.	16.67	1666.	528.	508.	21.18		
+								1006.45	16.67
HYDROGRAPH AT									
+	AVR55C	166.	12.58	36.	9.	9.	0.23		
ROUTED TO									
+	RB1592	104.	15.33	34.	9.	8.	0.23		
+								1003.60	15.33
HYDROGRAPH AT									
+	VR59C	176.	12.58	39.	10.	9.	0.25		
ROUTED TO									
+	RB1593	124.	14.33	37.	10.	10.	0.25		
+								1001.73	14.33
HYDROGRAPH AT									
+	BR159C	468.	12.58	91.	23.	22.	0.68		
4 COMBINED AT									
+	CB159C	2567.	16.67	1710.	569.	548.	22.34		
ROUTED TO									
+	RBR163	2499.	17.17	1699.	551.	530.	22.34		
+								998.80	17.17
HYDROGRAPH AT									
+	RET43C	906.	12.33	128.	38.	36.	0.00		
ROUTED TO									
+	RS51C	498.	13.83	126.	36.	35.	0.00		
+								1039.97	13.83
HYDROGRAPH AT									
+	SM51C	347.	12.67	75.	19.	18.	0.50		
2 COMBINED AT									
+	CS51C	568.	13.83	195.	55.	53.	0.50		
ROUTED TO									
+	RB2591	456.	14.83	189.	53.	51.	0.50		
+								1028.28	14.83
ROUTED TO									
+	RB2592	420.	15.50	185.	52.	50.	0.50		
+								1001.51	15.50
HYDROGRAPH AT									
+	BR259C	700.	12.58	132.	33.	32.	1.00		
2 COMBINED AT									
+	CB259C	702.	12.58	287.	85.	82.	1.50		

HYDROGRAPH AT								
+	DOA55C	711.	12.50	126.	35.	33.	0.00	
ROUTED TO								
+	RO55C	624.	13.08	123.	34.	33.	0.00	
+								1032.73 13.08
HYDROGRAPH AT								
+	OA55C	193.	12.42	33.	8.	8.	0.25	
2 COMBINED AT								
+	CPO55C	702.	13.00	154.	42.	41.	0.25	
ROUTED TO								
+	RD57C	554.	14.08	148.	41.	39.	0.25	
+								1029.62 14.08
HYDROGRAPH AT								
+	DR57C	72.	12.58	16.	4.	4.	0.12	
2 COMBINED AT								
+	CDR57C	566.	14.08	159.	45.	43.	0.37	
ROUTED TO								
+	RD59C	539.	14.33	158.	44.	43.	0.37	
+								1026.93 14.33
HYDROGRAPH AT								
+	DR59C	73.	12.50	15.	4.	4.	0.11	
2 COMBINED AT								
+	CDR59C	544.	14.33	170.	48.	46.	0.48	
ROUTED TO								
+	RB259	481.	14.67	168.	48.	46.	0.48	
+								1018.49 14.67
2 COMBINED AT								
+	CB259C	765.	14.67	452.	133.	128.	1.98	
ROUTED TO								
+	RB1631	735.	15.83	431.	128.	124.	1.98	
+								998.05 15.83
HYDROGRAPH AT								
+	BR163C	168.	12.58	36.	9.	9.	0.26	
HYDROGRAPH AT								
+	BR263C	319.	12.58	67.	17.	16.	0.50	
4 COMBINED AT								
+	CB163C	2946.	17.08	1998.	705.	679.	25.08	
ROUTED TO								
+	RCD1C	2878.	17.75	1984.	662.	637.	25.08	
+								994.89 17.75

HYDROGRAPH AT									
+	BR67C	98.	12.33	18.	5.	5.	0.13		
ROUTED TO									
+	RCD1C2	69.	13.67	17.	5.	5.	0.13		
+								993.33	13.67
HYDROGRAPH AT									
+	CD1C	407.	12.50	69.	17.	17.	0.47		
3 COMBINED AT									
+	CPCD1C	2881.	17.75	1987.	684.	659.	25.68		
ROUTED TO									
+	RCD2C1	2824.	18.67	1976.	632.	609.	25.68		
+								989.46	18.67
HYDROGRAPH AT									
+	CD2C	500.	12.50	92.	23.	22.	0.58		
2 COMBINED AT									
+	CCD2C	2824.	18.67	1976.	655.	631.	26.26		
HYDROGRAPH AT									
+	RIR63B	45.	11.83	45.	18.	18.	0.00		
ROUTED TO									
+	RIR65C	45.	13.17	45.	18.	17.	0.00		
+								5.81	13.58
HYDROGRAPH AT									
+	IR65C	90.	12.58	23.	6.	5.	0.17		
2 COMBINED AT									
+	CIR65C	134.	12.67	65.	23.	22.	0.17		
ROUTED TO									
+	RIRDC	129.	12.92	64.	23.	22.	0.17		
+								1014.15	12.92
DIVERSION TO									
+	RIR65C	98.	12.67	42.	16.	15.	0.17		
HYDROGRAPH AT									
+	DIIRDC	31.	12.67	22.	7.	7.	0.17		
HYDROGRAPH AT									
+	IRDC	235.	12.92	69.	17.	17.	0.52		
2 COMBINED AT									
+	CIRDC	266.	12.92	89.	24.	23.	0.69		
ROUTED TO									
+	RIRSMC	241.	13.83	85.	24.	23.	0.69		
+								1006.00	13.83
HYDROGRAPH AT									
+	IRSMC	173.	12.33	27.	7.	7.	0.25		

2 COMBINED AT	CIRSMC	251.	13.75	106.	30.	29.	0.94		
ROUTED TO	RCD2C2	244.	14.08	104.	30.	29.	0.94	988.06	14.08
2 COMBINED AT	CCD2C	2850.	18.67	1996.	685.	660.	27.20		
ROUTED TO	RPOND	2725.	19.00	1980.	621.	598.	27.20	986.81	19.00
ROUTED TO	RBASE	2722.	19.08	1979.	615.	593.	27.20	985.94	19.08
DIVERSION TO	REDIVE	1700.	19.08	1280.	396.	381.	27.20		
HYDROGRAPH AT	DIBASE	1022.	19.08	699.	220.	211.	27.20		
ROUTED TO	RCD3C1	1008.	19.67	697.	207.	199.	27.20	983.68	19.58
HYDROGRAPH AT	A67AC	379.	12.67	84.	21.	20.	0.61		
ROUTED TO	RCD4C1	344.	13.42	84.	21.	20.	0.61	984.60	13.42
HYDROGRAPH AT	CD4C	129.	12.58	26.	6.	6.	0.19		
2 COMBINED AT	CPCD4C	387.	13.33	109.	27.	26.	0.80		
ROUTED TO	RCD3C2	300.	14.92	105.	27.	26.	0.80	984.55	14.92
HYDROGRAPH AT	CD3C	337.	12.58	70.	18.	17.	0.48		
3 COMBINED AT	CPCD3C	1057.	19.58	722.	252.	243.	28.48		

*** NORMAL END OF HEC-1 ***

APPENDIX M

HEC-1 Input/Output Data
(SWSM.NEW24)

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1**************************************
*                                    *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*          SEPTEMBER 1990            *
*           VERSION 4.0              *
*                                    *
*  RUN DATE  WED. OCT 02 1991        *
*  RUN TIME  13:40:02                *
*                                    *
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*                                    *
*   U.S. ARMY CORPS OF ENGINEERS     *
*   HYDROLOGIC ENGINEERING CENTER    *
*         609 SECOND STREET          *
*      DAVIS, CALIFORNIA 95616       *
*          (916) 756-1104            *
*                                    *
*                                    *
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X     X  XXXXXXX   XXXXX          X
X     X  X       X     X        XX
X     X  X       X              X
XXXXXXX  XXXX    X       XXXXX  X
X     X  X       X              X
X     X  X       X     X        X
X     X  XXXXXXX   XXXXX        XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

1 HEC-1 INPUT PAGE 1

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID       LAVEEN ADMS 100-YEAR 24-HOUR SCS TYPE II RAINFALL  CBA FILE#40916-02-30 3
  2           ID       SOUTHWEST SOUTH MOUNTAIN WATERSHED (FINAL HEC-1)   SEPTEMBER 30. 1991
  3           ID       HEC-1 FILE NAME IS SWSM.NEW24
  4           IT       5                    300
  5           IO       5       0
              *DIAGRAM

  5           KK   SWSM1-LAND USE- NATURAL DESERT(MOUNTAIN)
  7           KM   SUB-BASIN SWSM1
  8           KM   24-HOUR SCS TYPE II RAINFALL WAS USED TO FINED TC & R FOR THIS BASIN
  9           KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
 10           BA   1.990
 11           IN      30
 12           KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 13           PB   4.158
 14           KM   THE FOLLOWING PC RECORD USED A 24-HR SCS TYPE STORM
 15           PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 16           PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
```

```
17        PC   .181   .204   .235   .283   .663   .735   .772   .799   .820   .838
18        PC   .854   .868   .880   .891   .902   .912   .921   .929   .937   .945
19        PC   .952   .959   .965   .972   .978   .984   .989   .995  1.000
20        LG   .150   .345  3.550   .686 60.000
21        UC   .483   .249
22        UA     0     3     5     8    12    20    43    75    90    96
23        UA   100

24        KK   RSWSM1
25        KM   ROUTE FLOW FROM SUB-BASIN SWSM1 TO COMPUTATION POINT SWSM4
26        RS     2   ELEV   1168
27        RC 0.040  0.050  0.040  8600   0.02   1174
28        RX     0    30    40    50    80   100   110   210
29        RY  1174  1172  1170  1168  1168  1170  1172  1174

30        KK   SWSM4
31        KM   SUB-BASIN SWSM4-LAND USE- NATURAL DESERT(HILLSLOPE)
32        KM   24-HOUR SCS TYPE II RAINFALL WAS USED TO FINED TC & R FOR THIS BASIN
33        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF .99
34        BA    .340
35        LG   .150   .350  3.750   .293   .000
36        UC   .583   .556
37        UA     0     3     5     8    12    20    43    75    90    96
38        UA   100

39        KK   CSWSM1
40        KM   COMBINE ROUTED FLOW FROM SUB-BASIN SWSM1 AND SWSM4
41        HC     2

42        KK   DSWSM4
43        KM   RUNOFF FROM COMPUTATION POINT CSWSM1 DRAINS OUTSIDE OF THE STUDY AREA
44        KM   HYDROGRAPH IS DIVERTED
45        DT   DIV.4
46        DI     0   100   500  1000  2000  2500  3000  3500
47        DO     0   100   500  1000  2000  2500  3000  3500
```



```
LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

48        KK   SWSM2
49        KM   SUB-BASIN SWSM2-LAND USE- NATURAL DESERT(HILLSLOPE.MOUNTAIN)
50        KM   24-HOUR SCS TYPE II RAINFALL WAS USED TO FINED TC & R FOR THIS BASIN
51        KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.00
52        BA    .440
53        IN     30
54        KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
55        PB   4.20
56        KM   THE FOLLOWING PC RECORD USED A 24-HR SCS TYPE STORM
57        PC   .000   .005   .011   .016   .022   .028   .035   .041   .048   .056
58        PC   .068   .071   .080   .089   .098   .109   .120   .133   .147   .163
59        PC   .181   .204   .235   .283   .663   .735   .772   .799   .820   .838
60        PC   .854   .868   .880   .891   .902   .912   .921   .929   .937   .945
61        PC   .952   .959   .965   .972   .978   .984   .989   .995  1.000
62        LG   .150   .263  3.100   .942 25.000
63        UC   .417   .330
64        UA     0     3     5     8    12    20    43    75    90    96
65        UA   100
```

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 66          KK   DSWSM2
 67          KM   RUNOFF FROM SUB-BASIN SWSM2 DRAINS OUTSIDE OF THE STUDY AREA.
 68          KM   HYDROGRAPH IS DIVERTED
 69          DT   DIV.2
 70          DI       0     100     200     500    1000    1500    2000    2500
 71          DO       0     100     200     500    1000    1500    2000    2500

 72          KK   SWSM3
 73          KM   SUB-BASIN SWSM3-LAND USE- NATURAL DESERT(HILLSLOPE)
 74          KM   24-HOUR SCS TYPE II RAINFALL WAS USED TO FINED TC & R FOR THIS BASIN
 75          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
 76          BA    .280
 77          IN      30
 78          KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
 79          PB   4.200
 80          KM   THE FOLLOWING PC RECORD USED A 24-HR SCS TYPE STORM
 81          PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
 82          PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
 83          PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
 84          PC    .854    .868    .880    .391    .902    .912    .921    .929    .937    .945
 85          PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
 86          LG    .150    .300   3.750    .633    .000
 87          UC    .617    .534
 88          UA       0       3       5       8      12      20      43      75      90      96
 89          UA     100

 90          KK   DSWSM3
 91          KM   RUNOFF FROM SUB-BASIN SWSM3 DRAINS OUTSIDE OF THE STUDY AREA.
 92          KM   HYDROGRAPH IS DIVERTED
 93          DT   DIV.3
 94          DI       0      50     200     300     400     500     700    1000
 95          DO       0      50     200     300     400     500     700    1000
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 96          KK   SWSM5
 97          KM   SUB-BASIN SWSM5-LAND USE- NATURAL DESERT(HILLSLOPE)
 98          KM   24-HOUR SCS TYPE II RAINFALL WAS USED TO FINED TC & R FOR THIS BASIN
 99          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
100          BA    .090
101          IN      30
102          KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
103          PB    4.20
104          KM   THE FOLLOWING PC RECORD USED A 24-HR SCS TYPE STORM
105          PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
106          PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
107          PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
108          PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
109          PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
110          LG    .150    .250   8.600    .066    .000
111          UC    .433    .516
112          UA       0       3       5       8      12      20      43      75      90      96
113          UA     100

114          KK   DSWSM5
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115     KM   RUNOFF FROM SUB-BASIN SWSM5 DRAINS OUTSIDE OF THE STUTY AREA.
116     KM   HYDROGRAPH IS DIVERTED
117     DT   DIV.5
118     DI      0      10      50      70     100     150     200     300
119     DO      0      10      50      70     100     150     200     300

120     KK   SWSM6
121     KM   SUB-BASIN SWSM6-LAND USE- NATURAL DESERT(HILLSLOPE,MOUNTAINS)
122     KM   24-HOUR SCS TYPE II RAINFALL WAS USED TO FINED TC & R FOR THIS BASIN
123     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF 1.00
124     BA    .950
125     IN      30
126     KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
127     PB    4.20
128     KM   THE FOLLOWING PC RECORD USED A 24-HR SCS TYPE STORM
129     PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
130     PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
131     PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
132     PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
133     PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
134     LG    .150    .316   4.950    .564  40.000
135     UC    .467    .357
136     UA       0       3       5       8      12      20      43      75      90      96
137     UA     100

138     KK   DSWSM6
139     KM   RUNOFF FROM SUB-BASIN SWSM6 DRAINS OUTSIDE OF THE STUDY AREA.
140     KM   HYDROGRAPH IS DIVERTED
141     DT   DIV.6
142     DI      0     100     500    1000    1500    2000    2500    3000
143     DO      0     100     500    1000    1500    2000    2500    3000
```



```
LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

144     KK   SWSM7
145     KM   SUB-BASIN SWSM7-LAND USE- NATURAL DESERT(HILLSLOPE,MOUNTAIN)
146     KM   24-HOUR SCS TYPE II RAINFALL WAS USED TO FINED TC & R FOR THIS BASIN
147     KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
148     BA    .100
149     IN      30
150     KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
151     PB   4.200
152     KM   THE FOLLOWING PC RECORD USED A 24-HR SCS TYPE STORM
153     PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
154     PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
155     PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
156     PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
157     PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
158     UC    .183    .141
159     UA       0       3       5       8      12      20      43      75      90      96
160     UA     100

161     KK   DSWSM7
162     KM   RUNOFF FROM SUB-BASIN SWSM7 DRAINS OUTSIDE OF STUDY AREA.
163     KM   HYDROGRAPH IS DIVERTED
164     DT   DIV.7
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165          DI      0      50     100     200     500     700     800    1000
166          DO      0      50     100     200     500     700     800    1000

167          KK   SWSM8
168          KM   SUB-BASIN SWSM8-LAND USE- NATURAL DESERT(MOUNTAIN)
169          KM   24-HOUR SCS TYPE II RAINFALL WAS USED TO FINED TC & R FOR THIS BASIN
170          KM   THIS BASIN USED RAINFALL REDUCTION FACTOR OF1.00
171          BA    .030
172          IN      30
173          KM   RAINFALL DEPTH OF 4.20 WAS SPACIALLY REDUCED AS SHOWN BY THE PB RECORD
174          PB   4.200
175          KM   THE FOLLOWING PC RECORD USED A 24-HR SCS TYPE STORM
176          PC    .000    .005    .011    .016    .022    .028    .035    .041    .048    .056
177          PC    .068    .071    .080    .089    .098    .109    .120    .133    .147    .163
178          PC    .181    .204    .235    .283    .663    .735    .772    .799    .820    .838
179          PC    .854    .868    .880    .891    .902    .912    .921    .929    .937    .945
180          PC    .952    .959    .965    .972    .978    .984    .989    .995   1.000
181          UC    .150    .175
182          UA       0       3       5       8      12      20      43      75      90      96
183          UA     100

184          KK   DSWSM8
185          KM   RUNOFF FROM SUB-BASIN SWSM8 DRAINS OUTSIDE OF THE STUDY AREA.
186          KM   HYDROGRAPH IS DIVERTED
187          DT   DIV.8
188          DI       0      10      30      50      70      90     150
189          DO       0      10      30      50      70      90     150
190          ZZ
```

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   6       SWSM1
               V
               V
  24       RSWSM
               .
               .
  30           .       SWSM4
               .           .
               .           .
  39       CSWSM............
               .
               .
  45           .------->   DIV.4
  42       DSWSM
               .
               .
  48           .       SWSM2
               .           .
               .           .
  69           .           .------->   DIV.2
  56           .       DSWSM
               .           .
               .           .
```

```
 72          .          .       SWSM3
             .          .          .
             .          .          .
 93          .          .          .-------> DIV.3
 90          .          .       DSWSM
             .          .          .
             .          .          .
 96          .          .          .      SWSM5
             .          .          .          .
             .          .          .          .
117          .          .          .          .-------> DIV.5
114          .          .          .      DSWSM
             .          .          .          .
             .          .          .          .
120          .          .          .          .      SWSM6
             .          .          .          .          .
             .          .          .          .          .
141          .          .          .          .          .-------> DIV.6
138          .          .          .          .      DSWSM
             .          .          .          .          .
             .          .          .          .          .
144          .          .          .          .          .      SWSM7
             .          .          .          .          .          .
             .          .          .          .          .          .
164          .          .          .          .          .          .-------> DIV.7
161          .          .          .          .          .      DSWSM
             .          .          .          .          .          .
             .          .          .          .          .          .
167          .          .          .          .          .          .      SWSM8
             .          .          .          .          .          .          .
             .          .          .          .          .          .          .
187          .          .          .          .          .          .          .-------> DIV.8
184          .          .          .          .          .          .      DSWSM
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*************************************
*                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1) *
*          SEPTEMBER 1990           *
*           VERSION 4.0             *
*                                   *
* RUN DATE  WED. OCT 02 1991        *
* RUN TIME  13:40:02                *
*                                   *
*************************************
```

```
*************************************
*                                   *
*  U.S. ARMY CORPS OF ENGINEERS     *
*  HYDROLOGIC ENGINEERING CENTER    *
*        609 SECOND STREET          *
*     DAVIS. CALIFORNIA 95616       *
*        (916) 756-1104             *
*                                   *
*                                   *
*************************************
```

LAVEEN ADMS 100-YEAR 24-HOUR SCS TYPE II RAINFALL CBA FILE#40916-02-30 3
SOUTHWEST SOUTH MOUNTAIN WATERSHED (FINAL HEC-1) SEPTEMBER 30. 1991
HEC-1 FILE NAME IS SWSM.NEW24

```
 5 IO        OUTPUT CONTROL VARIABLES
                  IPRNT          5  PRINT CONTROL
                  IPLOT          0  PLOT CONTROL
                  OSCAL         0.  HYDROGRAPH PLOT SCALE
```

IT HYDROGRAPH TIME DATA

NMIN		5	MINUTES IN COMPUTATION INTERVAL
IDATE	1	0	STARTING DATE
ITIME		0000	STARTING TIME
NO		300	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	2	0	ENDING DATE
NDTIME		0055	ENDING TIME
ICENT		19	CENTURY MARK

COMPUTATION INTERVAL 0.08 HOURS
TOTAL TIME BASE 24.92 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	SWSM1	2683.	12.25	454.	152.	147.	1.99		
ROUTED TO	RSWSM	2410.	12.42	454.	152.	146.	1.99	1172.25	12.42
HYDROGRAPH AT	SWSM4	289.	12.33	47.	12.	11.	0.34		
2 COMBINED AT	CSWSM	2694.	12.42	501.	163.	157.	2.33		
DIVERSION TO	DIV.4	2694.	0.08	501.	163.	157.	2.33		
HYDROGRAPH AT	DSWSM	0.	0.08	0.	0.	0.	2.33		
HYDROGRAPH AT	SWSM2	421.	12.25	65.	20.	19.	0.44		
DIVERSION TO	DIV.2	421.	0.08	65.	20.	19.	0.44		
HYDROGRAPH AT	DSWSM	0.	0.08	0.	0.	0.	0.44		

	HYDROGRAPH AT						
+		SWSM3	191.	12.42	30.	8.	7.	0.28
	DIVERSION TO						
+		DIV.3	191.	0.08	30.	8.	7.	0.28
	HYDROGRAPH AT						
+		DSWSM	0.	0.08	0.	0.	0.	0.28
	HYDROGRAPH AT						
+		SWSM5	100.	12.25	18.	5.	4.	0.09
	DIVERSION TO						
+		DIV.5	100.	0.08	18.	5.	4.	0.09
	HYDROGRAPH AT						
+		DSWSM	0.	0.08	0.	0.	0.	0.09
	HYDROGRAPH AT						
+		SWSM6	1044.	12.25	181.	58.	56.	0.95
	DIVERSION TO						
+		DIV.6	1044.	0.08	181.	58.	56.	0.95
	HYDROGRAPH AT						
+		DSWSM	0.	0.08	0.	0.	0.	0.95
	HYDROGRAPH AT						
+		SWSM7	150.	12.08	19.	6.	6.	0.10
	DIVERSION TO						
+		DIV.7	150.	0.08	19.	6.	6.	0.10
	HYDROGRAPH AT						
+		DSWSM	0.	0.08	0.	0.	0.	0.10
	HYDROGRAPH AT						
+		SWSM8	43.	12.00	6.	2.	2.	0.03
	DIVERSION TO						
+		DIV.8	43.	0.08	6.	2.	2.	0.03
	HYDROGRAPH AT						
+		DSWSM	0.	0.08	0.	0.	0.	0.03

*** NORMAL END OF HEC-1 ***

APPENDIX N

Floppy Disk Containing HEC-1 Computer Files