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BUCKEYE/SUN VALLEY AREA DRAINAGE MASTER STUDY
TECHNICAL DATA NOTEBOOK

CONTRACT FCD 2002C027

VOLUME V-A2: AREA 3 HYDROLOGY REPORT

FINAL

PREPARED FOR

Flood Control District of Maricopa County

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Buckeye/Sun Valley Area Drainage Master Study

Contract FCD 2002C027

Technical Data Notebook

Volume V-A2: Area 3 Hydrology Report

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Prepared for

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E. Original Hydrology

Introduction

The following hydrologic analysis was the original hydrologic analysis that comprised the Area 3 Hydrology Report. The original hydrology was updated due to a study by Ayres and Associates that changed the alluvial fan apex points within Area 3 from which the hydrology was derived. The changes in apex points caused concentration points to be moved and sub-basins to shift. The hydrology used in Volume V-B: Area 3 Hydraulics Report and the PMF Report for Flood Retarding Structures are all based on the original hydrology. All portions of the original report that pertain to that study have been moved to this Appendix and a Table of Contents has been included to show the correlation with the portions of the study that were placed in this appendix to the current updated information in the report. The following Table E.1a shows the differences in the two hydrology sets.

Table E.1a

Peak Flow Comparison between Original and the Updated Alluvial Fan Data

Aluvial Fan Updates				Original (Pre-AF Updates)				
		100-YR 24-HR				100-YR 24-HR		
Station	Area [mi2]	Peak [cfs]	Unit Discharge [cfs/mi²]	Station	Area [mi2]	% Difference	Peak [cfs]	Unit Discharge [cfs/mi²]	% Difference
A	4.91	1,858	378	A			2,414	492	29.9%
A1	1.11	1,104	995	A1			1,104	995	0.0%
				A1-A2			846	762	
				A2			980	2,042	
				A2-A3			1,486	679	
A1-A2A	1.11	991	893						
A2A	0.48	325	677						
A2A-B2	2.19	1,579	721						
A2B	1.18	824	698						
A2B-A3	1.18	652	553						
A3	3.73	1,855	497	A3			1,855	1,572	0.0%
				A3R			1,798	1,524	
B	4.62	1333	289	B			1,101	295	-17.4%
B1	0.60	416	693	B1	0.56	-6.7%	448	97	7.7%
				B1-B2			363	605	
B2	0.44	277	630	B2	0.49	11.4%	325	739	17.3%
B2-B3	2.64	1,211	459	B2-B3			413	156	-65.9%
B2RB	2.19	1,704	778						

B3	1.99	1,104	555
B3R	2.64	1,835	695
C	10.69	3,502	328
C1	3.64	2,307	634
C1-C2	3.64	2,051	563
C2	1.86	1,105	594
C2-C3	5.51	2,445	444
C3	3.79	1,507	398
C3R	5.51	2,721	494
C4	1.40	1,211	865
C4R	9.29	3,437	370
E	31.24	5,760	184
E1	0.96	790	823
E1-E2B	0.96	687	716
E2A	0.80	572	715
E2A-E3	0.80	461	576
E2B	0.47	352	749
E2B-E3	1.42	751	529
E2C	0.72	541	751
E2C-E3	0.72	424	589
E3	2.49	1,130	454
E3-E4	5.42	1,911	353
E3RB	1.42	958	675
E4	3.04	966	318
E4-E5	16.98	4,422	260
E4RA	5.42	2,205	407
E4RB	6.05	3,032	501
E5	1.31	645	492
E5-E6	29.20	5,765	197
E5R	16.98	4,827	284
E6	2.04	1,194	585
E6R	29.20	5,888	202
F1	3.10	1,868	603
F1-F2	3.10	1,823	588
F2	2.21	1,333	603
F2-F3	5.31	2,783	524
F3	0.74	375	507
F3-E4	6.05	2,414	399
F3R	5.31	3,030	571
G1	1.12	819	731
H1	1.07	472	441
H1-H2	1.07	314	293
H2	1.40	432	309

B3			1,105	505	0.1%
B3R			575	289	-68
C			3,797	1,438	8.4%
C1	3.59	-1.4%	2,659	249	15.3%
C1-C2			2,273	624	10.8%
C2	1.92		966	265	-12.6%
C2-C3			2,747	1,477	12.4%
C3			1,506	273	-0.1%
C3R			3,117	822	14.6%
C4			1,211	220	0.0%
E			6,068	4,334	5.3%
E1			790	85	0.0%
E1-E2			679	22	
E2			1,548	1,613	
E2-E3			1,684	1,754	
E3			1,129	1,411	-0.1%
E3-E4			2,191	2,739	14
E3R			2,008	4,272	
E4			966	680	0.0%
E4H2E5			4,752	6,600	7.5%
E4RA			2,619	3,638	18.8%
E4RB			3,398	1,365	12.1%
E5			645	119	0.0%
E5K2E6			6,068	4,273	5.3%
E5R			5,270	1,734	9.2%
E6			1,194	70	0.0%
E6R			6,229	1,149	5.8%
F1			2,147	355	14.9%
F1-F2			2,005	1,531	10.0%
F2			1,506	52	13.0%
F2-F3			3,110	183	11.7%
F3			374	183	-0.3%
F3-E4			2,583	88	7.0%
F3R			3,484	1,124	15.0%
G1			820	265	0.1%
H1			472	214	0.0%
H1-H2			305	57	-2.9%
H2			432	584	0.0%

J1	1.73	633	366
J1-J2	1.73	494	286
J2	3.64	1,212	333
J2-K3	5.37	1,184	220
K1	1.54	1,433	931
K1-K2A	1.54	1,031	669
K2A	1.95	827	424
K2A-2B	3.49	1,701	487
K2B	0.42	217	517
K2B-K3	3.91	1,392	356
K2BR	3.49	1,839	527
K3	1.64	507	309
K3RA	3.91	1,718	439
K3RB	5.37	1,206	225
L	16.73	3,437	205
L1	3.55	2,267	639
L1-L2A	3.55	2,154	607
L2A	0.69	570	826
L2A-2B	4.24	2,228	525
L2B	4.08	1,700	417
L2B-L3	8.32	3,004	361
L2BR	4.24	2,519	594
L2C	1.33	692	520
L2C-2D	1.33	651	489
L2D	1.23	655	533
L2D-L3	2.56	705	275
L3	5.85	2,129	364
L3R	8.32	3,676	442
L3RB	2.56	1,104	431
M	13.12	3,187	243
M1	5.69	3,301	580
M1-M2	5.69	2,392	420
M2	7.44	2,347	315
N	4.85	1,385	286
N1	1.52	1,211	797
N1-N2	1.52	758	499
N2	3.33	1,331	400
O1	3.09	1,163	376
P	2.44	891	365

J1			633	105	0.0%
J1-J2			488	92	-1.2%
J2			1,213	1,083	0.1%
J2-K3			1,186	1,108	0.2%
K1			1,432	1,338	-0.1%
K1-K2			813	581	
K2			694	401	
K2-K3			1,216	703	
K3			507	139	0.0%
K3RA			1,456	271	-15.3%
K3RB			1,207	784	0.1%
L			3,781	2,455	10.0%
L1			2,267	1,163	0.0%
L1-L2			1,803	517	
L2			2,641	6,288	
L2-L3			3,494	894	
L3			2,129	610	0.0%
L3R			4,184	2,551	13.8%
M			3,327	851	4.4%
M1			3,717	692	12.6%
M1-M2			2,554	153	6.8%
M2			2,304	649	-1.8%
N			1,364	384	-1.5%
N1			1,211	1,755	0.0%
N1-N2			757	179	-0.1%
N2			1,331	326	0.0%
O1			1,163	140	0.0%
P1			1,073	253	20.4%
Q1			1,111	835	4.9%

P1A	0.50	441	882
P1A-1B	0.50	296	592
P1B	1.94	842	434
Q	2.23	1,059	475
Q1A	1.30	915	704
Q1A-1B	1.30	757	582
Q1B	0.94	740	787
R1	0.28	387	1382
Z1	0.66	558	845

R1			387	291	0.0%
Z1			558	367	0.0%

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(Draft)

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2.DISTRICT ABSTRACT

2.3 Hydrology

2.3.1 Model or Method Used

The methodologies for this study included Green & Ampt rainfall/runoff losses with S-graph unit hydrographs and normal depth routing using 8-point cross sections.

2.3.2 Storm Frequency and Duration

For both existing and future conditions, the following storm frequencies and durations were used:

- 10-year 6-hour
- 10-year 24-hour
- 100-year 6-hour
- 100-year 24-hour
- 100-year 10-day
- 200-year 24-hour
- 500-year 24-hour
- PMP 6-hour
- PMP 72-hour

2.3.3 Hydrograph Type

S-graphs (Phoenix Mountain and Desert/Rangeland) developed for Maricopa County.

2.3.4 Frequencies Determined

10-year, 100-year, 200-year, 500-year, and PMP

2.3.5 List of Gages used in Frequency Analysis or Calibration

N/A

2.3.6 Rainfall Amounts and Reference

The rainfall amounts were derived from the NOAA Atlas 2 isopluvial maps as provided in the Hydrology Manual (Sabol et al., 1995) for events up to the 100-year return frequency storm. For those events greater than the 100-year return frequency, the rainfall amounts were derived from a linear extension of the Intensity-Duration-Frequency (I-D-F) relationship in a normal-logarithmic scale (Prefre, ver. 2.1 in DDMSW). PMP amounts were derived based upon the procedure described in the National Weather Service (NWS) Technical Report HMR-49: Probable Maximum Precipitation Estimates, Colorado River and Great Basin Drainages (NWS, 1977). The rainfall depths are presented in Table 4-7.

2.3.7 Unique Conditions and Problems

Special problems encountered in the course of study are discussed in subsequent sections, including:

- Flow splits and diversions among sub-basins
- Reduced conveyance capacity of the culverts along the Sun Valley Parkway due to excessive sedimentation
- Unit hydrograph K_n-values for desert/rangeland
- Future condition assumptions used for hydrology modeling

2.3.8 Coordination of Q's

Peak flows for Area 3 submitted in this report have been coordinated with Julie Cox from the District throughout the entire project. The hydrologic models were submitted for review by Ms. Cox in December 2003 and January 2004. Revisions were completed based on Ms. Cox's comments. The final peak flows from the PBS&J study were comparable to that of Alpha's previous study within ±15%.

2.4 Hydraulics

2.4.1 Model or Method Used

The unsteady flow module established in HEC-RAS (version 3.1.1) developed by the Corps of Engineers (May 2003).

2.4.2 Regime

The flow regime in the unsteady hydraulic model is assumed subcritical for all reaches.

2.4.3 Frequencies for which Profiles were Computed

For both existing and future conditions, the following storm frequencies and durations were used:

- 10-year 6-hour
- 10-year 24-hour
- 100-year 6-hour
- 100-year 24-hour
- 200-year 24-hour
- 500-year 24-hour
- PMP 6-hour
- PMP 72-hour

2.4.4 Method of Floodway Calculation

N/A

2.4.5 Unique Conditions and Problems

Special problems encountered in the course of study are discussed in subsequent sections, including:

- Comparison of the level pool routing with unsteady hydraulic model results
- Modeling of roadways transverse to the FRS structure
- Modeling of the emergency spillways and dam crest for overtopping
- Development of suitable rating curves

4.Hydrology

4.1 Method Description

The hydrologic responses of Area 3 to the various storm events were simulated using the modified U.S. Army Corps of Engineers HEC-1 (June 1998) computer program embedded in WMS 7.0 (September, 2003). The HEC-1 parameters were determined using the methods described in the Hydrology Manual (Sabol et al., 1995). The computational interval used to determine the unit hydrograph for each sub-basin is 5 minutes. The SCS principal spillway hydrograph (PSH) method (SCS, 1975) was used to model the hydrologic response of Area 3 to the 100-year, 10-day storm event.

4.2 Parameter Estimation

This section includes a complete description of the methodology and calculations used to develop the hydrology. The workmaps for Appendix E are in the pockets that immediately follow this section of the report. All of the original study's workmaps are not included, but they can be located in the Area 3 PMF Report for Flood Retarding Structures. Section 4.2.2 gives a complete list of all the maps, but the ones with "Included in Pocket" mean that they can be located in the pockets. The references to maps that are not included for the original section should be ignored.

4.2.1 Drainage Area Boundaries

Area 3 of the Buckeye/Sun Valley ADMS is defined as the area that drains to the Buckeye FRSs. The area begins at the west side of the White Tank Mountains and is approximately 90 square miles. The water flows in a south to southwest direction toward the Buckeye FRSs.

The three structures were designed for a 100-year event and drain west toward the Hassayampa River. Currently, this watershed is natural desert with several identified alluvial fans. A number of master planned communities are planned within this area. Sub-basins A through C do not contribute to the Buckeye FRSs, but are included in Area 3 hydrology for consistency in the updating of Alpha's study (1996). Figure 4-9 (Pocket) shows the drainage area boundaries, major sub-basin boundaries, and concentration points, for both existing and future conditions.

4.2.2 Watershed Work Maps

The watershed work maps include:

- General watershed work map with the aerial photography and contour lines as background (Figure 4-9, in Pocket);
- HEC-1 schematic map (Figures 4-10 & 4-111 for existing and future conditions, in Pocket);

- *Drainage basin map showing lag flow paths, and routing reaches* (Figure 4-12, in Pocket);
- Soil map (Figure 4-13, in Pocket);
- Land use maps (Figures 4-14 & 4-15 for existing and future conditions, in Pocket);
- Flow maps including the drainage basin map with lag time paths (Figures 4-16 & 4-17, for existing and future conditions, in Pocket).

4.2.3 Gage Data

There are no existing precipitation gages or stage gages within the study watershed. There are precipitation and reservoir pool gages at the downstream end of the watershed at each of the three FRSs. There is also a weather station located in the Hassayampa River at the I-10 bridge.

4.2.4 Statistical Parameters

The statistical parameters such as rainfall depths and rainfall distributions for storms up to the 100-year return frequency events are based on the data provided in the Hydrology Manual. PMP amounts are derived based upon the data provided in NWS Technical Report HMR-49: Probable Maximum Precipitation Estimates, Colorado River and Great Basin Drainages (NWS, 1977).

4.2.5 Precipitation

4.2.5.1 Rainfall Depths

The NOAA Atlas 2 data set is used for point rainfall amounts in this study. The NOAA Atlas 14 data set is available for use; however, it has not been accepted to date by the District. For the same storm event, rainfall depths in NOAA 14 are approximately 15 to 25% less than that in NOAA 2.

The point rainfall depths for less than and equal to 100-year, 24-hour storm events are obtained from the isopluvial maps in the Hydrology Manual. For those storms above the 100-year return frequency event, the rainfall depths are derived from a linear extension of Intensity-Duration-Frequency (I-D-F) relationship in a normal-logarithmic scale (Prefre, ver. 2.1 in DDMSW) (Appendix E.1). PMP amounts are derived based upon the procedure in NWS Technical Report HMR-49: Probable Maximum Precipitation Estimates, Colorado River and Great Basin Drainages (NWS, 1977) (Figure E.1-2 and E.1-3 in Appendix E.1). Rainfall depth for the 100-year, 10-day event is determined following the three-step calculation procedure in SCS Technical Report - Hydrology – PO-6 (Rev. 2) (SCS, 1975) (Appendix E.6.1). Firstly, the 2-year 1-hour rainfall depth was calculated using Region 8 equation, and then 2-year 10-day rainfall depth was obtained using the 2-year 1-hour rainfall depth and Buckeye Area 3 latitude information. Finally the 100-year 10-day rainfall depth was derived from the ratio of 100-year 10-day precipitation to 2-year 10-day precipitation in the Western Region. The 100-year 10-day was determined 6.0 inch.

The point rainfall depths presented in the following Table 4-7 are area-weighted based on the watershed contributing to each FRS respectively.

Table 4-7

Summary of Rainfall Depths for Area 3

	FRS 1	FRS 2	FRS 3
Storm Event	Depth [in]	Depth [in]	Depth [in]
10-yr, 6-hr	2.08	2.07	2.07
10-yr, 24-hr	2.62	2.56	2.58
100-yr, 6-hr	3.23	3.28	3.26
100-yr, 24-hr	4.16	4.13	4.14
200-yr, 24-hr	4.63	4.61	4.62
500-yr, 24-hr	5.23	5.22	5.23
PMP, 6-hr	9.8	13.6	12.8
PMP, 72-hr	15.8	17.5	17.5

Note: Except for the PMP rainfall amounts that are area-averaged, all values are area-weighted point rainfall depths.

The point rainfall depths are adjusted by areal reduction factors (JD records) to develop the rainfall depths to be entered into the combined HEC-1 model by using the PC records. The areal reduction factors are based on the Hydrology Manual as presented in JD records of HEC-1 input files (Appendix E.6). Rainfall amounts for PMP events are average values based on the watershed contributing to each FRS respectively. Therefore, no areal reduction factor is used for PMP HEC-1 models.

4.2.5.1 Rainfall Distributions

Both the 6-hour and 24-hour rainfall distributions are based on the Hydrology Manual (Sabol et al., 1995). The 24-hour rainfall distribution is the SCS Type II distribution for each sub-basin. The 6-hour rainfall distributions vary with the size of the sub-basin (distribution patterns were obtained from the Maricopa County Rainfall Distribution module in WMS 7.0). This is different from Alpha's study (1996), which used one rainfall distribution pattern based on the entire Area 3 drainage area for the 100-year 6-hour storm. For the PMP events, the rainfall distribution patterns are constructed by following the procedure in NWS HMR-49 report (NWS, 1977) (Appendix E.1). The values of rainfall distributions can be found in the final HEC-1 models (Appendix E.6).

4.2.6 Physical Parameters

This section describes the methods used for estimation of the physical hydrologic parameters such as rainfall losses, the unit hydrograph, and lag time for the desert/rangeland type terrain drainage area.

4.2.6.1 Rainfall Losses

The Green-Ampt procedure is used to compute rainfall losses in accordance with the Hydrology Manual. The digital soil file and land use files (both in GIS shape file format) for the study area were provided by the District. The digital soil file corresponds to SCS soil maps (Camp, 1986). The GIS land use shape file is based on published digital GIS land use maps (MAG, 2000), the most current land use information. Figures 4-13 and 4-14 & 4-15 describe the soils and land use, respectively. An apparent discrepancy for the same soil texture located in the vicinity of Township 1N in Area 3 (Figure 4-13) is due to two separate soil survey results. An average value from the two soil survey map units is used for this study.

The GIS land use shape files and soil files are imported into WMS 7.0. Two additional attribute tables (one for soil and another for land use, Tables E.2-1 and E.2-2) are imported into WMS 7.0 for the Green-Ampt rainfall loss parameter estimation. The attribute tables for the land use types can be found in Appendix E.2.

The Green-Ampt rainfall loss parameters used in the HEC-1 input files (Appendix E.6) can be found in Tables E.2-3 and E.2-4 for existing and future conditions, respectively. For future conditions, the Green-Ampt parameters are estimated based upon variations of land use types according to conceptual community plans within the study area. This study assumes that the Green & Ampt loss parameters do not change with storm return frequencies.

Five major land uses are identified for the watershed, which are vacant, estate residential (1/5 dwelling per acre to 1 dwelling per acre), rural residential (<1/5 dwelling per acre), large lot residential/single family (1 dwelling per acre to 2 dwellings per acre), and water (MAG, 2000). The surface retention losses, percent impervious, and vegetation cover for each land use type are estimated based on the Hydrology Manual and MAG (2000). The values of these parameters are shown in Table 4-8, which is a subset of Table E.2-1a in Appendix E.2.

Table 4-8

Land Use Surface Retention Losses, Percent Impervious, and Vegetation Cover

Land Uses	Surface Retention Losses: IA (inch)	Percent Impervious RTIMP (%)	Vegetation Cover (%)
Vacant	0.4	0.0	25.0
Estate Residential	0.3	5.0	30.0
Rural Residential	0.3	5.0	30.0
Large Lot Residential/Single Family	0.3	15.0	50.0
Water	0.0	100.0	100.0

4.2.6.2 Unit Hydrograph

The Maricopa County S-Graph method is used to compute unit hydrographs in accordance with the Hydrology Manual, because for routing rainfall excess in Maricopa County, the recommended procedures are either the Clark Unit Hydrograph or the application of selected S-graphs; the Clark Unit Hydrograph procedure is more appropriate for watersheds less than about 5 square miles in size with an upper limit of application of 10 square miles and is preferred for urban watersheds, while the Area 3 watershed is approximately 90 square miles and is characterized as desert/agriculture land type; and S-graph method was used in Alpha's study (1996).

The Phoenix Mountain and Desert/Rangeland S-Graphs are used to compute the unit hydrographs. Alpha (1996) used Phoenix Valley S-graph for desert area because the Desert S-Graph was still under development. The unit hydrographs are computed by using WMS 7.0. The unit hydrograph can be found in the UI record in the HEC-1 input files (see Appendix E.6).

4.2.6.3 Lag Time

Lag time must be estimated before S-Graph unit hydrographs can be computed. Four parameters must be computed to estimate the lag time for each sub-basin. These four parameters are the longest watercourse length measured from the concentration point to a most hydraulically upstream point (L), the slope for the longest watercourse (S), the length from the concentration point along the longest watercourse to a point opposite the centroid (L_{ca}), and the basin roughness (K_n).

The first three parameters (L, L_{ca}, and S) are automatically computed in WMS 7.0. Some L_{ca}-values were adjusted based on engineering judgment since the WMS program could not correctly locate the point opposite the centroid for several sub-basins with meandering flow paths. In this case, half of L length was used for L_{ca}. The basin roughness is a composite Manning's *n* value for all the channels in the sub-basins. An appropriate basin roughness value is determined for each sub-basin based on field observation, areal photographs, soil maps, and land use maps. Lag time for each basin is calculated by using the formula in the Hydrology Manual. The parameters for lag time calculation are summarized in Table E.2-5 (Appendix E.2).

Since Desert/Rangeland S-graphs are used for gently sloping natural areas, the K_n-value range is 0.02 to 0.03 as shown in Table 5-4 in the Hydrology Manual. However, based upon our field survey, we determined a range of 0.04 to 0.06 according to the base material, vegetation, obstruction, and irregularity in the basins. The selection of K_n values is in agreement with studies conducted at similar surface geographic watersheds (Zhao, 2003).

As the Hydrology Manual notes, "some adjustment in K_n should be made for use with rainfalls of different magnitudes (frequencies)." We agree that K_n should be adjusted for storms with different return frequencies in the study since the study storm events vary from 10-year, 6-hour to the PMP 72-hour. However, no quantitative adjustment factors are available. Therefore, no adjustment is made to K_n -value for different storm events.

4.6.2.4 Channel Routing Path Parameters

The normal depth channel routing in HEC-1 is used to route runoff hydrographs through sub-basins. The routing paths for the drainage area can be found in Figure 4-12 (pocket).

The channel routing parameters include NSTPS (the number of sub-reaches to be divided for the routing reach by HEC-1), initial outflow, Manning's n-values for left overbank (LOB), main channel, and right overbank (ROB), reach length, bed slope for the routing reach, and an eight-point cross section (RX-RY data). The initial outflow is set as the initial inflow, which is usually zero (0) cfs, implying a dry channel when routing starts. The eight-point cross section data was obtained from field surveys (See Appendix C survey notes). The reach length and channel bed slope are automatically computed by WMS 7.0. The estimation of Manning's n-value is based on field trips, areal photo, land use maps, and soil maps using the procedures in USGS technical report: Estimated Manning's Roughness Coefficients for Stream Channels and Floodplains in Maricopa County, Arizona (USGS, 1991). NSTEPS values for routing reaches are calculated by an iterative process in WMS 7.0. All channel routing parameters are summarized in Tables E.3-1 through E.3-3 in Appendix E.3.

It is noted that several routing channels from field survey measurements are incapable of conveying peak discharges above the 100-year event (especially routing channels along the Sun Valley Parkway). This is because (1) there is really more than one routing channel per basin to convey the upstream discharges; (2) the routing channels are poorly-defined, and most of the flows are conveyed in the overbanks; and (3) the geological surface for the entire basin is flat. In those cases, the routing channel cross-sections are expanded according to the areal photos and DEM data.

4.3 Problems Encountered During the Study

4.3.1 Special Problems and Solutions

Several issues have already been proposed and discussed in the previous sections, such as unit hydrographs and basin roughness K_n-values. This section covers additional issues encountered during the study.

4.3.1.1 Time Interval for Rainfall

Previous hydrologic studies used a 30-minute interval for rainfall distributions, such as Alpha's (1996). In WMS 7.0, the Maricopa County Rainfall Distribution uses a 15-minute interval that gives better linear interpolations than the 30-minute interval. However, the peak discharge results from the 15-minute interval are typically 10% higher than the 30-minute interval provided that all other parameters are kept the same. A comparison was conducted for basins A through C as presented in Table E.6-1 (Appendix E.6). This 10% difference should be considered in verification or comparison with other studies and sources.

4.3.1.2 Phoenix Valley and Desert/Rangeland S-graphs

As mentioned in Section 4.2.6.2, Alpha (1996) used the Phoenix Valley S-Graph for natural desert rangelands because the Desert/Rangeland S-Graph was under development at that time. A comparison between Phoenix Valley and Desert S-Graphs was conducted for sub-basins A through C with all other parameters the same. The peak discharge results are summarized in Table E.6-2 (Appendix E.6). The Phoenix Valley S-Graph appears to provide a 0~23% greater discharge compared to the Desert/Rangeland S-Graph for the same basin.

4.3.1.3 Culvert Conveyance Capabilities along the Sun Valley Parkway

Field surveys were conducted for major culverts along the Sun Valley Parkway in Area 3. The results show that up to 50% of the culvert conveyance area is blocked by sediments accumulated upstream, downstream, and within the culvert (Appendix C, Table C-1). The sediments are mostly sand and gravel with some cobbles. Many of the culverts are obstructed by dense weeds, brush and trees. Many of the trees are mature and much taller than the culvert (Appendix C). All of these factors will cumulatively decrease culvert conveyance capacity and impair its hydraulic functions.

The culverts were designed to convey 100-year storm discharges (Collar Williams and White, 1987). It is unlikely the culverts in their current condition can convey their design capacities. This study updated Alpha's (1996) culvert capacity verification by field measured data. The field measured data included culvert effective rise and span and estimation of upstream and downstream Manning's n-values (USGS, 1991). These values were input into HY8 version 6.1 (FHWA, 1985) together with as-built Sun Valley Parkway roadway profiles and hydrologic results for each sub-basin from WMS 7.0 (this study). The results indicate the Sun Valley Parkway will be overtopped at the 100-year storm event due to the reduction of the culvert discharge capacity by sediments and higher roughness of the dense brush and trees (Table C-1). Without regular maintenance, the culvert discharge capacities will continue to be reduced, and the Sun Valley Parkway will be overtopped at lower-frequency storm events. Regular maintenance should include removal of existing obstructions such as sediments, trees, and bushes around the culverts.

4.3.1.4 Flow Diversions

Flow diversions along the Sun Valley Parkway sub-basins are minimal. Diversion as used in this study is defined as all or a portion of the flow in one sub-basin diverting to the adjacent sub-basin across a common boundary with or without overtopping the Sun Valley Parkway when the culvert in that basin is incapable of conveying the flow to its downstream routing basin. Thus, the diversion can only occur when the roadway profile is at least as high as the sub-basin boundaries. Most of the Sun Valley Parkway road profiles are in fact lower than that of the sub-basin boundaries; therefore, overtopping of the Sun Valley Parkway occurs first if the culvert capacity is inadequate to convey the discharge. For those segments where the Sun Valley Parkway road profiles are higher than the sub-basin boundaries, the diversion may occur prior to overtopping the Sun Valley Parkway. However, field survey indicated there is no apparent evidence of flow diversion across the basin boundaries (Appendix C). Also, Alpha's hydrologic

analyses (1996) indicated no diversion occurred for 100-year 6-hour storm event in Area 3; and there was only one diversion that occurred in a 100-year 24-hour event. Out of a total flow of 3,084 cfs produced within Sub-basin F2, 490 cfs was diverted from Sub-basin F2 to H1 when the flow exceeded the culvert capacity. Therefore in this study, flow diversion from basin to basin is negligible and not considered in hydrologic modeling.

4.3.1.5 Future Condition Assumptions

To comply with the sub-task 2.3.10.2 in the project Scope of Work, hydrologic analyses for Area 3 future conditions were performed. The following assumptions were used after discussion with the District.

1. Basin and sub-basin boundary delineations were kept the same as the existing conditions model. Basin delineation includes all the surface characteristics such as sub-basin boundaries, concentration points, and routing channels. Community Master Plans (CMP) within Buckeye Area 3 were reviewed. Most of the CMPs use the previous HEC-1 model in this area. For example, Tartesso used the same HEC-1 model developed by Alpha (1996). In their reports, they maintained the major natural channel and flow patterns and did not make significant changes to the topography. Based on these reports, we assume that the basin delineations for future conditions can be maintained the same as the existing condition.

2. Precipitation parameters are kept the same as the existing conditions. This includes rainfall amount for all storm events, areal reduction factors, and rainfall distribution patterns.

3. The future condition model will use the "land-use plan" provided by Town of Buckeye. Buckeye land use codes are different from the County's. The relationship between the two land use code systems is identified in Table 4-9. These changes are incorporated in GIS shape file and used to re-calculate the Green & Ampt parameters.

4. Retention is used for flood mitigation due to land development for future conditions. As stated in "Town of Buckeye Development Code (1996)", the Town does not allow any increase of peak discharge, runoff volume, and velocity of runoff for post-development; 100-year 2-hour onsite retention is encouraged. The retention volumes for each sub-basin are determined by a trial-and-error process. The existing and future condition 100-year 24-hour storm event HEC-1 models are simulated in a no routing option, and the difference of runoff volume generated from each sub-basin between the post- and pre-development is obtained, which is set as an initial retention volume. A second run of future condition HEC-1 model is then simulated with retention. The runoff volumes are compared to those of existing condition and retention volumes are adjusted until there is no increase of peak flows or volumes from each sub-basin. The final retention volume for each basin is presented in Table 4-10.

Table 4-9

Correlations between Buckeye and the County Land Use Codes

Buckeye Code	Description of Buckeye Code	FCDMC Code	Relation to County Code
CC	Community Center, to accommodate a variety of commerce and specialized development including commercial uses which comprise the central business district of the Town	C2	Central, general, office, intermediate commerce
GC	General Commerce, to accommodate general commercial and employment uses and compatible industrial uses to which public services are available	C2	Central, general, office, intermediate commerce
MR	Mixed Residential, to accommodate both single and multiple family residential development, historic residential neighborhoods and compatible commercial uses	MDR	Medium Density Residential, 6,000~12,000 sq. ft lot size
PC	Planned Community, to accommodate all land uses approved as part of a Community Master Plan, where specific uses, public services, densities, and design criteria have been identified and adopted	MDR	Developers proposed MDR
PR	Planned Residential, to accommodate all subdivided residential development to which public services are available	MDR	Developers proposed MDR
RR	Rural Residential, to accommodate low-density residential development in outlying areas where all public services may not be available.	VLDR	40,000 sq. ft and greater lot size
Special Use	To accommodate uses in natural hazard or floodplain areas or those under public ownership where development may not be possible.	NDR	Undeveloped desert rangeland
Undeveloped	Little topographic relief, slope < 5%, desert rangeland	NDR	Undeveloped desert rangeland

Table 4-10

Future Condition Retention Volumes for Buckeye Area 3

Sub-basin	Retention Volume [ac-ft]	Sub-basin	Retention Volume [ac-ft]
E1	53	L3	457
E2	118	M1	170
E3	152	M2	585
E4	190	N1	65
E5	79	N2	150
E6	100	O1	150
F1	133	P1	85
F2	130	Q1	72
F3	45	R1	24
G1	47	S1	61
H1	60	T1	103
H2	88	U1	47
J1	102	V1	23
J2	224	W1	0
K1	0	W2	130
K2	128	X1	0
K3	101	Y1	0
L1	0	Z1	58
L2	475		

Note:

- **Retention volume zero (0) in the table indicates no future development is planned within that sub-basin.**
- **Increase of peak discharge and runoff volume in the 100-year 24-hour storm event in the future condition is summarized in Table E.5-1, Appendix E. The runoff volume difference between the existing and future conditions was used as an initial retention volume;**
- **The peak discharge and runoff volume for future conditions with final retention volume are summarized in Table E.5-2, Appendix E.**

4.3.2 Model Warning and Error Messages

No error messages are present in the computer model output files. There are several warning messages about the channel routing, including the following:

```
*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR
OUTFLOWS BETWEEN     2617. TO 3974.

                 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR
OUTFLOWS GREATER THAN PEAK INFLOWS.

                 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR
INCREASING STORAGE (USE A LONGER REACH.)
```

A test was conducted by decreasing NSTEPS until the warning message disappeared. Since the "modified puls" routing method was not used, and there is less than 3% difference in peak discharge after the NSTEPS was changed, this type of warning is ignored.

4.4 Calibration

No calibration is performed because there is no gage station within the watershed. However, verification is performed (see Section 4.5.2, this report).

4.5 Final Results

4.5.1 Hydrologic Analysis Results

The results for Buckeye Area 3 hydrology were obtained using the 1998 revision of HEC-1 (version 4.1) embedded in WMS 7.0. All events are shown in Table 4-7 except for the 100-year 10-day storm. The peak discharges and times-to-peak at all of the concentration points within Area 3 are shown in Tables 4-11 and 4-12 for existing and future conditions, respectively. The runoff volumes for the various storm events at the concentration points along the FRSs are shown in Tables 4-13 and 4-14 for existing and future conditions, respectively.

The higher of the two peak discharges from the 100-year, 24-hour and 100-year, 6-hour storms is considered the critical peak discharge and should be used for floodplain delineation studies. As shown in Tables 4-11 and 4-12, the peak flows for the 100-year, 24-hour storm are larger at most downstream outlets than that for the 100-year, 6-hour storm. Therefore, the 100-year 24-hour results should be used for floodplain delineation studies. In general, for Area 3, if the drainage area is less than 1 square mile, peak flow in a 6-hour duration is higher than that in a 24-hour duration for the same return frequency. For larger drainage areas, the peak flow in a 24-hour duration is higher.

The FRS was originally designed to protect farmlands and the Town of Buckeye from the 100-year flood; consequently the storage pool was intended to contain the runoff volume from the 100-year storm event. As can be seen in Tables 4-13 and 4-14, the runoff volumes generated

from the 100-year 24-hour storm at most downstream outlets to the FRS are larger than that of the 6-hour storm. Therefore, the 100-year 24-hour results should be used to evaluate the adequacy of existing FRS storage volumes.

The peak discharge hydrographs from all the events were used as inputs for the unsteady hydraulic model of the Buckeye FRSs to develop a frequency-stage relationship (Volume V-B: Area 3 Hydraulic Report). The runoff volumes presented in Tables 4-13 and 4-14 can be used to facilitate FRS management and to prepare an update of the emergency action plan for the structures.

For the future condition hydrologic analysis, the major changes to the model included revision of the land use classification, which affected the rainfall loss parameters, and addition of retention to the model. For storm events less than 100-year recurrence frequency, peak discharges and runoff volumes are effectively attenuated by the retention basins. For the 100-year or greater storm event, however, a 10~15% increase of peak discharge and runoff volume compared to pre-development conditions was observed. This increase raises the maximum water surface elevations in the Buckeye FRSs approximately 0.2 foot for each storm event (Volume V-B: Area 3 Hydraulic Report).

Since the hydrology study included multiple storm events, the District requested a comparison of extreme event peak flows, presented as a ratio of the 100-year event. Based on Tables 4-11 and 4-12 - Peak Flow Summary for Buckeye Area 3, the analysis indicates that the 10-year storm varies between 30 to 50%, while the 200-year and 500-year events average 120% and 145% respectively. The 6-hour PMF, which in this study is greater than the 72-hour PMF, generates flows that are 500% of the 100-year storm.

Extreme event runoff volumes were also compared to the 100-year storm. The 10-year event averages 45% of the 100-year event, while the 200-year event produces 115% more than that of 100-year event. The 500-year event produces about 140% of the 100-year event; and the 6-hour PMP, which again was greater than the 72-hour PMP, is 600% of the 100-year event.

The 100-year, 10-day principal spillway hydrograph (PSH) was obtained manually following the SCS procedure (SCS, 1975). The PSH calculation is presented in Appendix D.9. and the results for both existing and future conditions are in Table D.6-3a and D.6-3b. The principal spillway hydrograph for both existing and future conditions is shown in Figures D.6-1a and D.6-1b, and the principal spillway mass curve for both existing and future conditions is shown in Figures D.6-2a and D.6-2b.

4.5.2 Verification of Results

Previous studies in Area 3 were conducted by Alpha (1996) for 100-year storm events, and Dames & Moore (1990) for PMP storm events. The basin delineations and hydrologic parameters used in these studies as well as their results were compared to the parameters and results of the current study as verification.

The peak flows for the 100-year 6-hour storm event from this study were 10-15% higher than the Alpha study. Alpha determined a single areal reduction factor based on the entire watershed size, while this study based areal reduction factors on sub-basin size. The peak flows for the 100-year 24-hour storm event are very similar to each other for the same sub-basins (within ±10%).

The peak flows for PMP storm events from this study are 20% lower than that of the Dames & Moore study (1990). Dames & Moore used less detailed methods to delineate the watershed; and used the SCS curve number method for rainfall-runoff conversion. The curve numbers determined in that study are relatively high compared to the Green and Ampt parameters used for this study. In addition, the rainfall precipitation amounts used in the Dames and Moore study were point values unmodified by the use of areal reduction factors.

Other verifications included the indirect methods presented in the Hydrology Manual. The results using indirect method No. 2 – USGS data for Arizona are presented in Figure 4-18. The LP3 regression curve and 75% tolerance limits from the USGS data are plotted along with the 100-year storm event peak discharges and trendline from this study. The results fit within the tolerance limits, and the trendline is very similar to the USGS's.

The second indirect method use Boughton and Malvick Envelope Curves, as presented in Figure 4-19. The Boughton and Malvick Envelope Curves are plotted along with the 100-year storm event peak discharge and trendline from this study. The results are all under the Boughton Envelope Curve, and are in agreement with the Malvick Envelope Curve.

The third indirect method of verification uses the USGS regional regression method (Thomas et al., 1995). Table 4-15 shows the USGS envelope curve data, 100-year regional data, and 100-year low-to-middle elevation peak discharges compared to basin size. Table 4-16, which is a sub-set of Table 4-11, shows the peak discharges (100-year 6 & 24-hour) for all sub-basins in the Area 3 arranged in an ascending order of the sub-basin area. The comparison between Table 4-15 and Table 4-16 indicates the results from this study are relatively low compared with the regional 100-year discharges, but are all above the low-to-middle elevation values. The results are in agreement with those studies conducted in comparable areas (Zhao, 2003).

Figure 4-18

Indirect Method Verification - Buckeye Area 3 Study and USGS LP3 Analysis

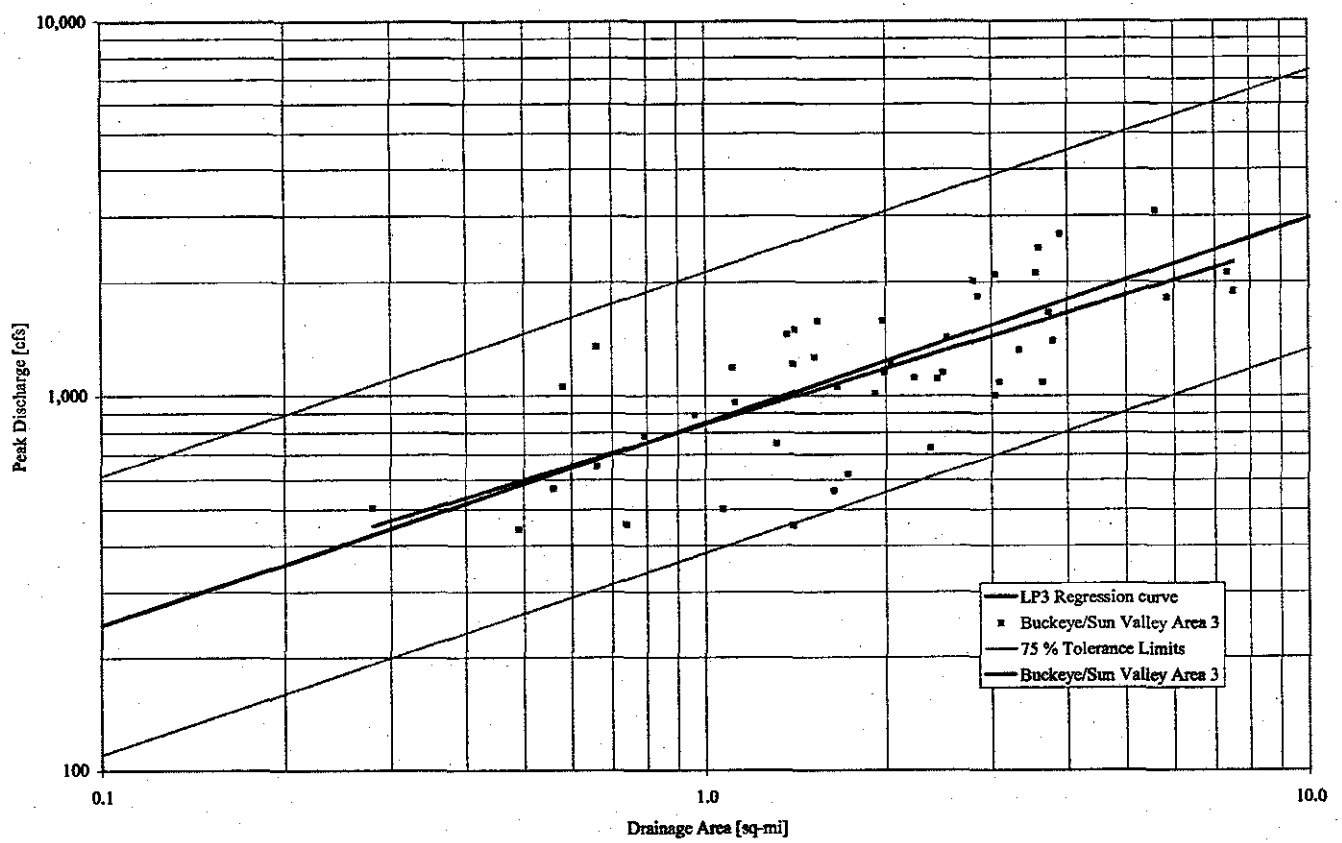


Figure 4-19

Indirect Method Verification - Buckeye Area 3 Study and Boughton and Malvick Envelope Curves

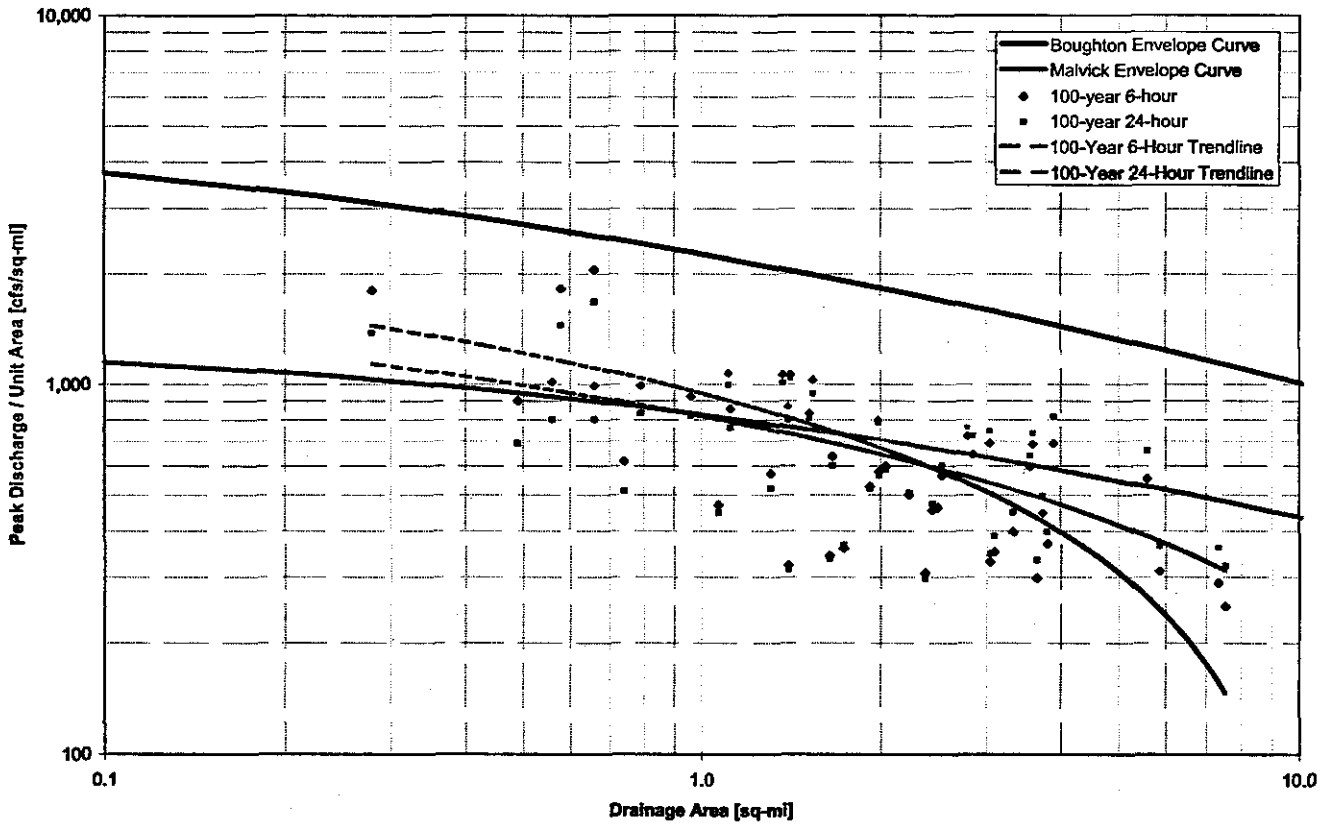


Table 4-11

Buckeye Area 3 Hydrologic Responses for Various Storm Events (Peak Discharge and Time to Peak – Existing Condition)

Station	Area [mi²]	10-YR 6-HR			10-YR 24-HR			100-YR 6-HR			100-YR 24-HR			200-YR 24-HR			500-YR 24-HR			PMP 6-HR			PMP 72-HR		
		Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]
A	6.50	411	6.00	63	811	13.75	125	1,998	5.42	307	2,414	13.42	371	3,011	13.33	463	3,853	13.25	593	15,421	4.42	2,372	9,714	37.50	1,494
A1	1.11	515	4.33	464	493	12.33	444	1,187	4.33	1,069	1,104	12.33	995	1,293	12.33	1,165	1,542	12.33	1,389	4,428	3.58	3,989	2,987	36.67	2,691
A1-A2	1.11	383	5.00	345	360	13.00	324	964	4.83	868	846	12.83	762	1,019	12.83	918	1,237	12.83	1,114	3,855	4.00	3,473	2,554	37.08	2,301
A2	1.66	360	4.83	217	405	12.83	244	1,037	4.75	625	980	12.75	590	1,169	12.75	704	1,418	12.75	854	4,415	4.17	2,660	2,948	37.17	1,776
A2-A3	2.77	406	5.92	147	583	13.83	210	1,472	5.58	531	1,486	13.50	536	1,807	13.50	652	2,249	13.42	812	7,533	4.50	2,719	4,878	37.67	1,761
A3	3.73	397	4.92	106	744	12.92	199	1,661	4.92	445	1,855	12.92	497	2,214	12.83	594	2,707	12.83	726	8,894	4.25	2,384	5,909	37.25	1,584
A3R	2.77	512	5.00	185	726	12.92	262	1,723	4.83	622	1,798	12.83	649	2,153	12.83	777	2,632	12.75	950	8,152	4.00	2,943	5,463	37.08	1,972
B	3.03	301	4.83	99	453	12.83	150	1,044	4.83	345	1,101	12.75	363	1,309	12.75	432	1,595	12.75	526	5,110	4.17	1,686	3,386	37.17	1,117
B1	0.56	269	4.50	480	193	12.50	345	568	4.42	1,014	448	12.42	800	529	12.42	945	634	12.42	1,132	1,912	3.67	3,414	1,259	36.75	2,248
B1-B2	0.56	199	5.08	355	142	13.17	254	464	4.92	829	363	13.00	648	442	12.92	789	531	12.92	948	1,694	4.08	3,025	1,115	37.17	1,991
B2	0.49	189	4.67	386	128	12.67	261	422	4.58	861	325	12.58	663	390	12.58	796	473	12.58	965	1,506	3.92	3,073	1,005	36.92	2,051
B2-B3	1.04	154	6.83	148	145	14.92	139	473	6.67	455	413	14.67	397	507	14.58	488	617	14.50	593	2,471	5.08	2,376	1,481	38.33	1,424
B3	1.99	372	4.83	187	455	12.83	229	1,137	4.83	571	1,105	12.75	555	1,315	12.75	661	1,601	12.75	805	5,110	4.17	2,568	3,382	37.17	1,699
B3R	1.04	205	5.08	197	195	13.08	188	652	4.83	627	575	12.83	553	714	12.83	687	883	12.83	849	3,109	4.00	2,989	2,005	37.08	1,928
C	10.69	855	6.17	80	1,457	14.00	136	3,033	5.75	284	3,797	13.67	355	4,747	13.58	444	5,813	13.50	544	21,853	4.67	2,044	14,372	37.75	1,344
C1	3.59	1,111	4.67	309	1,340	12.67	373	2,486	4.67	692	2,659	12.67	741	3,073	12.67	856	3,622	12.67	1,009	10,568	3.83	2,944	6,874	36.92	1,915
C1-C2	3.59	962	5.25	268	1,085	13.17	302	2,236	5.08	623	2,273	13.08	633	2,664	13.08	742	3,113	13.00	867	9,615	4.25	2,678	6,266	37.25	1,745
C2	1.92	305	4.92	159	386	12.92	201	980	4.92	510	966	12.83	503	1,155	12.83	602	1,410	12.83	734	4,607	4.25	2,399	3,060	37.25	1,594
C2-C3	5.51	851	6.25	154	1,176	14.00	213	2,480	5.83	450	2,747	13.75	499	3,305	13.67	600	3,928	13.58	713	13,252	4.75	2,405	8,512	37.83	1,545
C3	3.79	356	5.25	94	606	13.17	160	1,398	5.17	369	1,506	13.17	397	1,795	13.17	474	2,197	13.17	580	7,270	4.58	1,918	4,870	37.58	1,285
C3R	5.51	967	5.25	175	1,393	13.17	253	2,773	5.08	503	3,117	13.00	566	3,723	13.00	676	4,419	13.00	802	14,222	4.25	2,581	9,326	37.25	1,693
C4	1.40	521	4.58	372	526	12.58	376	1,301	4.50	929	1,211	12.50	865	1,427	12.50	1,019	1,702	12.50	1,216	4,975	3.83	3,554	3,328	36.83	2,377
E	31.24	521	9.17	17	1,999	16.42	64	3,755	8.17	120	6,068	15.92	194	7,408	15.83	237	9,286	15.67	297	49,972	6.17	1,600	29,593	39.58	947
E1	0.96	385	4.50	401	349	12.50	364	894	4.50	931	790	12.50	823	924	12.50	963	1,093	12.50	1,139	3,742	3.75	3,898	2,114	36.83	2,202
E1-E2	0.96	321	5.00	334	284	13.00	296	785	4.83	818	679	12.83	707	809	12.83	843	977	12.83	1,018	3,363	4.08	3,503	1,943	37.17	2,024
E2	1.98	589	4.67	297	655	12.67	331	1,587	4.58	802	1,548	12.58	782	1,830	12.58	924	2,182	12.58	1,102	7,614	3.92	3,845	4,401	36.92	2,223
E2-E3	2.94	489	5.83	166	632	13.67	215	1,690	5.42	575	1,684	13.42	573	2,032	13.33	691	2,484	13.25	845	9,511	4.58	3,235	5,401	37.58	1,837
E3	2.49	353	5.08	142	460	13.08	185	1,147	5.08	461	1,129	13.00	453	1,349	13.00	542	1,636	13.00	657	6,325	4.42	2,540	3,612	37.42	1,451
E3-E4	5.42	435	6.83	80	770	14.67	142	2,011	6.42	371	2,191	14.33	404	2,668	14.25	492	3,324	14.25	613	14,181	5.25	2,616	7,986	38.42	1,473
E3R	2.94	596	4.83	203	756	12.83	257	1,964	4.75	668	2,008	12.67	683	2,415	12.67	821	2,921	12.67	994	10,614	4.00	3,610	6,070	37.00	2,065
E4	3.04	232	5.50	76	378	13.42	124	923	5.42	304	966	13.42	318	1,156	13.42	380	1,411	13.42	464	5,792	4.75	1,905	3,367	37.92	1,108
E4H2E5	16.98	591	7.92	35	1,717	15.92	101	3,376	7.75	199	4,752	15.58	280	5,729	15.50	337	7,138	15.33	420	34,789	6.00	2,049	19,333	39.33	1,139
E4RA	5.42	498	5.83	92	883	13.58	163	2,320	5.42	428	2,619	13.33	483	3,194	13.25	589	3,960	13.25	731	15,715	4.50	2,899	8,920	37.58	1,646
E4RB	6.05	833	5.17	138	1,461	13.08	241	2,848	5.08	471	3,398	13.00	562	4,032	13.00	666	4,868	13.00	805	18,583	4.25	3,072	10,517	37.25	1,738
E5	1.31	251	4.92	192	259	12.92	198	713	4.92	544	645	12.92	492	767	12.92	585	932	12.92	711	3,618	4.25	2,762	2,056	37.33	1,569

Station	Area [mi²]	10-YR 6-HR			10-YR 24-HR			100-YR 6-HR			100-YR 24-HR			200-YR 24-HR			500-YR 24-HR			PMP 6-HR			PMP 72-HR		
		Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]
E5K2E6	29.2	519	9.17	18	2,001	16.42	69	3,753	8.17	129	6,068	15.92	208	7,408	15.83	254	9,286	15.67	318	49,700	6.17	1,702	28,671	39.58	982
E5R	16.98	612	7.08	36	1,921	14.58	113	3,693	6.50	217	5,270	14.42	310	6,338	14.42	373	7,805	14.33	460	37,770	5.33	2,224	20,727	38.50	1,221
E6	2.04	408	4.83	200	491	12.83	241	1,227	4.75	601	1,194	12.75	585	1,419	12.75	696	1,719	12.75	843	6,400	4.17	3,137	3,678	37.17	1,803
E6R	29.2	582	8.25	20	2,051	15.92	70	3,846	7.75	132	6,229	15.58	213	7,568	15.50	259	9,509	15.33	326	50,380	6.00	1,725	29,097	39.33	996
F1	2.79	844	4.58	303	1,020	12.58	366	2,048	4.58	734	2,147	12.58	770	2,502	12.58	897	2,962	12.58	1,062	10,195	3.83	3,654	5,811	36.92	2,083
F1-F2	2.79	772	4.83	277	922	12.83	330	1,944	4.75	697	2,005	12.75	719	2,347	12.75	841	2,797	12.75	1,003	9,757	4.00	3,497	5,512	37.00	1,976
F2	2.53	484	4.75	191	649	12.75	257	1,426	4.75	564	1,506	12.75	595	1,773	12.75	701	2,134	12.75	843	7,826	4.00	3,093	4,463	37.00	1,764
F2-F3	5.31	833	5.17	157	1,371	13.08	258	2,720	5.08	512	3,110	13.00	586	3,682	13.00	693	4,441	13.00	836	16,518	4.25	3,111	9,435	37.33	1,777
F3	0.74	175	4.75	236	136	12.75	184	452	4.75	611	374	12.75	505	457	12.75	618	560	12.75	757	2,279	4.08	3,080	1,289	37.08	1,742
F3-E4	6.05	622	6.75	103	1,094	14.67	181	2,296	6.58	380	2,583	14.58	427	3,070	14.50	507	3,735	14.50	617	15,312	5.42	2,531	8,441	38.67	1,395
F3R	5.31	906	4.83	171	1,538	12.75	290	2,872	4.75	541	3,484	12.75	656	4,087	12.75	770	4,895	12.75	922	17,583	4.00	3,311	9,976	37.00	1,879
G1	1.12	359	4.67	321	346	12.67	309	928	4.67	829	820	12.58	732	974	12.58	870	1,166	12.58	1,041	4,114	3.92	3,673	2,389	37.00	2,133
H1	1.07	141	4.75	132	134	12.75	125	497	4.75	464	472	12.75	441	580	12.75	542	739	12.67	691	3,278	4.00	3,064	1,822	37.00	1,703
H1-H2	1.07	82	7.08	77	73	15.17	68	323	6.33	302	305	14.42	285	380	14.25	355	525	14.08	491	2,659	5.25	2,485	1,421	38.25	1,328
H2	1.4	136	5.25	97	154	13.25	110	446	5.25	319	432	13.25	309	533	13.25	381	659	13.25	471	2,836	4.58	2,026	1,589	37.67	1,135
J1	1.73	175	5.08	101	227	13.08	131	626	5.08	362	633	13.08	366	778	13.08	450	960	13.00	555	4,090	4.42	2,364	2,291	37.42	1,324
J1-J2	1.73	129	6.67	75	188	14.42	109	488	7.33	282	488	15.33	282	601	15.17	347	767	15.00	443	3,547	5.67	2,050	1,949	38.92	1,127
J2	3.64	228	5.33	63	468	13.33	129	1,095	5.33	301	1,213	13.33	333	1,460	13.33	401	1,773	13.33	487	7,410	4.67	2,036	4,247	37.75	1,167
J2-K3	5.37	149	5.67	28	454	13.67	85	981	5.58	183	1,186	13.58	221	1,433	13.58	267	1,747	13.58	325	7,594	5.58	1,414	4,361	39.00	812
K1	1.54	789	4.50	512	741	12.50	481	1,563	4.50	1,015	1,432	12.50	930	1,648	12.50	1,070	1,922	12.50	1,248	6,266	3.75	4,069	3,584	36.83	2,327
K1-K2	1.54	403	6.33	262	336	14.50	218	1,004	5.83	652	813	14.00	528	976	13.83	634	1,227	13.75	797	4,912	4.58	3,190	2,634	37.83	1,710
K2	2.37	225	5.75	95	282	13.67	119	721	5.67	304	694	13.67	293	828	13.67	349	1,006	13.67	424	4,031	5.00	1,701	2,415	38.25	1,019
K2-K3	3.91	360	8.33	92	425	16.25	109	1,257	7.42	321	1,216	15.42	311	1,482	15.25	379	1,844	15.17	472	7,696	5.92	1,968	4,366	39.33	1,117
K3	1.64	153	5.33	93	187	13.33	114	520	5.33	317	507	13.33	309	619	13.33	377	758	13.33	462	3,219	4.67	1,963	1,827	37.75	1,114
K3RA	3.91	428	6.58	109	516	14.50	132	1,502	5.92	384	1,456	13.92	372	1,772	13.83	453	2,210	13.75	565	8,400	4.58	2,148	4,856	37.83	1,242
K3RB	5.37	152	5.33	28	465	13.33	87	999	5.33	186	1,207	13.33	225	1,454	13.33	271	1,766	13.33	329	7,691	5.42	1,432	4,433	38.75	826
L	16.73	566	8.42	34	1,362	15.50	81	2,776	7.00	166	3,769	14.83	226	4,667	14.75	280	5,861	14.67	351	29,264	5.50	1,751	16,901	38.75	1,012
L1	3.55	888	4.83	250	1,090	12.75	307	2,127	4.75	599	2,267	12.75	639	2,640	12.75	744	3,115	12.75	877	11,153	4.00	3,142	6,179	37.08	1,741
L1-L2	3.55	713	5.83	201	830	13.83	234	1,851	5.58	521	1,803	13.58	508	2,143	13.50	604	2,565	13.50	723	9,356	4.75	2,635	5,241	37.83	1,476
L2	7.33	369	5.33	50	1,037	13.25	141	2,135	5.25	291	2,641	13.25	360	3,155	13.25	430	3,857	13.25	526	15,687	4.58	2,140	9,034	37.75	1,232
L2-L3	10.88	576	8.40	53	1,339	15.50	123	2,798	7.00	257	3,488	14.92	321	4,258	14.75	392	5,275	14.67	486	22,680	5.58	2,086	12,650	38.83	1,164
L3	5.85	392	5.33	67	858	13.33	147	1,832	5.25	313	2,129	13.25	364	2,533	13.25	433	3,087	13.25	528	12,449	4.58	2,128	7,162	37.75	1,224
L3R	10.88	713	5.92	66	1,603	13.67	147	3,288	5.50	302	4,184	13.50	385	5,027	13.42	462	6,128	13.42	563	24,861	4.75	2,285	14,147	37.75	1,300
M	13.12	880	6.83	67	1,459	14.67	111	2,659	6.67	203	3,327	14.58	254	3,960	14.58	302	4,842	14.50	369	23,749	5.42	1,810	13,252	38.75	1,010
M1	5.59	1,184	4.75	212	1,777	12.75	318	3,143	4.75	562	3,717	12.67	665	4,335	12.67	775	5,138	12.67	919	18,370	3.92	3,286	10,299	37.00	1,842
M1-M2	5.59	880	6.83	157	1,176	14.75	210	2,407	6.83	431	2,554	14.75	457	2,991	14.75	535	3,602	14.67	644	13,673	5.58	2,446	7,466	38.83	1,336
M2	7.53	266	5.50	35	893	13.50	119	1,812	5.50	241	2,304	13.42	306	2,769	13.42	368	3,375	13.42	448	14,132	4.83	1,877	8,220	37.92	1,092
N	4.85	309	6.17	64	566	13.25	117	1,171	6.08	241	1,364	13.25	281	1,620	13.25	334	1,969	13.25	406	9,242	5.00	1,906	5,177	38.25	1,067
N1	1.52	502	4.50	330	534	12.50	351	1,253	4.50	824	1,211	12.50	797	1,421	12.50	935	1,697	12.50	1,116	5,936	3.75	3,905	3,424	36.83	2,253
N1-N2	1.52	312	6.33	205	321	14.33	211	828	6.17	545	757	14.17	498	900	14.17	592	1,095	14.08	720	4,349	5.08	2,861	2,342	38.33	1,541
N2	3.33	354	5.25	106	564	13.25	169	1,193	5.17	358	1,331	13.17	400	1,574	13.17	473	1,901	13.17	571	7,496	4.42	2,251	4,269	37.50	1,282

Station	Area [mi²]	10-YR 6-HR			10-YR 24-HR			100-YR 6-HR			100-YR 24-HR			200-YR 24-HR			500-YR 24-HR			PMP 6-HR			PMP 72-HR		
		Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]
O1	3.09	319	5.33	103	489	13.33	158	1,057	5.33	342	1,163	13.33	376	1,373	13.33	444	1,657	13.33	536	6,584	4.58	2,131	3,719	37.67	1,204
P1	2.44	371	5.17	152	471	13.17	193	1,041	5.08	427	1,073	13.08	440	1,262	13.08	517	1,518	13.08	622	5,837	4.33	2,392	3,305	37.42	1,355
Q1	2.23	434	5.00	195	505	13.00	226	1,107	5.00	496	1,111	13.00	498	1,299	13.00	583	1,551	13.00	696	5,816	4.25	2,608	3,248	37.33	1,457
R1	0.28	254	4.25	907	179	12.25	639	506	4.25	1,807	387	12.25	1,382	450	12.25	1,607	531	12.25	1,896	1,716	3.42	6,129	1,036	36.58	3,700
S1	1.41	621	4.33	440	624	12.33	443	1,542	4.33	1,094	1,449	12.33	1,028	1,703	12.33	1,208	2,030	12.33	1,440	9,642	3.58	6,838	4,479	36.67	3,177
T1	3.04	812	4.67	267	979	12.67	322	2,111	4.67	694	2,151	12.67	708	2,532	12.67	833	3,007	12.67	989	15,022	3.83	4,941	6,656	36.92	2,189
U1	1.37	638	4.42	466	615	12.42	449	1,496	4.42	1,092	1,365	12.42	996	1,598	12.42	1,166	1,887	12.42	1,377	8,841	3.58	6,453	4,033	36.75	2,944
V1	0.66	311	4.50	471	236	12.50	358	664	4.50	1,006	526	12.50	797	617	12.50	935	735	12.50	1,114	3,462	3.75	5,245	1,618	36.83	2,452
W	6.74	818	5.08	121	1,478	13.00	218	3,219	4.83	474	3,686	12.83	541	4,424	12.83	650	5,386	12.83	792	28,690	4.08	4,222	13,040	37.17	1,915
W1	3.89	933	4.58	240	1,343	12.58	345	2,623	4.58	674	2,976	12.50	765	3,489	12.50	897	4,159	12.50	1,069	19,969	3.75	5,133	9,329	36.83	2,398
W1-W2	3.89	789	5.08	203	1,083	13.00	277	2,383	4.92	610	2,589	12.92	661	3,062	12.92	784	3,677	12.92	941	17,725	4.17	4,557	8,426	37.25	2,152
W2	2.85	596	4.58	209	848	12.58	298	1,878	4.58	659	2,042	12.50	716	2,419	12.50	849	2,914	12.50	1,022	14,807	3.75	5,066	6,736	36.83	2,364
X1	0.79	358	4.50	453	288	12.50	365	787	4.50	996	645	12.50	816	755	12.50	956	902	12.50	1,142	4,163	3.75	5,270	1,994	36.83	2,524
Y1	0.58	513	4.17	884	371	12.17	640	1,077	4.17	1,857	837	12.17	1,443	979	12.17	1,688	1,158	12.17	1,997	4,868	3.42	8,393	2,556	36.50	4,407
Z1	0.66	310	4.50	470	239	12.50	362	694	4.50	1,052	558	12.50	845	656	12.50	994	787	12.50	1,192	2,775	3.83	4,205	1,616	36.83	2,448

Note:

1. Station designations can be found in Figure 4-16.
2. Basin series of A through D are not within the Area 3 boundary. They are presented in the table to update Alpha's study.

Table 4-12

Buckeye Area 3 Hydrologic Responses for Various Storm Events (Peak Discharge and Time to Peak –Future Condition)

Station	Area [mi2]	10-YR 6-HR			10-YR 24-HR			100-YR 6-HR			100-YR 24-HR			200-YR 24-HR			500-YR 24-HR			PMP 6-HR			PMP 72-HR		
		Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]
E	1.54	302	9.17	196	261	17.42	169	5,491	8.5	3,566	5,088	16.58	3,304	6,975	16.25	4,529	9,449	16	6,136	50,490	6.25	32,786	32,130	39.58	20,864
E1	0.96	566	4.5	590	480	12.5	500	1,061	4.5	1,105	904	12.5	942	1,034	12.5	1,077	1,197	12.5	1,247	3,877	3.75	4,039	2,170	36.83	2,260
E1-D	0.96	566	4.5	590	480	12.5	500	1,061	4.5	1,105	904	12.5	942	1,034	12.5	1,077	1,092	12.42	1,138	3,877	3.75	4,039	2,170	36.83	2,260
E1-Do	0.96	32	6.5	33	12	14.58	13	815	4.75	849	649	12.75	676	909	12.67	947	1,173	12.58	1,222	3,877	3.75	4,039	2,170	36.83	2,260
E1-E2	0.96	23	7.75	24	11	15.83	11	658	5.25	685	505	13.25	526	677	13.17	705	866	13	902	3,457	4.08	3,601	1,992	37.17	2,075
E2	1.98	984	4.58	497	935	12.58	472	1,953	4.58	986	1,808	12.58	913	2,076	12.58	1,048	2,416	12.58	1,220	7,892	3.92	3,986	4,527	36.92	2,286
E2-D	1.98	984	4.58	497	935	12.58	472	1,953	4.58	986	1,808	12.58	913	2,076	12.58	1,048	2,328	12.5	1,176	7,892	3.92	3,986	4,527	36.92	2,286
E2-Do	1.98	0	0.08	0	4	18.75	2	1,443	4.92	729	1,461	12.83	738	1,889	12.75	954	2,367	12.67	1,195	7,892	3.92	3,986	4,527	36.92	2,286
E2-E3	2.94	4	10.83	1	12	21.92	4	1,029	6.08	350	1,005	13.92	342	1,456	13.75	495	2,037	13.58	693	9,549	4.58	3,248	5,470	37.67	1,861
E3	2.49	770	5.08	309	741	13.08	298	1,583	5.08	636	1,443	13	580	1,666	13	669	1,948	13	782	6,737	4.42	2,706	3,819	37.5	1,534
E3-D	2.49	770	5.08	309	741	13.08	298	1,583	5.08	636	1,443	13	580	1,666	13	669	1,915	12.92	769	6,737	4.42	2,706	3,819	37.5	1,534
E3-Do	2.49	0	0.08	0	2	24.75	1	1,106	5.58	444	1,053	13.5	423	1,521	13.25	611	1,895	13.17	761	6,737	4.42	2,706	3,819	37.5	1,534
E3-E4	5.42	0	0.08	0	10	25.42	2	1,267	7.17	234	1,365	15	252	1,950	14.75	360	2,717	14.58	501	14,226	5.25	2,625	8,155	38.42	1,505
E3R	2.94	27	7.75	9	13	18.75	4	1,373	4.92	467	1,455	12.83	495	1,883	12.75	640	2,364	12.67	804	10,852	4	3,691	6,192	37.08	2,106
E4	3.04	687	5.42	226	684	13.42	225	1,438	5.42	473	1,332	13.42	438	1,535	13.42	505	1,800	13.42	592	6,357	4.75	2,091	3,679	37.92	1,210
E4-D	3.04	687	5.42	226	684	13.42	225	1,438	5.42	473	1,332	13.42	438	1,535	13.42	505	1,779	13.33	585	6,357	4.75	2,091	3,679	37.92	1,210
E4-Do	3.04	0	0.08	0	0	0.08	0	914	6.25	301	950	14.08	313	1,341	13.83	441	1,759	13.58	579	6,357	4.75	2,091	3,679	37.92	1,210
E4H2E5	16.98	0	0.08	0	62	22	4	2,026	8.75	119	3,148	16.33	185	4,427	16.08	261	6,109	15.83	360	34,900	6.08	2,055	20,645	39.33	1,216
E4RA	5.42	0	0.08	0	12	21.92	2	1,515	6.08	280	1,633	13.92	301	2,359	13.67	435	3,327	13.5	614	15,936	4.58	2,940	9,171	37.58	1,692
E4RB	6.05	0	0.08	0	144	16.17	24	2,376	5.58	393	2,694	13.42	445	3,504	13.25	579	4,646	13.17	768	19,350	4.25	3,198	10,955	37.33	1,811
E5	1.31	470	4.92	359	417	12.92	318	957	4.92	731	819	12.92	625	943	12.92	720	1,108	12.92	846	3,843	4.25	2,934	2,172	37.33	1,658
E5-D	1.31	470	4.92	359	417	12.92	318	957	4.92	731	819	12.92	625	943	12.92	720	1,104	12.83	843	3,843	4.25	2,934	2,172	37.33	1,658
E5-Do	1.31	0	0.08	0	0	0.08	0	667	5.25	509	586	13.33	447	822	13.17	627	1,086	13	829	3,843	4.25	2,934	2,172	37.33	1,658
E5K2E6	1.54	302	9.17	196	261	17.42	169	5,490	8.5	3,565	5,063	16.58	3,288	6,946	16.25	4,510	9,414	16	6,113	50,140	6.25	32,558	31,104	39.58	20,197
E5R	16.98	0	0.08	0	123	18.5	7	2,324	7.42	137	3,517	15.08	207	5,000	14.92	294	6,803	14.67	401	38,156	5.42	2,247	22,046	38.58	1,298
E6	2.04	627	4.83	307	643	12.83	315	1,456	4.75	714	1,356	12.75	665	1,581	12.75	775	1,875	12.75	919	6,594	4.08	3,232	3,774	37.17	1,850
E6-D	2.04	627	4.83	307	643	12.83	315	1,456	4.75	714	1,356	12.75	665	1,581	12.75	775	1,841	12.67	902	6,594	4.08	3,232	3,774	37.17	1,850
E6-Do	2.04	0	0.08	0	0	0.08	0	940	5.17	461	1,055	13.08	517	1,420	12.92	696	1,852	12.83	908	6,594	4.08	3,232	3,774	37.17	1,850
E6R	1.54	315	8.33	205	268	16.5	174	5,642	8.08	3,664	5,183	16.17	3,366	7,149	15.92	4,642	9,679	15.67	6,285	51,233	6.08	33,268	31,605	39.33	20,523
ECP	1.54	302	9.17	196	261	17.42	169	5,491	8.5	3,566	5,088	16.58	3,304	6,975	16.25	4,529	9,449	16	6,136	50,490	6.25	32,786	32,130	39.58	20,864
F1	2.79	1,167	4.58	418	1,246	12.58	447	2,361	4.58	846	2,376	12.58	852	2,731	12.58	979	3,182	12.58	1,141	10,473	3.83	3,754	5,943	36.92	2,130
F1-D	2.79	1,167	4.58	418	1,246	12.58	447	2,361	4.58	846	2,316	12.5	830	2,465	12.5	884	2,605	12.42	934	10,473	3.83	3,754	5,943	36.92	2,130
F1-Do	2.79	97	5.75	35	172	14.17	62	1,895	4.83	679	2,117	12.67	759	2,617	12.58	938	3,182	12.58	1,141	10,473	3.83	3,754	5,943	36.92	2,130
F1-F2	2.79	98	6.33	35	150	14.83	54	1,682	5.17	603	1,743	13	625	2,261	12.92	810	2,848	12.83	1,021	10,031	4	3,595	5,643	37	2,023
F2	2.53	923	4.75	365	959	12.75	379	1,869	4.75	739	1,828	12.75	723	2,096	12.75	828	2,448	12.75	968	8,230	4	3,253	4,648	37	1,837
F2-D	2.53	923	4.75	365	959	12.75	379	1,869	4.75	739	1,828	12.75	723	2,069	12.67	818	2,133	12.58	843	8,230	4	3,253	4,648	37	1,837
F2-D	2.53	38	6.92	15	66	15.58	26	1,379	5.08	545	1,430	12.92	565	1,957	12.83	774	2,448	12.75	968	8,230	4	3,253	4,648	37	1,837

Station	Area [mi2]	10-YR 6-HR			10-YR 24-HR			100-YR 6-HR			100-YR 24-HR			200-YR 24-HR			500-YR 24-HR			PMP 6-HR			PMP 72-HR		
		Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]
F2-F3	5.31	0	0.08	0	144	16.17	27	2,291	5.58	431	2,483	13.42	468	3,191	13.25	601	4,226	13.17	796	17,110	4.25	3,222	9,761	37.33	1,838
F3	0.74	331	4.75	447	257	12.75	347	638	4.75	862	512	12.75	692	594	12.75	803	697	12.75	942	2,456	4.08	3,319	1,389	37.08	1,877
F3-D	0.74	331	4.75	447	257	12.75	347	638	4.75	862	512	12.75	692	594	12.75	803	695	12.67	939	2,456	4.08	3,319	1,389	37.08	1,877
F3-Do	0.74	0	0.08	0	0	0.08	0	415	5.08	561	325	13.17	439	487	13	658	676	12.83	914	2,456	4.08	3,319	1,389	37.08	1,877
F3-E4	6.05	0	0.08	0	122	18.5	20	1,651	7.25	273	1,898	15.08	314	2,499	14.92	413	3,293	14.83	544	15,266	5.5	2,523	8,771	38.67	1,450
F3R	5.31	0	0.08	0	163	14.83	31	2,828	5.17	533	2,978	13	561	3,875	12.92	730	5,100	12.83	960	18,261	4	3,439	10,291	37	1,938
G1	1.12	475	4.67	424	427	12.67	381	1,040	4.67	929	899	12.58	803	1,050	12.58	938	1,238	12.58	1,105	4,202	3.92	3,752	2,429	37	2,169
G1-D	1.12	475	4.67	424	427	12.67	381	1,039	4.58	928	899	12.58	803	1,005	12.5	897	1,075	12.42	960	4,202	3.92	3,752	2,429	37	2,169
G1-Do	1.12	0	0.08	0	2	16.42	2	943	4.75	842	786	12.75	702	1,031	12.67	921	1,229	12.67	1,097	4,202	3.92	3,752	2,429	37	2,169
GCP	1.12	0	0.08	0	2	16.42	2	943	4.75	842	786	12.75	702	1,031	12.67	921	1,229	12.67	1,097	4,202	3.92	3,752	2,429	37	2,169
H1	1.07	399	4.67	373	337	12.67	315	803	4.67	750	694	12.67	649	818	12.67	764	977	12.67	913	3,584	4	3,350	2,004	37	1,873
H1-D	1.07	399	4.67	373	337	12.67	315	803	4.67	750	694	12.67	649	818	12.67	764	952	12.58	890	3,584	4	3,350	2,004	37	1,873
H1-Do	1.07	0	0.08	0	0	0.08	0	518	5.08	484	402	13.17	376	702	12.92	656	915	12.83	855	3,584	4	3,350	2,004	37	1,873
H1-H2	1.07	0	0.08	0	0	0.08	0	212	7.17	198	189	15.25	177	306	14.83	286	468	14.5	437	2,837	5.33	2,651	1,581	38.33	1,478
H2	1.4	358	5.25	256	323	13.25	231	730	5.25	521	638	13.25	456	740	13.25	529	869	13.25	621	3,145	4.58	2,246	1,774	37.67	1,267
H2-D	1.4	358	5.25	256	323	13.25	231	730	5.25	521	638	13.25	456	740	13.25	529	869	13.25	621	3,145	4.58	2,246	1,774	37.67	1,267
H2-Do	1.4	0	0.08	0	0	0.08	0	386	5.92	276	384	14	274	610	13.67	436	806	13.5	576	3,145	4.58	2,246	1,774	37.67	1,267
J1	1.73	483	5.08	279	459	13.08	265	1,009	5	583	909	13.08	525	1,055	13	610	1,240	13	717	4,485	4.42	2,592	2,517	37.42	1,455
J1-D	1.73	483	5.08	279	459	13.08	265	1,009	5	583	909	13.08	525	1,055	13	610	1,219	12.92	705	4,485	4.42	2,592	2,517	37.42	1,455
J1-Do	1.73	0	0.08	0	0	0.08	0	528	5.5	305	612	13.58	354	927	13.33	536	1,207	13.17	698	4,485	4.42	2,592	2,517	37.42	1,455
J1-J2	1.73	0	0.08	0	0	0.08	0	380	8.08	220	377	16.08	218	518	15.83	299	708	15.42	409	3,783	5.75	2,187	2,139	38.92	1,236
J2	3.64	804	5.33	221	858	13.33	236	1,745	5.33	479	1,679	13.33	461	1,931	13.33	530	2,269	13.33	623	8,107	4.67	2,227	4,639	37.75	1,274
J2-D	3.64	804	5.33	221	858	13.33	236	1,745	5.33	479	1,679	13.33	461	1,931	13.33	530	2,259	13.25	621	8,107	4.67	2,227	4,639	37.75	1,274
J2-Do	3.64	0	0.08	0	0	0.08	0	1,006	6.17	276	1,178	13.92	324	1,688	13.67	464	2,211	13.42	607	8,107	4.67	2,227	4,639	37.75	1,274
J2-K3	5.37	0	0.08	0	0	0.08	0	791	6.58	147	1,002	14.33	187	1,454	14	271	2,032	13.83	378	8,042	4.83	1,498	4,975	39.08	926
K1	1.54	789	4.5	512	741	12.5	481	1,563	4.5	1,015	1,432	12.5	930	1,649	12.5	1,071	1,922	12.5	1,248	6,266	3.75	4,069	3,584	36.83	2,327
K1-K2	1.54	392	6.33	255	333	14.5	216	1,004	5.83	652	822	13.92	534	1,013	13.83	658	1,248	13.75	810	5,088	4.5	3,304	2,634	37.83	1,710
K2	2.37	419	5.67	177	418	13.67	176	935	5.67	395	852	13.67	359	991	13.67	418	1,170	13.67	494	4,263	5	1,799	2,536	38.25	1,070
K2-D	2.37	419	5.67	177	418	13.67	176	935	5.67	395	852	13.67	359	991	13.67	418	1,160	13.58	489	4,263	5	1,799	2,536	38.25	1,070
K2-Do	2.37	0	0.08	0	0	0.08	0	642	6.5	271	651	14.33	275	898	14.08	379	1,153	13.83	486	4,263	5	1,799	2,536	38.25	1,070
K2-K3	1.54	303	8.33	197	268	16.5	174	1,166	7.83	757	1,007	15.92	654	1,348	15.67	875	1,775	15.42	1,153	7,812	6	5,073	4,485	39.33	2,912
K3	1.64	394	5.33	240	368	13.33	224	817	5.33	498	724	13.33	441	838	13.33	511	981	13.33	598	3,544	4.67	2,161	2,015	37.75	1,229
K3-D	1.64	394	5.33	240	368	13.33	224	817	5.33	498	724	13.33	441	838	13.33	511	974	13.25	594	3,544	4.67	2,161	2,015	37.75	1,229
K3-Do	1.64	0	0.08	0	0	0.08	0	429	5.92	262	484	14	295	697	13.75	425	946	13.5	577	3,544	4.67	2,161	2,015	37.75	1,229
K3RA	1.54	392	6.33	255	333	14.5	216	1,480	6.17	961	1,350	14.33	877	1,758	14.08	1,142	2,358	13.83	1,531	8,776	4.58	5,699	4,964	37.83	3,223
K3RB	5.37	0	0.08	0	0	0.08	0	877	6.17	163	1,174	13.92	219	1,681	13.67	313	2,201	13.42	410	8,108	4.67	1,510	5,047	38.83	940
L	16.73	386	8.75	23	598	16.50	36	1,856	7.92	111	3,043	15.58	183	4,186	15.33	251	5,811	15.08	349	32,803	5.5	1,961	18,396	38.83	1,100
L1	3.55	888	4.83	250	1,090	12.75	307	2,127	4.75	599	2,267	12.75	639	2,640	12.75	744	3,115	12.75	877	11,153	4	3,142	6,179	37.08	1,741
L1-L2	3.55	713	5.83	201	830	13.83	234	1,851	5.58	521	1,832	13.58	516	2,143	13.5	604	2,565	13.5	723	9,356	4.75	2,635	5,241	37.83	1,476
L2	7.33	1,556	5.25	212	1,843	13.25	251	3,405	5.25	465	3,556	13.25	485	4,082	13.25	557	4,792	13.25	654	16,946	4.58	2,312	9,694	37.75	1,323
L2-D	7.33	1,556	5.25	212	1,843	13.25	251	3,405	5.25	465	3,556	13.25	485	4,082	13.25	557	4,738	13.17	646	16,946	4.58	2,312	9,694	37.75	1,323
L2-Do	7.33	0	0.08	0	0	0.08	0	1,774	6.25	242	2,556	13.83	349	3,645	13.58	497	4,640	13.42	633	16,946	4.58	2,312	9,694	37.75	1,323
L2-L3	10.88	386	8.75	35	598	16.50	56	1,886	8	174	2,741	15.6	252	3,681	15.33	340	5,048	15	467	24,884	5.58	2,287	13,247	38.83	1,219

Station	Area [mi2]	10-YR 6-HR			10-YR 24-HR			100-YR 6-HR			100-YR 24-HR			200-YR 24-HR			500-YR 24-HR			PMP 6-HR			PMP 72-HR		
		Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]
L3	5.85	1,623	5.25	277	1,680	13.33	287	3,146	5.25	538	3,075	13.25	526	3,505	13.25	599	4,072	13.25	696	13,797	4.58	2,358	7,915	37.75	1,353
L3-D	5.85	1,623	5.25	277	1,680	13.33	287	3,146	5.25	538	3,075	13.25	526	3,505	13.25	599	4,072	13.25	696	13,797	4.58	2,358	7,915	37.75	1,353
L3-Do	5.85	0	0.08	0	0	0.08	0	1,581	6.33	270	2,077	13.92	355	3,013	13.67	515	3,869	13.5	661	13,797	4.58	2,358	7,915	37.75	1,353
L3R	10.88	719	5.92	66	830	13.83	76	2,624	6.25	241	3,810	13.83	350	5,417	13.58	498	7,023	13.42	645	26,096	4.75	2,399	14,817	37.83	1,362
LCP	16.73	317	9.08	19	582	16.42	35	1,654	8	99	3,054	15.58	183	4,203	15.33	251	5,843	15	349	32,803	5.5	1,961	18,408	38.83	1,100
M	13.12	0	0.08	0	84	15.83	6	2,295	7.17	175	3,011	15	229	3,762	14.92	287	4,790	14.75	365	25,268	5.5	1,926	14,225	38.75	1,084
M1	5.59	1,193	4.75	213	1,783	12.75	319	3,151	4.75	564	3,723	12.67	666	4,341	12.67	777	5,144	12.67	920	18,377	3.92	3,287	10,302	37	1,843
M1-D	5.59	1,193	4.75	213	1,783	12.75	319	3,132	4.67	560	3,363	12.58	602	3,606	12.5	645	3,839	12.42	687	18,377	3.92	3,287	10,302	37	1,843
M1-Do	5.59	0	0.08	0	563	13.67	101	2,848	4.83	509	3,712	12.75	664	4,341	12.67	777	5,144	12.67	920	18,377	3.92	3,287	10,302	37	1,843
M1-M2	5.59	0	0.08	0	84	15.83	15	1,667	7.25	298	1,874	15.08	335	2,379	15	426	3,047	14.92	545	14,084	5.58	2,519	7,427	38.83	1,329
M2	7.53	1,720	5.5	228	1,900	13.5	252	3,413	5.5	453	3,470	13.42	461	3,962	13.42	526	4,590	13.42	610	15,810	4.75	2,100	9,138	37.92	1,214
M2-D	7.53	1,720	5.5	228	1,900	13.5	252	3,413	5.5	453	3,470	13.42	461	3,962	13.42	526	4,590	13.42	610	15,810	4.75	2,100	9,138	37.92	1,214
M2-Do	7.53	0	0.08	0	0	0.08	0	1,553	6.75	206	2,277	14.25	302	3,355	13.92	446	4,423	13.67	587	15,810	4.75	2,100	9,138	37.92	1,214
MCP	13.12	0	0.08	0	73	16.08	6	2,295	7.17	175	3,011	15	229	3,762	14.92	287	4,790	14.75	365	25,268	5.5	1,926	14,225	38.75	1,084
N	4.85	35	8.25	7	110	17	23	1,093	5.67	225	1,276	13.42	263	1,712	13.33	353	2,201	13.17	454	9,694	5.08	1,999	5,469	38.25	1,128
N1	1.52	691	4.5	455	673	12.5	443	1,441	4.5	948	1,346	12.5	886	1,552	12.5	1,021	1,823	12.5	1,199	6,090	3.75	4,007	3,496	36.83	2,300
N1-D	1.52	691	4.5	455	673	12.5	443	1,441	4.5	948	1,306	12.42	859	1,385	12.42	911	1,486	12.33	978	6,090	3.75	4,007	3,496	36.83	2,300
N1-Do	1.52	74	5.75	49	63	14.17	41	1,056	4.75	695	1,211	12.58	797	1,455	12.58	957	1,823	12.5	1,199	6,090	3.75	4,007	3,496	36.83	2,300
N1-N2	1.52	35	8.33	23	33	17	22	612	6.58	403	565	14.58	372	731	14.42	481	964	14.33	634	4,551	5.08	2,994	2,398	38.33	1,578
N2	3.33	736	5.25	221	834	13.25	250	1,605	5.17	482	1,633	13.17	490	1,879	13.17	564	2,209	13.17	663	7,913	4.42	2,376	4,477	37.5	1,344
N2-D	3.33	736	5.25	221	834	13.25	250	1,605	5.17	482	1,633	13.17	490	1,753	13.08	526	1,873	13	562	7,913	4.42	2,376	4,477	37.5	1,344
N2-Do	3.33	29	7.92	9	98	16.42	29	1,131	5.67	340	1,281	13.42	385	1,719	13.33	516	2,209	13.17	663	7,913	4.42	2,376	4,477	37.5	1,344
NCP	4.85	3	8.25	1	110	17	23	1,093	5.67	225	1,276	13.42	263	1,712	13.33	353	2,201	13.17	454	9,694	5.08	1,999	5,469	38.25	1,128
O1	3.09	717	5.33	232	772	13.33	250	1,479	5.33	479	1,476	13.33	478	1,693	13.33	548	1,980	13.33	641	7,023	4.58	2,273	3,946	37.67	1,277
O1-D	3.09	717	5.33	232	772	13.33	250	1,479	5.33	479	1,476	13.33	478	1,607	13.25	520	1,696	13.08	549	7,023	4.58	2,273	3,946	37.67	1,277
O1-Do	3.09	33	8.17	11	105	16.58	34	1,022	5.83	331	1,096	13.58	355	1,620	13.42	524	1,980	13.33	641	7,023	4.58	2,273	3,946	37.67	1,277
OCP	3.09	33	8.17	11	105	16.58	34	1,022	5.83	331	1,096	13.58	355	1,620	13.42	524	1,980	13.33	641	7,023	4.58	2,273	3,946	37.67	1,277
P1	2.44	496	5.17	203	561	13.17	230	1,175	5.08	482	1,171	13.08	480	1,361	13.08	558	1,615	13.08	662	5,967	4.33	2,445	3,367	37.42	1,380
P1-D	2.44	496	5.17	203	561	13.17	230	1,175	5.08	482	1,167	13.08	478	1,178	12.92	483	1,319	12.83	541	5,967	4.33	2,445	3,367	37.42	1,380
P1-Do	2.44	49	7.17	20	84	15.58	34	908	5.42	372	1,064	13.25	436	1,350	13.17	553	1,615	13.08	662	5,967	4.33	2,445	3,367	37.42	1,380
PCP	2.44	49	7.17	20	84	15.58	34	908	5.42	372	1,064	13.25	436	1,350	13.17	553	1,615	13.08	662	5,967	4.33	2,445	3,367	37.42	1,380
Q1	2.23	473	5	212	534	13	239	1,148	5	515	1,141	13	512	1,329	13	596	1,582	13	709	5,856	4.25	2,626	3,268	37.33	1,465
Q1-D	2.23	473	5	212	534	13	239	1,096	4.92	491	1,055	12.92	473	1,148	12.83	515	1,250	12.75	561	5,856	4.25	2,626	3,268	37.33	1,465
Q1-Do	2.23	68	6.67	30	93	15	42	930	5.25	417	1,059	13.08	475	1,329	13	596	1,582	13	709	5,856	4.25	2,626	3,268	37.33	1,465
QCP	2.23	68	6.67	30	93	15	42	930	5.25	417	1,059	13.08	475	1,329	13	596	1,582	13	709	5,856	4.25	2,626	3,268	37.33	1,465
R1	0.28	368	4.25	1,314	268	12.25	957	613	4.25	2,189	465	12.25	1,661	525	12.25	1,875	602	12.25	2,150	1,795	3.42	6,411	1,081	36.58	3,861
R1-D	0.28	368	4.25	1,314	268	12.25	957	613	4.25	2,189	465	12.25	1,661	521	12.17	1,861	467	12.08	1,668	1,795	3.42	6,411	1,081	36.58	3,861
R1-Do	0.28	0	0.08	0	5	18.58	18	393	4.42	1,404	296	12.42	1,057	450	12.33	1,607	602	12.25	2,150	1,795	3.42	6,411	1,081	36.58	3,861
RCP	0.28	0	0.08	0	5	18.58	18	393	4.42	1,404	296	12.42	1,057	450	12.33	1,607	602	12.25	2,150	1,795	3.42	6,411	1,081	36.58	3,861
S1	1.41	808	4.33	573	763	12.33	541	1,714	4.33	1,216	1,572	12.33	1,115	1,820	12.33	1,291	2,140	12.33	1,518	9,757	3.58	6,920	4,539	36.67	3,219
S1-D	1.41	808	4.33	573	763	12.33	541	1,714	4.33	1,216	1,454	12.25	1,031	1,690	12.25	1,199	1,561	12.17	1,107	9,757	3.58	6,920	4,539	36.67	3,219
S1-Do	1.41	66	5.5	47	25	13.5	18	1,412	4.5	1,001	1,339	12.42	950	1,718	12.42	1,218	2,140	12.33	1,518	9,757	3.58	6,920	4,539	36.67	3,219
SCP	1.41	66	5.5	47	25	13.5	18	1,412	4.5	1,001	1,339	12.42	950	1,718	12.42	1,218	2,140	12.33	1,518	9,757	3.58	6,920	4,539	36.67	3,219

Station	Area [mi2]	10-YR 6-HR			10-YR 24-HR			100-YR 6-HR			100-YR 24-HR			200-YR 24-HR			500-YR 24-HR			PMP 6-HR			PMP 72-HR		
		Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]	Peak [cfs]	T_p [hr]	Unit Discharge [cfs/mi²]
T1	3.04	930	4.67	306	1,062	12.67	349	2,222	4.67	731	2,231	12.67	734	2,608	12.67	858	3,080	12.67	1,013	15,109	3.83	4,970	6,696	36.92	2,203
T1-D	3.04	930	4.67	306	1,062	12.67	349	2,122	4.58	698	2,069	12.58	681	2,223	12.5	731	2,446	12.42	805	15,109	3.83	4,970	6,696	36.92	2,203
T1-Do	3.04	112	5.58	37	209	13.92	69	2,091	4.75	688	2,067	12.75	680	2,608	12.67	858	3,080	12.67	1,013	15,109	3.83	4,970	6,696	36.92	2,203
TCP	3.04	112	5.58	37	209	13.92	69	2,091	4.75	688	2,067	12.75	680	2,608	12.67	858	3,080	12.67	1,013	15,109	3.83	4,970	6,696	36.92	2,203
U1	1.37	735	4.42	536	683	12.42	499	1,581	4.42	1,154	1,424	12.42	1,039	1,653	12.42	1,207	1,939	12.42	1,415	8,898	3.58	6,495	4,059	36.75	2,963
U1-D	1.37	735	4.42	536	683	12.42	499	1,467	4.33	1,071	1,331	12.33	972	1,381	12.25	1,008	1,291	12.17	942	8,898	3.58	6,495	4,059	36.75	2,963
U1-Do	1.37	214	5	156	114	13.33	83	1,504	4.5	1,098	1,309	12.5	955	1,653	12.42	1,207	1,939	12.42	1,415	8,898	3.58	6,495	4,059	36.75	2,963
UCP	1.37	214	5	156	114	13.33	83	1,504	4.5	1,098	1,309	12.5	955	1,653	12.42	1,207	1,939	12.42	1,415	8,898	3.58	6,495	4,059	36.75	2,963
V1	0.66	334	4.5	506	254	12.50	385	690	4.50	1,045	545	12.50	826	635	12.50	962	753	12.50	1,141	3,483	3.75	5,277	1,628	36.83	2,467
V1-D	0.66	334	4.5	506	254	12.50	385	618	4.42	936	490	12.42	742	541	12.42	820	602	12.33	912	3,483	3.75	5,277	1,628	36.83	2,467
V1-Do	0.66	79	5.2	120	31	14.00	47	676	4.58	1,024	487	12.58	738	619	12.58	938	753	12.50	1,141	3,483	3.75	5,277	1,628	36.83	2,467
VCP	0.66	79	5.17	120	31	14	47	676	4.58	1,024	487	12.58	738	619	12.58	938	753	12.5	1,141	3,483	3.75	5,277	1,628	36.83	2,467
W	6.74	793	5.08	117	1,084	13	160	2,642	5.08	393	3,591	12.92	530	4,546	12.83	668	5,513	12.83	811	28,839	4.08	4,244	13,126	37.17	1,928
W1	3.89	934	4.6	240	1,343	12.58	345	2,624	4.58	675	2,976	12.50	765	3,490	12.50	897	4,160	12.50	1,069	19,970	3.75	5,134	9,330	36.83	2,398
W1-W2	3.89	791	5.1	203	1,084	13.00	277	2,384	5.00	610	2,589	12.92	661	3,063	12.92	784	3,678	12.92	942	17,808	4.17	4,557	8,426	37.25	2,152
W2	2.85	781	4.6	274	980	12.58	344	2,067	4.58	725	2,180	12.50	765	2,554	12.50	896	3,047	12.50	1,069	14,599	3.75	5,122	6,810	36.83	2,389
W2-D	2.85	781	4.6	274	980	12.58	344	2,067	4.58	725	2,180	12.50	765	2,554	12.50	896	3,047	12.50	1,069	14,599	3.75	5,122	6,810	36.83	2,389
W2-Do	2.85	0	0.1	0	0	0.08	0	1,068	5.08	375	1,076	13.00	378	1,607	12.75	564	2,726	12.67	956	14,599	3.75	5,122	6,810	36.83	2,389
WCP	6.74	640	5.17	95	1,068	13	158	2,647	5.08	393	3,575	12.92	530	4,504	12.83	668	5,465	12.83	811	28,604	4.08	4,244	12,995	37.17	1,928
X1	0.79	359	4.5	454	289	12.50	366	788	4.50	997	645	12.50	816	756	12.50	957	902	12.50	1,142	4,164	3.75	5,271	1,994	36.83	2,524
XCP	0.79	359	4.5	454	289	12.5	366	788	4.5	997	645	12.5	816	756	12.5	957	902	12.5	1,142	4,164	3.75	5,271	1,994	36.83	2,524
Y1	0.58	512	4.2	883	369	12.17	636	1,075	4.17	1,853	835	12.17	1,440	978	12.17	1,686	1,157	12.17	1,995	4,867	3.42	8,391	2,556	36.50	4,407
YCP	0.58	512	4.17	883	369	12.17	636	1,075	4.17	1,853	835	12.17	1,440	978	12.17	1,686	1,157	12.17	1,995	4,867	3.42	8,391	2,556	36.5	4,407
Z1	0.66	535	4.5	811	410	12.5	621	919	4.5	1,392	724	12.5	1,097	820	12.5	1,242	945	12.5	1,432	2,957	3.83	4,480	1,719	36.83	2,605
Z1-D	0.66	535	4.5	811	410	12.5	621	919	4.5	1,392	724	12.5	1,097	820	12.5	1,242	915	12.42	1,386	2,957	3.83	4,480	1,719	36.83	2,605
Z1-Do	0.66	0	0.08	0	3	20.75	5	571	4.83	865	476	12.83	721	639	12.75	968	920	12.58	1,394	2,957	3.83	4,480	1,719	36.83	2,605
ZCP	0.66	0	0.08	0	3	20.75	5	571	4.83	865	476	12.83	721	639	12.75	968	920	12.58	1,394	2,957	3.83	4,480	1,719	36.83	2,605

Note:

3. Station designations can be found in Figure 4-17.
4. For future condition, Basin series of A through D are not included, since they are not within the Area 3 boundary.

Table 4-13

Buckeye Area 3 Hydrologic Responses for Various Storm Events (Runoff Volumes – Existing Condition)

Outlet	Area [mi^2]	10-yr 6-hr	10-yr 24-hr	100-yr 6-hr	100-yr 24-hr	200-yr 24-hr	500-yr 24-hr	PMP 6-hr	PMP 72-hr
E	31.24	166	656	1,040	1,637	1,967	2,397	10,789	9,835
G	1.12	29	27	79	68	81	98	402	394
L	16.73	174	412	729	976	1,159	1,403	5,878	5,581
M	13.12	189	375	632	841	994	1,193	4,661	4,566
N	4.85	70	127	261	297	351	425	1,692	1,604
O	3.09	49	74	174	180	215	261	1,071	1,001
P	2.44	53	71	155	160	188	227	864	846
Q	2.23	63	80	159	167	195	233	817	847
R	0.28	11	9	23	20	24	28	102	103
S	1.41	38	41	104	95	112	135	772	597
T	3.04	87	108	231	233	274	326	1,729	1,436
U	1.37	43	43	111	99	117	140	784	653
V	0.66	26	25	56	52	60	72	342	296
W	6.74	121	215	400	471	554	665	3,417	2,858
X	0.79	29	28	64	59	69	82	401	341
Y	0.58	22	19	48	42	49	59	293	246
Z	0.66	21	18	50	41	49	59	232	214

Note: Station designations can be found in Figure 4-14; runoff volume unit: acre-feet

Table 4-14

Buckeye Area 3 Hydrologic Responses for Various Storm Events (Runoff Volumes – Future Condition)

Outlet	Area [mi^2]	10-yr 6-hr	10-yr 24-hr	100-yr 6-hr	100-yr 24-hr	200-yr 24-hr	500-yr 24-hr	PMP 6-hr	PMP 72-hr
E	31.24	91	143	1,263	1,492	1,952	2,545	10,695	12,564
G	1.12	0	1	52	49	64	83	384	427
L	16.73	93	147	458	838	1,082	1,404	5,879	7,276
M	13.12	0	65	307	627	822	1,074	4,533	5,590
N	4.85	5	40	185	260	329	420	1,684	1,950
O	3.09	4	30	137	178	224	285	1,092	1,316
P	2.44	5	18	103	119	151	194	828	894
Q	2.23	6	18	97	109	138	176	760	816
R	0.28	0	3	14	20	26	33	104	156
S	1.41	3	10	71	75	96	123	759	669
T	3.04	8	29	152	163	207	262	1,662	1,432
U	1.37	10	12	79	74	94	119	760	667
V	0.66	6	5	37	34	43	55	326	292
W	6.74	102	146	304	382	468	583	3,342	2,869
X	0.79	29	28	64	59	69	83	401	342
Y	0.58	22	19	47	42	49	59	293	245
Z	0.66	0	1	28	41	53	69	238	346

Note: Station designations can be found in Figure 4-15; runoff volume unit: acre-feet

Table 4-15

USGS Regression Data (Digitized from Figure 41 in Thomas et al., 1995)

Drainage Area [sq-mi]	Envelope [cfs]	Regional [cfs]	Low-to-Middle Elevation [cfs]
0.1	300	182	110
0.2	700	308	156
0.3	1,162	419	192
0.4	1,600	522	222
0.5	2,028	618	249
0.6	2,500	710	273
0.7	3,000	798	296
0.8	3,500	884	317
0.9	3,887	967	336
1	4,403	1,047	355
2	7,878	1,678	505
3	10,676	2,210	621
4	13,809	2,688	720
5	16,047	3,128	806

Table 4-16

Area 3 Sub-Basin Existing 100-year Peak Flows

Sub-Basin	Area [sq-mi]	6-Hr Peak [cfs]	24-Hr Peak [cfs]
R1	0.28	506	387
Y1	0.58	1,077	837
V1	0.66	664	526
Z1	0.66	694	558
F3	0.74	452	374
X1	0.79	787	645
E1	0.96	894	790
H1	1.07	497	472
G1	1.12	928	820
U1	1.37	1,496	1,365
H2	1.4	446	432
S1	1.41	1,542	1,449
N1	1.52	1,253	1,211

Sub-Basin	Area [sq-mi]	6-Hr Peak [cfs]	24-Hr Peak [cfs]
K1	1.54	1,563	1,432
K3	1.64	520	507
J1	1.73	626	633
E2	1.98	1,587	1,548
E6	2.04	1,227	1,194
Q1	2.23	1,107	1,111
K2	2.37	721	694
P1	2.44	1,041	1,073
E3	2.49	1,147	1,129
F2	2.53	1,426	1,506
W2	2.85	1,878	2,042
E4	3.04	923	966
T1	3.04	2,111	2,151
O1	3.09	1,057	1,163
N2	3.33	1,193	1,331
L1	3.55	2,127	2,267
J2	3.64	1,095	1,213
W1	3.89	2,623	2,976
M1	5.59	3,143	3,717
L3	5.85	1,832	2,129
L2	7.33	2,135	2,641
M2	7.53	1,812	2,304

E. Hydrologic Analysis Supporting Documentation

This section was Appendix D in the June 2004 report.

E.1 Precipitation Data

Table E.1-1

Rainfall Amount Calculation from Prefre, in DDMSW (ver. 2.1)

	FRS 1 (Area=75.76 sq-mile)							
	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	200-Yr	500-Yr
	2	5	10	25	50	100	200	500
5 MIN	0.34	0.43	0.49	0.58	0.65	0.72		
10 MIN	0.50	0.65	0.74	0.88	0.99	1.10		
15 MIN	0.61	0.81	0.94	1.12	1.27	1.41		
30 MIN	0.81	1.08	1.26	1.52	1.71	1.91		

	FRS 1 (Area=75.76 sq-mile)							
	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	200-Yr	500-Yr
	2	5	10	25	50	100	200	500
1 HOUR	0.99	1.33	1.56	1.89	2.14	2.39		
2 HOUR	1.08	1.48	1.74	2.11	2.39	2.67		
3 HOUR	1.15	1.57	1.86	2.25	2.56	2.87		
6 HOUR	1.27	1.76	2.08	2.53	2.88	3.23		
12 HOUR	1.39	1.97	2.35	2.88	3.29	3.69		
24 HOUR	1.52	2.18	2.62	3.23	3.70	4.16	4.63	5.23
	FRS 2 (Area=5.82 sq-mile)							
	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	200-Yr	500-Yr
	2	5	10	25	50	100	200	500
5 MIN	0.32	0.42	0.49	0.59	0.66	0.74		
10 MIN	0.48	0.64	0.75	0.90	1.02	1.13		
15 MIN	0.59	0.80	0.94	1.14	1.30	1.45		
30 MIN	0.77	1.07	1.27	1.54	1.76	1.97		
1 HOUR	0.94	1.32	1.57	1.92	2.19	2.46		
2 HOUR	1.03	1.46	1.74	2.14	2.44	2.74		
3 HOUR	1.09	1.55	1.86	2.28	2.60	2.93		
6 HOUR	1.20	1.72	2.07	2.55	2.91	3.28		
12 HOUR	1.31	1.91	2.31	2.86	3.29	3.70		
24 HOUR	1.42	2.11	2.56	3.18	3.66	4.13	4.61	5.22
	FRS 3 (Area=8.77 sq-mile)							
	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	200-Yr	500-Yr
	2	5	10	25	50	100	200	500
5 MIN	0.32	0.42	0.49	0.58	0.66	0.73		
10 MIN	0.48	0.63	0.74	0.89	1.00	1.12		
15 MIN	0.58	0.79	0.93	1.13	1.28	1.43		
30 MIN	0.77	1.06	1.26	1.53	1.74	1.95		
1 HOUR	0.94	1.31	1.56	1.90	2.17	2.43		
2 HOUR	1.03	1.45	1.73	2.12	2.42	2.71		
3 HOUR	1.09	1.55	1.85	2.26	2.58	2.90		
6 HOUR	1.21	1.72	2.07	2.54	2.90	3.26		
12 HOUR	1.33	1.93	2.32	2.86	3.28	3.70		
24 HOUR	1.45	2.13	2.58	3.19	3.67	4.14	4.62	5.23

Table E.1-2

Summary of Rainfall Areal Reduction for 200 and 500-Year Storm Events

Area [mi^2]	Reduction Factor	FRS 1		FRS 2		FRS 3	
		200-yr 24-hr	500-yr 24-hr	200-yr 24-hr	500-yr 24-hr	200-yr 24-hr	500-yr 24-hr
0	1.000	4.63	5.23	4.61	5.22	4.62	5.23
10	0.950	4.40	4.97	23.00	25.99	120.31	135.90
20	0.918	4.25	4.80	22.23	25.11	116.26	131.33
30	0.900	4.17	4.71	21.79	24.62	113.98	128.75
40	0.887	4.11	4.64	21.48	24.26	112.33	126.89

Area [mi^2]	Reduction Factor	FRS 1		FRS 2		FRS 3	
		200-yr 24-hr	500-yr 24-hr	200-yr 24-hr	500-yr 24-hr	200-yr 24-hr	500-yr 24-hr
50	0.877	4.06	4.59	21.24	23.99	111.07	125.46
60	0.870	4.03	4.55	21.07	23.80	110.18	124.46
70	0.863	4.00	4.51	20.90	23.61	109.29	123.46
80	0.857	3.97	4.48	20.75	23.44	108.53	122.60
90	0.852	3.94	4.46	20.63	23.30	107.90	121.88
100	0.848	3.93	4.44	20.53	23.20	107.39	121.31
110	0.845	3.91	4.42	20.46	23.11	107.01	120.88

Figure E.1-1a

Buckeye Area 3 FRS #1 I-D-F Graph

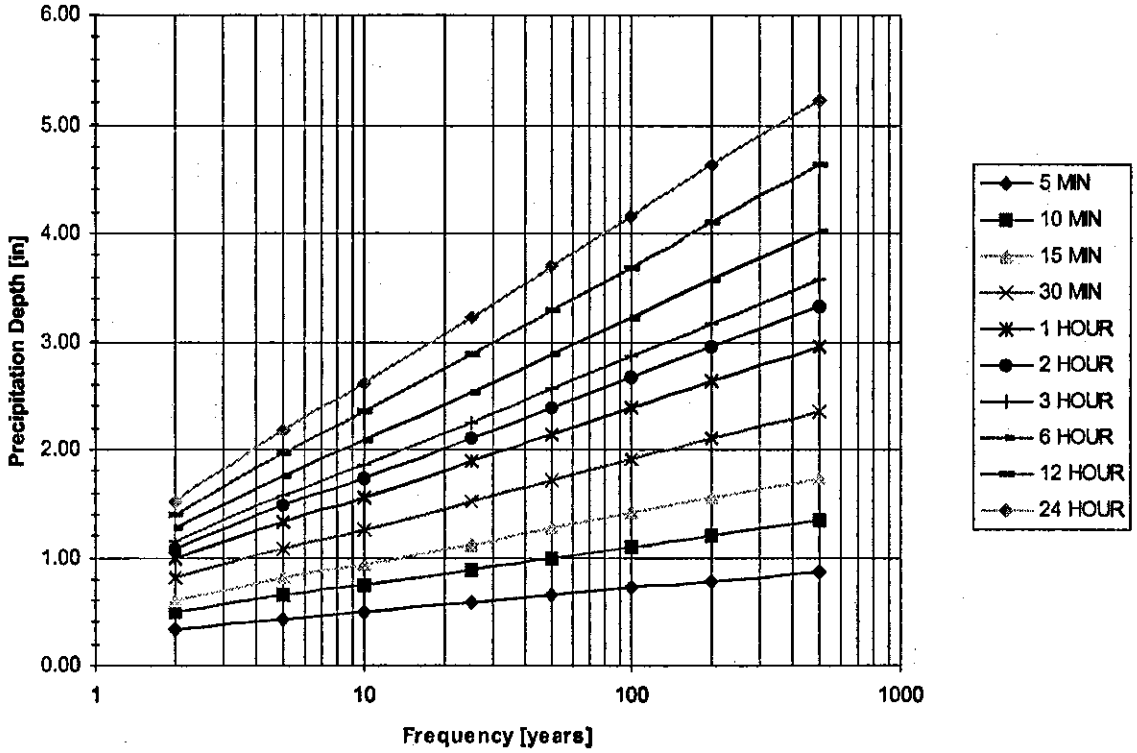


Figure E.1-1b

Buckeye Area 3 FRS #2 I-D-F Graph

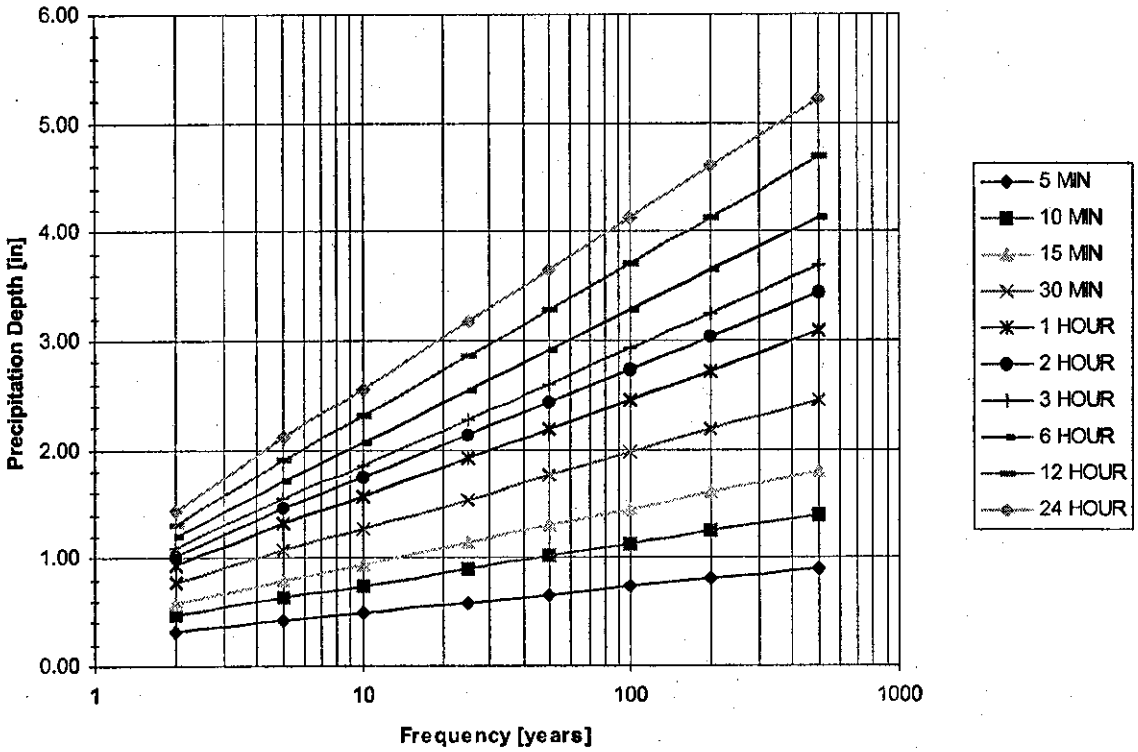


Figure E.1-1c

Buckeye Area 3 FRS #3 I-D-F Graph

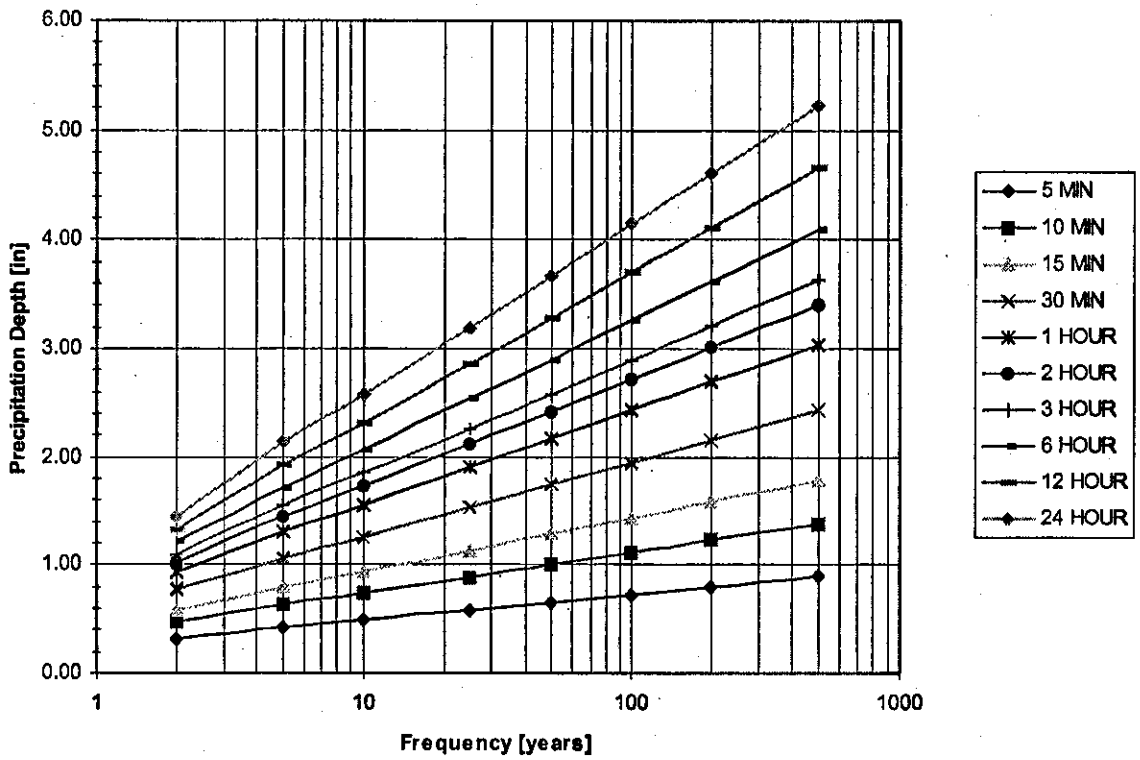


Figure E.1-2

Area 3 PMP 6-hour Incremental Rainfall Distribution

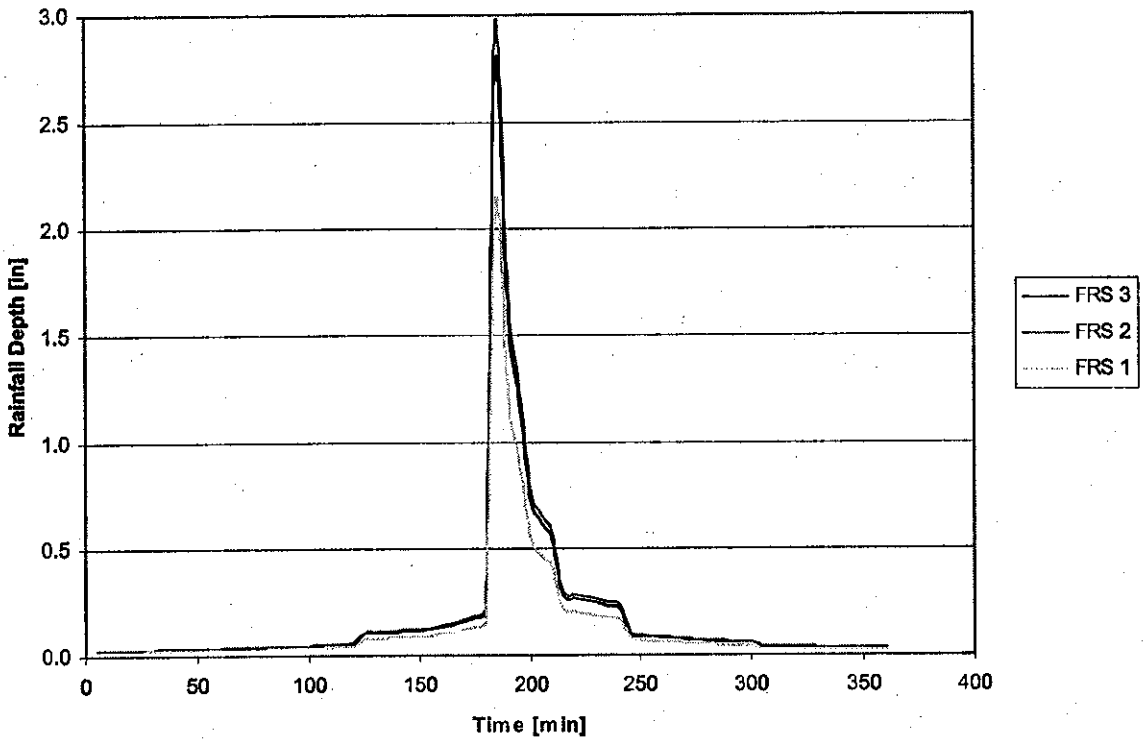
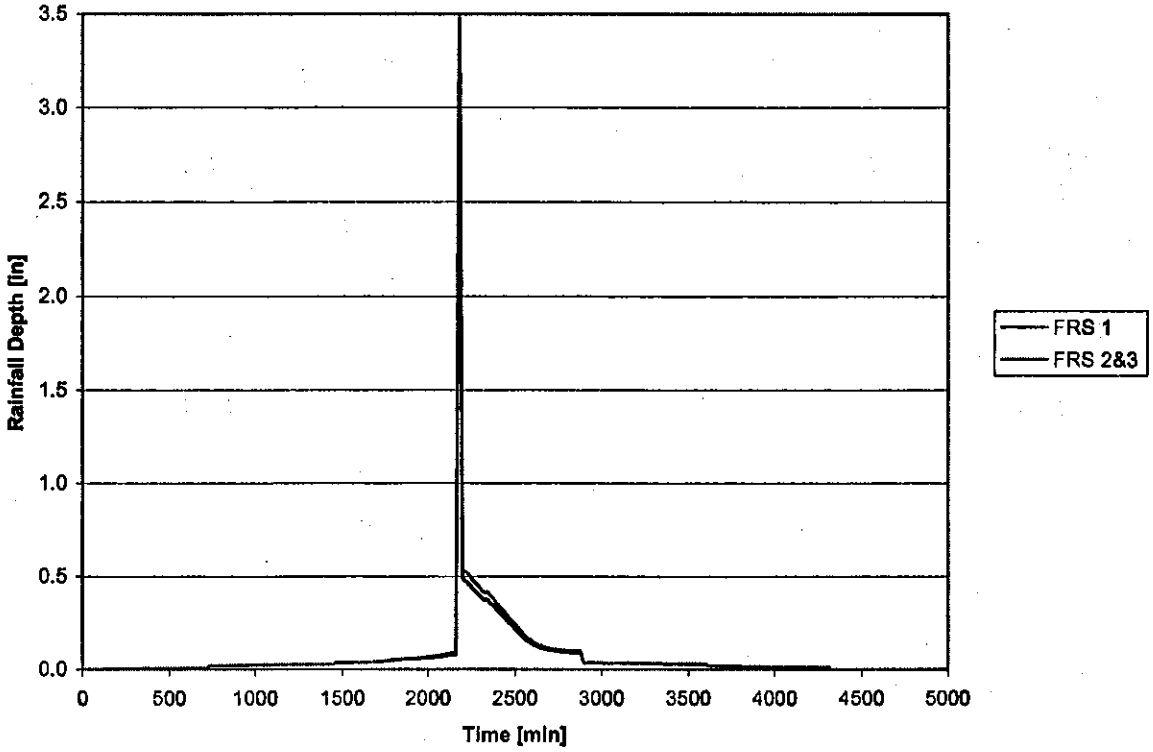


Figure E.1-3

Buckeye Area 3 PMP 72-hour Incremental Rainfall Distribution



E.2 Physical Parameter Calculations

Table E.2-1a

Existing Conditions Land Use Look-up Table for Area 3

LU Code	Land Use Description	IA	RTIMP	% Veg	Saturation
110	Rural Residential (<= 1/5 du per acre)	0.30	5	30	normal
120	Estate Residential (1/5 du per acre to 1 du per acre)	0.30	5	30	normal
130	Large Lot Residential - Single Family (1 du per acre to 2 du per acre)	0.30	15	50	normal
140	Medium Lot Residential - Single Family (2-4 du per acre)	0.25	30	50	normal
150	Small Lot Residential - Single Family (4-6 du per acre)	0.25	30	50	normal
160	Very Small Lot Residential - Single Family (>6 du per acre-includes mobile home	0.25	40	50	normal
170	Medium Density Residential - Muli Family (5-10 du per acre)	0.25	45	50	normal
180	High Density Residential - Multi Family (10-15 du per acre)	0.25	45	50	normal
190	Very High Density Residential - Multi Family (> 15 du per acre)	0.25	45	50	normal
200	General Commercial (Commercial where no detail available)	0.10	80	60	normal
210	Specialty Commercial (<=50,000 sq. ft.)	0.10	80	65	normal
220	Neighborhood Commercial (50,000 to 100,000 sq. ft.)	0.10	80	65	normal
230	Community Commercial (100,000 to 500,000 sq. ft.)	0.10	80	75	normal
240	Regional Commercial (500,000 to 1,000,000 sq. ft.)	0.10	80	65	normal
250	Super-Regional Commercial (>= 1,000,000 sq. ft.)	0.10	80	70	normal
300	General Industrial (Industrial where no detail available)	0.15	55	60	normal
310	Warehouse/Distribution Centers	0.10	80	75	normal
320	Industrial	0.15	55	60	normal
400	Office General (Office where no detail available)	0.10	80	75	normal
410	Office Low Rise (1-4 stories)	0.10	80	75	normal
420	Office Mid Rise (5-12 stories)	0.10	80	75	normal
430	Office High Rise (13 stories or more)	0.10	80	75	normal
510	Tourist and Visitor Accommodations (Hotels, motels and resorts)	0.10	80	75	normal
520	Educational (Public schools, private schools and universities)	0.29	45	80	normal
530	Institutional (Includes hospitals and churches)	0.10	80	75	normal
540	Cemeteries	0.10	5	90	normal
550	Public Facilities (Includes community centers, power sub-stations, libraries, ci	0.10	80	75	normal
560	Special Events (Includes stadiums, sports complexes and fairgrounds)	0.10	80	75	normal
570	Other Employment - low (Proving grounds and land fills)	0.10	80	75	normal
580	Other Employment - medium	0.10	80	75	normal
590	Other Employment - high	0.10	80	75	normal
600	General Transportation (Transportation where no detail available)	0.10	80	75	normal
610	Transportation (Includes railroads, railyards, transit centers and freeways)	0.10	80	75	normal
620	Airports (Includes public use airports)	0.15	55	60	normal
700	General Open Space (Open space where no detail available)	0.10	5	90	normal
710	Active Open Space (Includes parks)	0.10	5	90	normal

LU Code	Land Use Description	IA	RTIMP	% Veg	Saturation
720	Golf courses	0.10	5	90	normal
730	Passive Open Space (Includes mountain preserves and washes)	0.10	0	90	normal
740	Water	0.00	100	0	wet
750	Agriculture	0.50	0	85	normal
810	Business Park (Includes enclosed industrial, office or retail in a planned envir	0.10	80	75	normal
900	Vacant (Existing land use database only)	0.35	0	25	dry

Table E.2-1b

Future Conditions Land Use Look-up Table for Area 3

LU Code	Land Use Description	IA	RTIMP	% Veg	Saturation
100	Central, general, office, intermediate commerce	0.10	80	75	normal
200	Medium Density Residential (6,000-12,000 sq. ft lot size	0.25	30	50	normal
710	Active Open Space (Includes parks)	0.10	5	90	normal
900	Vacant (Existing land use database only)	0.35	0	25	dry

Table E.2-2

Soil Map look-up Table for Buckeye Area 3

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
6451	Antho sandy loams	0.410	0	100
6452	Antho gravelly sandy loams	0.410	0	100
6453	Antho-Carrizo-Maripo complex	0.580	0	100
6454	Antho-Carrizo-Maripo complex, low precipitation	0.580	0	100
6455	Anthony sandy loam	0.430	0	100
6456	Anthony-Arizo complex	0.620	0	100
6457	Anthony-Arizo complex, low precipitation	0.620	0	100
6458	Arizo cobbly sandy loam	0.960	0	100
6459	Beeline-Cipriano complex, 3 to 45 percent slopes	0.270	0	100
6531	Agualt and Ripley soils	0.000	0	100
6532	Agualt and Ripley soils, saline-sodic	0.000	0	100
6533	Ajo-Gunsight-Pompeii complex, 3 to 25 percent slopes	0.660	0	100
6535	Carrizo-Dateland complex, 0 to 3 percent slopes	0.820	0	100
6536	Carrizo-Momoli complex, 0 to 3 percent slopes	1.200	0	100
6537	Cherioni very cobbly fine sandy loam, 3 to 10 percent slopes	0.400	0	100
6538	Cherioni-Coolidge complex, 1 to 15 percent slopes	0.000	0	100
6539	Cipriano-Hyder-Rock outcrop complex, 15 to 65 percent slopes	0.590	15	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
6581	Brios gravelly loamy sand,3 to 5 percent slopes	0.000	0	100
6582	Brios very fine sandy loam,0 to 2 percent slopes	0.000	0	100
6583	Carrizo-Momoli complex, 1 to 3 percent slopes	0.000	0	100
6584	Carrizo-Pinamt complex, 1 to 5 percent slopes	0.000	0	100
6585	Carrizo very gravelly coarse sand, 0 to 1 percent slopes	0.000	0	100
6586	Casa Grande clay loam, 0 to 1 percent slopes	0.000	0	100
6587	Casa Grande complex, 0 to 5 percent slopes	0.000	0	100
6588	Casa Grande fine sandy loam, 0 to 3 percent slopes	0.000	0	100
6589	Cavelt-Carrizo-Gunsight complex, 1 to 10 percent slopes	0.000	0	100
7031	Ajo-pinamt, deep, complex, 3 to 15 percent slopes	0.000	0	100
7032	Anklam-cellar-rock outcrop complex, 15 to 55 percent slopes	0.000	0	100
7033	Anklam very gravelly sandy loam, 3 to 15 percent slopes	0.000	0	100
20012	Sandy Loam	0.400	0	100
20073	Sandy Loam	0.400	0	100
64510	Brios-Carrizo complex, 1 to 5 percent slopes	0.940	0	100
64511	Brios-Carrizo complex, low precipitation, 1 to 5 percent slopes	0.940	0	100
64512	Carefree cobbly clay loam, 1 to 8 percent slopes	0.010	0	100
64513	Carefree-Beardsley complex	0.010	0	100
64514	Carrizo very gravelly sand	1.040	0	100
64515	Carrizo-Gunsight complex, 1 to 5 percent slopes	0.540	0	100
64516	Cellar-Rock outcrop complex, 10 to 70 percent slopes	0.440	15	100
64517	Cellar-Rock outcrop complex, low precipitation, 10 to 70 percent slopes	0.440	15	100
64518	Cheriono-Rock outcrop complex, 5 to 60 percent slopes	0.330	15	100
64519	Chuckawalla-Gunsight complex, 1 to 8 percent slopes	0.190	0	100
64520	Chuckawalla-Gunsight complex, low precipitation, 1 to 8 percent slopes	0.190	0	100
64521	Cipriano very gravelly loam	0.380	0	100
64522	Contine clay loam	0.040	0	100
64523	Contine clay	0.010	0	100
64524	continental clay loam, 0 to 3 percent slopes	0.020	0	100
64525	Continental clay, 0 to 3 percent slopes	0.020	0	100
64526	Continental cobbly clay loam, 1 to 8 percent slopes	0.010	0	100
64527	Continental-Mohave complex, 1 to 7 percent slopes	0.010	0	100
64528	Continental-Ohaco complex	0.020	0	100
64529	Denure-Momoli-Carrizo complex	0.340	0	100
64530	Denure-Momoli-Carrizo complex, low precipitation	0.340	0	100
64531	Dixaleta-Rock outcrop complex, 25 to 65 percent slopes	0.330	35	100
64532	Dixaleta-Rock outcrop complex, low precipitation, 25 to 65 percent slopes	0.330	35	100
64533	Eba very gravelly loam, 1 to 8 percent slopes	0.230	0	100
64534	Eba very gravelly loam, 8 to 20 percent slopes	0.230	0	100
64535	Eba very gravelly loam, low precipitation, 8 to 20 percent slopes	0.230	0	100
64536	Eba-Continental complex, 1 to 8 percent slopes	0.070	0	100
64537	Eba-Continental-Cave association, 3 to 20 percent slopes	0.130	0	100
64538	Eba-Continental-Cave association, low precipitation, 3 to 20 percent	0.130	0	100
64539	Eba-Nickel-Cave association, 3 to 25 percent slopes	0.290	0	100
64540	Eba-Pinaleno complex, 3 to 20 percent slopes	0.170	0	100
64541	Eba-Pinaleno complex, 20 to 40 percent slopes	0.170	0	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
64542	Eba-Pinaleno complex, low precipitation, 3 to 20 percent slopes	0.170	0	100
64543	Eba-Pinaleno complex, low precipitation, 20 to 40 percent slopes	0.170	0	100
64544	Ebon very gravelly loam, 1 to 8 percent slopes	0.030	0	100
64545	Ebon very gravelly loam, 8 to 20 percent slopes	0.030	0	100
64546	Ebon-Contine complex, 1 to 8 percent	0.030	0	100
64547	Ebon-Gunsight-Cipriano association, 3 to 25 percent slopes	0.110	0	100
64548	Ebon-Pinamt complex, 3 to 20 percent slopes	0.060	0	100
64549	Ebon-Pinamt complex, 20 to 40 percent slopes	0.060	0	100
64550	Estrella loams	0.260	0	100
64551	Gachado-Lomitas complex, 8 to 25 percent slopes	0.240	0	100
64552	Gachado-Lomitas-Rock outcrop complex, 7 to 55 percent slopes	0.160	20	100
64553	Gadsden clay	0.020	0	100
64554	Gila fine sandy loams	0.290	0	100
64555	Gilman loams	0.270	0	100
64556	Gilman loams, low precipitation	0.270	0	100
64557	Gilman clay loam	0.060	0	100
64558	Gilman-Momoli-Denure complex	0.340	0	100
64559	Gilman-Momoli-Denure complex, low precipitation	0.340	0	100
64560	Glenbar loams	0.260	0	100
64561	Gran-Wickenburg complex, 1 to 10 percent slopes	0.150	0	100
64562	Gran-Wickenburg complex, low precipitation, 1 to 10 percent slopes	0.150	0	100
64563	Gran-Wickenburg-Rock outcrop complex, 1 to 7 percent slopes	0.140	25	100
64564	Gran-Wickenburg-Rock outcrop complex, low precipitation, 10 to 65 percent slopes	0.140	25	100
64565	Greyeagle-Continental-Nickel association, 1 to 40 percent slopes	0.190	0	100
64566	Greyeagle-Suncity Variant complex, 1 to 7 percent slopes	0.230	0	100
64567	Guest clay	0.010	0	100
64568	Gunsight-Cipriano complex, 1 to 7 percent slopes	0.630	0	100
64569	Gunsight-Cipriano complex, low precipitation, 1 to 7 percent slopes	0.630	0	100
64570	Gunsight-Rillito complex, 1 to 25 percent slopes	0.360	0	100
64571	Gunsight-Rillito complex, low precipitation, 1 to 40 percent slopes	0.360	0	100
64572	Lehmans-Rock outcrop complex, 8 to 65 percent slopes	0.090	30	100
64573	Lehmans-Rock outcrop complex, low precipitation, 8 to 65 percent slopes	0.090	30	100
64574	Luke-Cipriano association, 1 to 15 percent slopes	0.080	0	100
64575	Mohall loam	0.230	0	100
64576	Mohall loam, calcareous solum	0.230	0	100
64577	Mohall clay loam	0.050	0	100
64578	Mohall clay loam, calcareous solum	0.050	0	100
64579	Mohall clay	0.020	0	100
64580	Mohall-Tremant complex, 1 to 8 percent slopes	0.080	0	100
64581	Mohall-Tremant complex, low precipitation, 1 to 8 percent slopes	0.080	0	100
64582	Mohave sandy loam	0.040	0	100
64583	Mohave loam	0.040	0	100
64584	Mohave loam, calcareous solum	0.050	0	100
64585	Mohave clay loam	0.040	0	100
64586	Mohave clay loam, calcareous solum	0.050	0	100
64587	Mohave complex	0.040	0	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
64588	Mohave-Guest complex	0.020	0	100
64589	Mohave-Tres Hermanos complex, 1 to 8 percent slopes	0.060	0	100
64590	Momoli gravelly sandy loam, 1 to 5 percent slopes	0.390	0	100
64591	Momoli-Carrizo complex	0.930	0	100
64592	Momoli-Carrizo complex, low precipitation	0.930	0	100
64593	Nickel-Cave complex, 8 to 30 percent slopes	0.330	0	100
64594	Nickel-Cave complex, low precipitation, 8 to 30 percent slopes	0.330	0	100
64595	Ohaco gravelly loam	0.040	0	100
64596	Pinaleno-Tres Hermanos complex, 1 to 10 percent slopes	0.070	0	100
64597	Pinaleno-Tres Hermanos complex, low precipitation, 1 to 10 percent slopes	0.070	0	100
64598	Pinamt-Tremant complex, 1 to 10 percent slopes	0.370	0	100
64599	Pinamt-Tremant complex, low precipitation, 1 to 10 percent slopes	0.370	0	100
65164	Lakes, ponds, reservoirs - perennial	0.000	0	100
65310	Cipriano-Momoli complex, 1 to 7 percent slopes	0.500	0	100
65311	Coolidge complex, 0 to 3 percent slopes	0.000	0	100
65312	Cuerda-Why-Lagunita complex	0.350	0	100
65313	Dateland very fine sandy loam	0.000	0	100
65314	Dateland-Cuerda complex, 0 to 3 percent slopes	0.250	0	100
65315	Dateland-Denure fine sandy loams, saline-sodic, 0 to 3 percent slopes	0.280	0	100
65316	Denure sandy loam	0.000	0	100
65317	Denure gravelly fine sandy loam, 1 to 3 percent slopes	0.560	0	100
65318	Denure-Carrizo, bench, gravelly fine sandy loams	0.000	0	100
65319	Denure-Cavelt complex, 0 to 3 percent slopes	0.000	0	100
65320	Denure-Coolidge complex, 1 to 3 percent slopes	0.500	0	100
65321	Denure-Rillito-Why complex, 1 to 5 percent slopes	0.400	0	100
65322	Denure-Why complex, 1 to 5 percent slopes	0.000	0	100
65324	Gadsden clay loam, 0 to 3 percent slopes	0.000	0	100
65325	Gadsden and Kofa silty clay loams, saline-sodic	0.000	0	100
65327	Gilman very fine sandy loam	0.000	0	100
65328	Gilman very fine sandy loam, saline-sodic	0.000	0	100
65329	Glenbar silty clay loam	0.000	0	100
65330	Glenbar silty clay loam, saline-sodic	0.000	0	100
65331	Growler-Momoli complex, 1 to 3 percent slopes	0.840	0	100
65332	Growler-Wellton complex, 1 to 3 percent slopes	0.490	0	100
65333	Gunsight-Ajolito extremely gravelly sandy loams, 1 to 15 percent slopes	1.200	0	100
65334	Gunsight-Chuckawalla complex, 1 to 15 percent slopes	0.840	0	100
65335	Gunsight-Cipriano complex, 1 to 15 percent slopes	0.910	0	100
65336	Gunsight-Pinamt complex, 1 to 15 percent slopes	0.840	0	100
65337	Gunsight-Rillito-Carrizo complex, 1 to 15 percent slopes	0.800	0	100
65338	Harqua fine sandy loam, 0 to 3 percent slopes	0.000	0	100
65339	Harqua-Cavelt complex, 1 to 10 percent slopes	0.000	0	100
65340	Hyder-Gachado-Gunsight extremely gravelly sandy loams, 1 to 25 percent slopes	0.400	15	100
65341	Indio silt loam	0.000	0	100
65342	Indio silt loam, saline-sodic	0.000	0	100
65343	Lagunita-Vint complex	0.000	0	100
65344	Mohall fine sandy loam	0.000	0	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
65345	Mohall loam	0.280	0	100
65346	Mohall loam, occasionally flooded	0.000	0	100
65347	Mohall clay loam	0.000	0	100
65348	Mohall complex, 0 to 3 percent slopes	0.000	0	100
65349	Momoli-Carrizo extremely gravelly sandy loams, 1 to 10 percent slopes	1.200	0	100
65350	Momoli-Carrizo, bench, very gravelly sandy loams, 1 to 3 percent slopes	1.200	0	100
65351	Momoli-Comobabi association, 5 to 15 percent slopes	0.480	0	100
65352	Pits	0.000	0	100
65353	Quilotosa-Momoli-Carrizo complex, 1 to 15 percent slopes	1.200	15	100
65354	Quilotosa-Rock outcrop complex, 15 to 55 percent slopes	0.970	26	100
65355	Riverwash	0.000	0	100
65356	Rock outcrop-Hyder complex. 25 to 65 percent slopes	0.000	0	100
65357	Rositas-Denure loamy fine sands, 1 to 10 percent slopes	0.000	0	100
65358	Schenco-Laposa-Rock outcrop complex, 10 to 55 percent slopes	0.630	19	100
65359	Tremant gravelly fine sandy loam	0.000	0	100
65360	Tucson loam	0.250	0	100
65361	Vaiva-Quilotosa extremely gravelly sandy loams, 3 to 25 percent slopes	0.000	0	100
65362	Vaiva-Quilotosa extremely stony sandy loams, 25 to 55 percent slopes	0.000	0	100
65363	Vint very fine sandy loam	0.000	0	100
65364	Lakes, ponds, reservoirs - perennial	0.000	0	100
65365	Wellton complex	0.000	0	100
65366	Why gravelly fine sandy loam	0.000	0	100
65367	Why-Carrizo complex, 0 to 3 percent slopes	0.440	0	100
65564	Lakes, ponds, reservoirs - perennial	0.000	0	100
65810	Chuckwalla-Gunsight complex, 1 to 5 percent slopes	0.000	0	100
65811	Cristobal-Gunsight complex, 3 to 15 percent slopes	0.000	0	100
65812	Dateland-Cuerda complex, saline-sodic, 0 to 3 percent slopes	0.000	0	100
65813	Denure-Pahaka complex, 1 to 3 percent slopes	0.000	0	100
65814	Denure-Pahaka complex, 3 to 5 percent slopes	0.000	0	100
65815	Gadsden, Glenbar and Vint soils, saline-sodic, 0 to 2 percent slopes	0.000	0	100
65816	Gadsden silty clay loam, saline-sodic, 0 to 2 percent slopes	0.000	0	100
65817	Glenbar silt loam, saline-sodic, 0 to 2 percent slopes	0.000	0	100
65818	Indio silt loam, saline-sodic, 0 to 2 percent slopes	0.000	0	100
65819	Indio-Vint complex, saline-sodic, 0 to 3 percent slopes	0.000	0	100
65820	Kamato complex, 0 to 5 percent slopes	0.000	0	100
65821	Kamato loam, 0 to 2 percent slopes	0.000	0	100
65822	Lagunita silt loam, 0 to 2 percent slopes	0.000	0	100
65823	Laveen fine sandy loam, saline-sodic, 0 to 2 percent slopes	0.000	0	100
65824	Momoli cobbly sandy loam, 5 to 15 percent slopes	0.000	0	100
65825	Pompeii-Lomitas-Rock outcrop complex, 15 to 65 percent slopes	0.000	0	100
65826	Quilotosa-Momoli-Vaiva complex, 1 to 15 percent slopes	0.000	0	100
65827	Quilotosa-Rock outcrop-Vaiva complex, 20 to 65 percent slopes	0.000	0	100
65828	Redun-Shontik complex, 1 to 3 percent slopes	0.000	0	100
65829	Rillito-Gunsight complex, 3 to 15 percent slopes	0.000	0	100
65830	Rositas-Casa Grande-Slickspots complex, 1 to 15 percent slopes	0.000	0	100
65831	Rositas loamy fine sand, sodic, 0 to 3 percent slopes	0.000	0	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
65832	Shontik-Redun complex, 0 to 3 percent slopes	0.000	0	100
65833	Talai silt loam, 0 to 2 percent slopes	0.000	0	100
65834	Trix loam, saline-sodic, 0 to 1 percent slopes	0.000	0	100
65835	Vint-Yahana complex, saline-sodic, 0 to 10 percent slopes	0.000	0	100
65836	Why-Brios complex, 0 to 2 percent slopes	0.000	0	100
65837	Yahana-Indio complex, saline-sodic, 0 to 3 percent slopes	0.000	0	100
65838	Yahana silty clay loam, 0 to 2 percent slopes	0.000	0	100
70313	Chutum loam, 1 to 3 percent slopes	0.000	0	100
70315	Dateland-denure association, 1 to 3 percent slopes	0.000	0	100
70316	Delnorte-stagecoach complex, 1 to 20 percent slopes	0.000	0	100
70318	Delthorny-garzona-rock outcrop complex, 15 to 60 percent slopes	0.000	0	100
70319	Denure-momoli complex, 1 to 5 percent slopes	0.000	0	100
70323	Gachado-lomitas-rock outcrop complex, 15 to 45 percent slopes	0.000	0	100
70324	Gadsden silty clay loam, 0 to 1 percent slopes	0.000	0	100
70325	Gilman very fine sandy loam, 0 to 1 percent slopes	0.000	0	100
70327	Glenbar loam, 0 to 1 percent slopes	0.000	0	100
70328	Glendale clay loam, 0 to 2 percent slopes, flooded	0.000	0	100
70329	Glendale silt loam, 1 to 3 percent slopes	0.000	0	100
70330	Glendale-pajarito complex, 1 to 3 percent slopes	0.000	0	100
70331	Grabe-vado complex, 1 to 5 percent slopes	0.000	0	100
70332	Granolite-rock outcrop complex, 15 to 65 percent slopes	0.000	0	100
70334	Hantz clay loam, 0 to 1 percent slopes	0.000	0	100
70336	Hickiwan-gunsight-momoli complex, 3 to 15 percent slopes	0.000	0	100
70340	Lajitas-bosa-rock outcrop complex, 15 to 50 percent slopes	0.000	0	100
70343	Mohall-pahaka complex, 1 to 3 percent slopes	0.000	0	100
70344	Mohall-trix complex, 0 to 1 percent slopes	0.000	0	100
70345	Nahda-stagecoach complex, 1 to 15 percent slopes	0.000	0	100
70347	Pajarito-sahuarita complex, 1 to 3 percent slopes	0.000	0	100
70348	Pantano-granolite complex, 5 to 25 percent slopes	0.000	0	100
70349	Pinamt-momoli complex, 1 to 10 percent slopes	0.000	0	100
70355	Sasco loam, 0 to 1 percent slopes	0.000	0	100
70360	Vado-agustin complex, 1 to 8 percent slopes	0.000	0	100
70362	Wintersburg loam, 0 to 1 percent slopes	0.000	0	100
70363	Water	0.000	0	100
100103	Sandy Clay Loam	0.120	0	100
100121	Sandy Clay Loam	0.120	0	100
100126	Sandy Loam	0.400	15	100
100301	Sandy Loam	0.400	0	100
100303	Sandy Loam	0.400	15	100
200239	Sandy Loam	0.400	30	100
200292	Sandy Loam	0.400	30	100
200300	Sandy Clay Loam	0.060	0	100
200301	Sandy Clay Loam	0.060	0	100
200352	Sandy Loam	0.400	10	100
200381	Sandy Loam	0.400	0	100
200382	Sandy Loam	0.400	15	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
200390	Sandy Clay Loam	0.060	0	100
200391	Sandy Clay Loam	0.060	0	100
200400	Sandy Clay Loam	0.060	0	100
200401	Sandy Clay Loam	0.060	0	100
200402	Sandy Loam	0.400	10	100
200415	Sandy Loam	0.400	0	100
200416	Sandy Clay Loam	0.060	0	100
200417	Loam	0.250	20	100
200418	Sandy Loam	0.400	0	100
200451	Loam	0.250	0	100
200452	Loam	0.250	20	100
300337	Saucedo volcanics - includes rhyolite, latite, and andesite	0.000	0	100
645100	Quilotosa-Vaiva-Rock outcrop complex, 20 to 65 percent slopes	0.400	20	100
645101	Rillito loam, 0 to 3 percent slopes	0.280	0	100
645102	Rillito gravelly loam, 1 to 8 percent slopes	0.400	0	100
645103	Rock outcrop-Gachado complex, 5 to 55 percent slopes	0.100	65	100
645104	Rock outcrop-Lehmans complex, 15 to 65 percent slopes	0.140	60	100
645105	Rock outcrop-Lehmans complex, low precipitation, 15 to 65 percent slopes	0.140	60	100
645106	Sal-Cipriano complex, 1 to 10 percent slopes	0.180	0	100
645107	Sal-Cipriano complex, low precipitation, 1 to 10 percent slopes	0.180	0	100
645108	Schenco-Rock outcrop complex, 3 to 25 percent slopes	0.310	30	100
645109	Schenco-Rock outcrop complex, 25 to 60 percent slopes	0.350	35	100
645110	Suncity-Cipriano complex, 1 to 7 percent slopes	0.130	0	100
645111	Torriorthents, 15 to 40 percent slopes	0.400	0	100
645112	Tremant gravelly sandy loams	0.390	0	100
645113	Tremant gravelly loams	0.390	0	100
645114	Tremant gravelly loams, low precipitation	0.390	0	100
645115	Tremant-Antho complex, 1 to 5 percent slopes	0.390	0	100
645116	Tremant-Gunsight-Rillito complex, 1 to 5 percent slopes	0.230	0	100
645117	Tremant-Gunsight-Rillito complex, low precipitation, 1 to 5 percent slopes	0.230	0	100
645118	Tremant-Rillito complex	0.420	0	100
645119	Tremant-Suncity complex, 1 to 8 percent slopes	0.140	0	100
645120	Tres Hermanos gravelly sandy loams	0.060	0	100
645121	Tres Hermanos-Anthony complex, 1 to 5 percent slopes	0.120	0	100
645122	Vado gravelly sandy loam, 1 to 5 percent slopes	0.330	0	100
645123	Vaiva very gravelly loam, 1 to 20 percent slopes	0.370	0	100
645124	Valencia sandy loams	0.390	0	100
645125	Vint loamy fine sand	0.430	0	100
645999	Blank/Unknown/Uncertain	0.000	0	100
651999	Blank/Unknown/Uncertain	0.000	0	100
655999	Blank/Unknown/Uncertain	0.000	0	100
999999	Blank/Unknown/Uncertain	0.000	0	100
6512021	Agualt loam	0.260	0	100
6512025	Antho sandy loam, saline-alkali	0.390	0	100
6512029	Antho-Brios sandy loams	0.390	0	100
6512042	Antho association	0.400	0	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
6512044	Antho-Valencia association	0.390	0	100
6512047	Avonda clay loam	0.050	0	100
6512049	Avondale clay loam	0.040	0	100
6512051	Avondale clay loam, saline-alkali	0.040	0	100
6512228	Beardsley loam	0.240	0	100
6512255	Brios loamy sand	1.050	0	100
6512257	Brios sandy loam	0.390	0	100
6512259	Brios loam	0.250	0	100
6512423	Carrizo gravelly sandy loam	0.400	0	100
6512430	Carrizo and Brios soils	0.500	0	100
6512433	Casa Grande Sandy loam	0.240	0	100
6512435	Casa Grande loam	0.240	0	100
6512441	Casa Grande complex	0.300	0	100
6512445	Casa Grande-Leveen complex, alkali	0.260	0	100
6512447	Cashion clay, saline-alkali	0.010	0	100
6512448	Cheriono-Rock outcrop complex	0.290	20	100
6512451	Coolidge sandy loam	0.400	0	100
6512457	Coolidge-Tremant complex	0.190	0	100
6512462	Coolidge-Laveen association	0.390	0	100
6512647	Dune land	1.200	0	100
6512857	Estrella loam	0.250	0	100
6512859	Estrella loam, saline-alkali	0.250	0	100
6513220	Gachado-Rock outcrop complex	0.100	40	100
6513223	Gadsden clay loam	0.040	0	100
6513225	Gadsden clay	0.010	0	100
6513227	Gadsden clay, saline-alkali	0.010	0	100
6513229	Gilman fine sandy loam	0.260	0	100
6513231	Gilman fine sandy loam, saline-alkali	0.240	0	100
6513235	Gilman loam, saline-alkali	0.240	0	100
6513242	Gilman complex, saline-alkali	0.250	0	100
6513244	Gilman-Antho association	0.290	0	100
6513246	Gilman-Laveen association	0.250	0	100
6513251	Gilman loam, clayey subsoil variant, moderately saline	0.240	0	100
6513255	Glenbar loam	0.230	0	100
6513257	Glenbar loam, saline-alkali	0.230	0	100
6513259	Glenbar clay loam	0.040	0	100
6513261	Glenbar clay loam, saline-alkali	0.040	0	100
6513263	Glenbar clay	0.010	0	100
6513444	Harqua-Laveen complex	0.150	0	100
6514221	La Palma very fine sandy loam	0.260	0	100
6514223	Laveen sandy loam	0.400	0	100
6514227	Laveen loam, saline-alkali	0.250	0	100
6514229	Laveen clay loam	0.040	0	100
6514231	Laveen-Antho complex, saline-alkali	0.330	0	100
6514421	Maripo sandy loam	0.400	0	100
6514449	Mohall sandy loam	0.390	0	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
6514451	Mohall loam	0.250	0	100
6514455	Mohall clay loam	0.050	0	100
6514457	Mohall clay	0.010	0	100
6514462	Mohall-Laveen association	0.150	0	100
6515021	Perryville sandy loam	0.400	0	100
6515023	Perryville loam, saline-alkali	0.380	0	100
6515058	Pinal gravelly loam	0.400	0	100
6515456	Rock outcrop-Cherioni complex	0.400	65	100
6515821	Toltec loam	0.250	0	100
6515822	Torrifluvents	0.400	0	100
6515825	Torriorthents	0.400	0	100
6515826	Torripsamments and Torrifluvents, frequently flooded	1.200	0	100
6515829	Tremant loam	0.250	0	100
6515833	Tremant clay loam	0.040	0	100
6515835	Tremant gravelly clay loam	0.040	0	100
6515859	Trix clay loam	0.040	0	100
6515861	Tucson loam	0.250	0	100
6515865	Tucson clay loam	0.050	0	100
6516221	Valencia sandy loam	0.390	0	100
6516223	Valencia sandy loam, saline-alkali	0.390	0	100
6516225	Valencia gravelly sandy loam	0.390	0	100
6516229	Vecont loam	0.250	0	100
6516231	Vecont clay	0.010	0	100
6516233	Vint loamy fine sand	0.910	0	100
6516235	Vint fine sandy loam	0.270	0	100
6516241	Vint loam	0.260	0	100
6516247	Vint clay loam	0.040	0	100
6516255	Vint-Carrizo complex	0.630	0	100
6516433	Wintersburg complex	0.030	0	100
6552031	Agualt fine sandy loam	0.250	0	100
6552033	Agualt loam	0.250	0	100
6552045	Alluvial land	1.200	0	100
6552063	Avondale clay loam	0.040	0	100
6552421	Carrizo gravelly loamy sand	1.200	0	100
6552423	Carrizo fine sandy loam	0.250	0	100
6552425	Cashion clay	0.010	0	100
6552449	Contine clay loam	0.040	0	100
6552857	Estrella loam	0.250	0	100
6553231	Gilman fine sandy loam	0.250	0	100
6553245	Gilman loam	0.250	0	100
6553247	Glenbar clay loam	0.040	0	100
6553255	Gravelly alluvial land	1.200	0	100
6554449	Mohall sandy loam	0.400	0	100
6554463	Mohall loam	0.250	0	100
6555045	Pimer clay loam	0.040	0	100
6555049	Pinal loam, moderately deep variant	0.250	0	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
6555449	Rock land	0.250	65	100
6555461	Rough broken land	0.400	20	100
6555867	Trix clay loam	0.040	0	100
6556221	Valencia sandy loam	0.400	0	100
6556229	Vecont clay	0.010	0	100
6556231	Vint loamy fine sand	1.200	0	100
65124202	Calciorthids and Torriorthents, eroded	0.380	0	100
65132493	Gilman,Antho and Glenbar soils, severely eroded	0.190	0	100
651202320	Anthosandy loam, 0 to 1 percent slopes	0.380	0	100
651202322	Antho sandy loam, 1 to 3 percent slopes	0.390	0	100
651202720	Antho gravelly sandy loam, 0 to 1 percent slopes	0.400	0	100
651202722	Antho gravelly sandy loam, 1 to 3 percent slopes	0.400	0	100
651203120	Antho-Carrizo complex, 0 to 1 percent slopes	0.380	0	100
651203122	Antho-Carrizo complex, 1 to 3 percent slopes	0.400	0	100
651203222	Antho-Carrizo complex, 0 to 3 percent slopes	0.400	0	100
651203424	Antho-Tremant complex, 1 to 5 percent slopes	0.380	0	100
651204122	Antho-Tremant-Mohall complex, 1 to 5 percent slopes	0.270	0	100
651225036	Borrow pit	0.000	0	100
651242926	Carrizo-Ebon complex, 3 to 12 percent slopes	0.190	0	100
651245522	Coolidge gravelly sandy loam, 1 to 3 percent slopes	0.400	0	100
651282326	Ebon gravelly loam, 0 to 8 percent slopes	0.100	0	100
651285026	Ebon-Pinamt complex, 0 to 10 percent slopes	0.120	0	100
651323320	Gilman loan, 0 to 1 percent slopes	0.250	0	100
651323322	Gilman loam, 1 to 3 percent slopes	0.260	0	100
651325036	Gravel pit	0.000	0	100
651326426	Gunsight-Pinal complex, 1 to 10 percent slopes	0.350	0	100
651326720	Gunsight-Rillito complex, 0 to 1 percent slopes	0.230	0	100
651326722	Gunsight-Rillito complex, 1 to 3 percent slopes	0.240	0	100
651326826	Gunsight-Rillito complex, 0 to 10 percent slopes	0.260	0	100
651342022	Harqua complex, 0 to 3 percent slopes	0.070	0	100
651342024	Harqua complex, 3 to 8 percent slopes	0.050	0	100
651344224	Harqua-Gunsight complex, 0 to 5 percent slopes	0.140	0	100
651345522	Harqua-Rillito complex, 1 to 3 percent slopes	0.120	0	100
651422520	Laveen loam, 0 to 1 percent slopes	0.250	0	100
651422522	Laveen loam, 1 to 3 percent slopes	0.250	0	100
651422862	Man-made levee	0.000	0	100
651441064	Waste stabilization pond	0.000	0	100
651445822	Mohall-Tremant complex, 0 to 3 percent slopes	0.150	0	100
651502920	Perryville gravelly loam, 0 to 1 percent slopes	0.370	0	100
651502922	Perryville gravelly loam, 1 to 3 percent slopes	0.380	0	100
651505422	Perryville-Rillito complex, 0 to 3 percent slopes	0.280	0	100
651505720	Pinal loam, 0 to 1 percent slopes	0.250	0	100
651505722	Pinal loam, 1 to 3 percent slopes	0.260	0	100
651506322	Pinal-La Palma loams, 1 to 3 percent slopes	0.250	0	100
651506422	Pinal-Suncity complex, 0 to 3 percent slopes	0.380	0	100
651506826	Pinamt-Tremant complex, 1 to 10 percent slopes	0.200	0	100

Soil LID	Soil Description	XKSAT	RTIMP	% Effective
651542120	Rillito sandy loam, 0 to 1 percent slopes	0.390	0	100
651542122	Rillito sandy loam, 1 to 3 percent slopes	0.390	0	100
651542320	Rillito loam, 0 to 1 percent slopes	0.260	0	100
651542322	Rillito loam, 1 to 3 percent slopes	0.250	0	100
651543522	Rillito-Harqua complex, 1 to 3 percent slopes	0.230	0	100
651545128	Rillito-Perryville complex, 5 to 20 percent slopes	0.290	0	100
651583120	Tremant gravelly loam, 0 to 1 percent slopes	0.370	0	100
651583122	Tremant gravelly loam 1 to 3 percent slopes	0.360	0	100
651585022	Tremant complex, 0 to 3 percent slopes	0.120	0	100
651585520	Tremant-Rillito complex, 0 to 1 percent slopes	0.110	0	100
651585522	Tremant-Rillito complex, 1 to 3 percent slopes	0.130	0	100
651585624	Tremant-Rillito complex, 0 to 5 percent slopes	0.140	0	100
653422862	Man-made levee	0.000	0	100
655204720	Antho sandy loam, 0 to 1 percent slopes	0.400	0	100
655204722	Antho sandy loam, 1 to 3 percent slopes	0.400	0	100
655204922	Antho gravelly sandy loam, 1 to 3 percent slopes	0.400	0	100
655242924	Cavelt gravelly loam, 1 to 5 percent slopes	0.400	0	100
655325462	Gravel pit	0.000	0	100
655422120	Laveen loam, 0 to 1 percent slopes	0.250	0	100
655422122	Laveen loam, 1 to 3 percent slopes	0.250	0	100
655422920	Laveen clay loam, 0 to 1 percent slopes	0.040	0	100
655504720	Pinal gravelly loam, 0 to 1 percent slopes	0.400	0	100
655504724	Pinal gravelly loam, 1 to 3 percent slopes	0.400	0	100
655506320	Pinamt very gravelly loam, 0 to 1 percent slopes	0.400	0	100
655506324	Pinamt very gravelly loam, 3 to 5 percent slopes	0.400	0	100
655543720	Rillito gravelly loam, 0 to 1 percent slopes	0.400	0	100
655543722	Rillito gravelly loam, 1 to 3 percent slopes	0.400	0	100
655585522	Tremant gravelly loam, 1 to 3 percent slopes	0.100	0	100

Table E.2-3

Summary of Green & Ampt Parameters for Buckeye Area 3 Existing Conditions

Subbasin	Area [mi^2]	IA	DTHETA	PSIF	XKSAT	RTIMP
A1	1.11	0.350	0.350	4.058	0.417	9.677
A2	1.66	0.350	0.350	4.547	0.339	0.000
A3	3.73	0.350	0.350	4.230	0.405	0.000
B1	0.56	0.350	0.350	3.733	0.470	6.272
B2	0.49	0.350	0.350	3.617	0.513	0.000
B3	1.99	0.331	0.331	4.284	0.389	0.000
C1	3.59	0.215	0.296	3.933	0.407	21.409
C2	1.92	0.350	0.350	3.920	0.436	0.000
C3	3.79	0.345	0.345	4.357	0.372	0.000

Subbasin	Area [mi^2]	IA	DTHETA	PSIF	XKSAT	RTIMP
C4	1.40	0.327	0.327	4.737	0.290	0.000
E1	0.96	0.350	0.378	5.377	0.222	0.690
E2	1.98	0.350	0.360	5.043	0.256	0.000
E3	2.49	0.350	0.350	4.358	0.347	0.000
E4	3.04	0.350	0.350	3.816	0.439	0.000
E5	1.31	0.347	0.344	3.940	0.429	0.968
E6	2.04	0.343	0.336	4.356	0.367	0.711
F1	2.79	0.299	0.330	4.322	0.361	14.271
F2	2.53	0.350	0.350	4.311	0.375	3.026
F3	0.74	0.350	0.350	3.266	0.647	0.000
G1	1.12	0.350	0.350	4.688	0.298	0.000
H1	1.07	0.350	0.350	2.733	0.945	0.000
H2	1.40	0.350	0.350	3.222	0.664	0.000
J1	1.73	0.350	0.350	3.250	0.652	0.000
J2	3.64	0.349	0.348	3.623	0.495	0.281
K1	1.54	0.112	0.255	4.382	0.365	21.060
K2	2.37	0.341	0.346	4.471	0.348	1.018
K3	1.64	0.350	0.350	3.421	0.582	0.000
L1	3.55	0.271	0.318	4.357	0.352	16.317
L2	7.33	0.350	0.350	4.202	0.399	0.000
L3	5.85	0.341	0.328	3.980	0.419	1.050
M1	5.59	0.350	0.350	4.306	0.347	17.122
M2	7.53	0.350	0.350	3.952	0.446	0.287
N1	1.52	0.350	0.350	4.075	0.419	8.380
N2	3.33	0.350	0.350	4.117	0.405	2.670
O1	3.09	0.350	0.350	4.189	0.393	2.105
P1	2.44	0.350	0.350	4.193	0.396	6.712
Q1	2.23	0.350	0.350	4.203	0.390	12.313
R1	0.28	0.350	0.350	4.358	0.374	8.387
S1	1.41	0.350	0.350	4.484	0.352	6.918
T1	3.04	0.350	0.350	4.644	0.299	11.497
U1	1.37	0.350	0.370	5.258	0.233	6.449
V1	0.66	0.350	0.350	3.972	0.405	13.864
W1	3.89	0.350	0.350	3.976	0.410	15.199
W2	2.85	0.350	0.350	4.081	0.402	3.547
X1	0.79	0.350	0.350	3.955	0.417	12.555
Y1	0.58	0.350	0.350	4.044	0.415	10.947
Z1	0.66	0.321	0.292	4.004	0.430	2.909

Table E.2-4

Summary of Green & Ampt Parameters for Buckeye Area 3 Future Conditions

Subbasin	Area [mi^2]	IA	DTHETA	PSIF	XKSAT	RTIMP
A1	1.11	0.250	0.250	4.058	0.472	39.677
A2	1.66	0.250	0.250	4.547	0.420	30.000
A3	3.73	0.250	0.250	4.230	0.491	30.000
B1	0.56	0.250	0.260	3.733	0.484	36.272
B2	0.49	0.250	0.260	3.617	0.542	30.000
B3	1.99	0.250	0.250	4.284	0.468	30.000
C1	3.59	0.181	0.262	3.933	0.412	31.606
C2	1.92	0.250	0.250	3.920	0.482	30.000
C3	3.79	0.250	0.250	4.357	0.444	30.000
C4	1.40	0.250	0.250	4.737	0.345	30.000
E1	0.96	0.250	0.250	5.377	0.273	30.690
E2	1.98	0.250	0.250	5.043	0.306	30.000
E3	2.49	0.250	0.250	4.358	0.377	30.000
E4	3.04	0.250	0.250	3.816	0.441	30.000
E5	1.31	0.250	0.250	3.940	0.473	30.000
E6	2.04	0.289	0.289	4.356	0.392	18.293
F1	2.79	0.240	0.270	4.322	0.384	32.052
F2	2.53	0.250	0.250	4.311	0.436	33.026
F3	0.74	0.250	0.270	3.266	0.656	30.000
G1	1.12	0.297	0.297	4.688	0.326	15.814
H1	1.07	0.250	0.290	2.733	0.945	30.000
H2	1.40	0.250	0.270	3.222	0.664	30.000
J1	1.73	0.250	0.270	3.250	0.657	30.000
J2	3.64	0.250	0.260	3.623	0.499	30.000
K1	1.54	0.112	0.255	4.382	0.365	21.060
K2	2.37	0.272	0.277	4.471	0.382	21.860
K3	1.64	0.250	0.270	3.421	0.600	30.000
L1	3.55	0.271	0.318	4.357	0.352	16.317
L2	7.33	0.240	0.257	4.202	0.462	33.542
L3	5.85	0.205	0.257	3.980	0.449	45.272
M1	5.59	0.349	0.349	4.306	0.348	17.433
M2	7.53	0.205	0.255	3.952	0.547	45.552
N1	1.52	0.289	0.289	4.075	0.469	26.648
N2	3.33	0.268	0.268	4.117	0.446	27.305
O1	3.09	0.252	0.252	4.189	0.443	31.440
P1	2.44	0.312	0.312	4.193	0.424	18.000
Q1	2.23	0.338	0.340	4.203	0.396	15.896
R1	0.28	0.181	0.282	4.358	0.474	62.581
S1	1.41	0.287	0.312	4.484	0.393	26.695
T1	3.04	0.327	0.327	4.644	0.315	18.464

Subbasin	Area [mi^2]	IA	DTHETA	PSIF	XKSAT	RTIMP
U1	1.37	0.317	0.331	5.258	0.251	16.201
V1	0.66	0.334	0.334	3.972	0.405	18.810
W1	3.89	0.350	0.350	3.976	0.410	15.199
W2	2.85	0.320	0.320	4.081	0.407	12.365
X1	0.79	0.350	0.350	3.955	0.417	12.555
Y1	0.58	0.350	0.350	4.044	0.415	10.947
Z1	0.66	0.168	0.277	4.004	0.499	58.182

Table E.2-5

Summary of Lag Time Estimation for Buckeye Area 3 Sub-basins

Subbasin	Area [mi^2]	L [mi]	L_{ca} [mi]	S [ft/mi]	S-Graph Type	K_n	Lag [min]
A1	1.11	2.20	0.86	322.08	Phx Mnt	0.050	30
A2	1.66	3.34	1.28	94.61	Des Rnglnd	0.055	57
A3	3.73	3.92	1.89	58.21	Des Rnglnd	0.045	64
B1	0.56	2.52	1.19	227.45	Phx Mnt	0.050	38
B2	0.49	2.21	0.98	84.60	Des Rnglnd	0.055	45
B3	1.99	3.72	1.65	63.31	Des Rnglnd	0.045	59
C1	3.59	3.99	2.01	387.22	Phx Mnt	0.050	51
C2	1.92	3.69	1.53	105.29	Des Rnglnd	0.055	63
C3	3.79	4.44	2.51	56.33	Des Rnglnd	0.050	84
C4	1.40	2.18	0.88	44.31	Des Rnglnd	0.045	40
E1	0.96	2.51	1.13	178.34	Phx Mnt	0.055	43
E2	1.98	2.92	0.80	96.39	Des Rnglnd	0.055	45
E3	2.49	3.87	1.99	49.65	Des Rnglnd	0.050	75
E4	3.04	5.36	2.81	38.26	Des Rnglnd	0.050	102
E5	1.31	3.01	1.41	28.56	Des Rnglnd	0.050	66
E6	2.04	3.04	1.06	34.17	Des Rnglnd	0.050	57
F1	2.79	4.07	1.63	441.98	Phx Mnt	0.050	46
F2	2.53	3.88	1.76	161.60	Phx Mnt	0.050	57
F3	0.74	2.71	1.26	81.34	Des Rnglnd	0.055	54
G1	1.12	2.38	1.08	33.76	Des Rnglnd	0.045	47
H1	1.07	2.41	1.09	64.59	Des Rnglnd	0.055	51
H2	1.40	4.41	2.60	44.71	Des Rnglnd	0.050	89
J1	1.73	4.09	1.78	70.82	Des Rnglnd	0.055	75
J2	3.64	5.18	2.51	45.01	Des Rnglnd	0.050	93
K1	1.54	3.23	1.84	681.00	Phx Mnt	0.050	40
K2	2.37	7.30	4.04	108.84	Des Rnglnd	0.055	119
K3	1.64	4.92	2.65	44.16	Des Rnglnd	0.050	94
L1	3.55	4.93	2.29	308.27	Phx Mnt	0.050	61
L2	7.33	5.21	2.40	82.13	Des Rnglnd	0.055	90

Subbasin	Area [mi²]	L [mi]	L_{ca} [mi]	S [ft/mi]	S-Graph Type	K_n	Lag [min]
L3	5.85	4.75	2.00	44.27	Des Rnglnd	0.055	91
M1	5.59	4.99	1.81	302.46	Phx Mnt	0.050	56
M2	7.53	7.60	3.07	88.36	Des Rnglnd	0.050	103
N1	1.52	2.79	1.44	340.38	Phx Mnt	0.050	40
N2	3.33	5.64	3.27	170.14	Phx Mnt	0.055	91
O1	3.09	5.20	2.79	64.07	Phx Mnt	0.055	100
P1	2.44	6.39	2.62	200.13	Phx Mnt	0.055	85
Q1	2.23	5.23	2.81	228.56	Phx Mnt	0.055	78
R1	0.28	1.01	0.46	213.31	Phx Mnt	0.050	19
S1	1.41	2.32	0.52	143.99	Phx Mnt	0.050	29
T1	3.04	4.34	1.58	274.89	Phx Mnt	0.050	51
U1	1.37	2.37	1.03	326.50	Phx Mnt	0.050	33
V1	0.66	2.86	1.75	344.82	Phx Mnt	0.050	43
W1	3.89	3.46	1.78	486.28	Phx Mnt	0.050	44
W2	2.85	3.25	1.19	178.54	Phx Mnt	0.050	44
X1	0.79	2.60	1.44	288.89	Phx Mnt	0.050	40
Y1	0.58	1.37	0.53	771.84	Phx Mnt	0.050	17
Z1	0.66	1.70	0.66	47.00	Des Rnglnd	0.055	39

E.3 Hydrograph Routing Data

Table E.3-1

Summary of Routing Channel Parameters – Length, Slope and Manning's n

Routing Channel	L [ft]	S [ft/ft]	n-left	n-channel	n-right
A1-A2	15,153	0.0134	0.045	0.045	0.045
A2-A3	18,190	0.0116	0.050	0.043	0.050
B1-B2	11,334	0.0137	0.055	0.042	0.055
B2-B3	19,622	0.0121	0.050	0.025	0.050
C1-C2	18,437	0.0176	0.050	0.044	0.050
C2-C3	23,418	0.0107	0.046	0.050	0.046
E1-E2	11,365	0.0160	0.050	0.047	0.046
E2-E3	19,626	0.0088	0.052	0.046	0.052
E3-E4	13,855	0.0048	0.056	0.049	0.056
F3-E4	27,656	0.0072	0.050	0.044	0.050
E4H2-E5	15,206	0.0051	0.060	0.050	0.060
E5K3-E6	5,083	0.0037	0.063	0.051	0.063
F1-F2	8,635	0.0120	0.053	0.045	0.055
F2-F3	7,059	0.0100	0.050	0.047	0.048
H1-H2	21,738	0.0082	0.053	0.050	0.053
J1-J2	24,090	0.0086	0.055	0.040	0.055

K1-K2	30,021	0.0150	0.048	0.050	0.048
K2-K3	25,950	0.0084	0.050	0.048	0.050
J2-K3	4,072	0.0059	0.050	0.048	0.050
L1-L2	28,949	0.0147	0.046	0.045	0.046
L2-L3	20,567	0.0084	0.050	0.045	0.060
M1-M2	38,719	0.0133	0.040	0.040	0.045
N1-N2	26,511	0.0115	0.05	0.047	0.05
W1-W2	11,249	0.0189	0.050	0.050	0.060

Table E.3-2

Summary of Routing Channel Parameters – Representative Cross Sections

	A2		A3		B2		B3		C2		C3		E2		E3	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	0	27.0	0	20.0	0	20.0	0	13.5	0	21.0	0	26.0	0	24.0	0	22.0
2	75	23.0	20	19.0	75	17.0	120	10.0	35	19.0	60	25.0	65	21.0	133	17.0
3	125	19.0	30	18.0	140	14.0	278	11.6	90	16.0	125	23.0	140	17.0	173	14.0
4	185	10.0	165	10.0	167	10.0	285	10.1	138	10.0	140	10.0	170	10.0	213	10.0
5	190	10.0	186	10.0	193	10.0	301.5	10.1	159	10.0	172	10.0	185	10.0	223	10.0
6	220	20.0	346	20.0	226	13.0	312.5	11.5	209	15.0	232	16.0	200	14.0	263	15.0
7	280	26.0	361	21.0	296	17.0	446.5	10.8	264	20.0	292	20.0	270	18.0	303	18.0
8	340	32.0	381	22.0	371	22.0	529.5	12.6	309	24.0	352	23.0	340	22.0	403	22.0

	E4A		E4B		E5		E6		F2		F3		H2		J2	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	0	21.0	0	20.0	0	27.0	0	25.0	0	27.0	0	20.0	0	17.0	0	17.0
2	570	14.0	570	14.0	1010	16.0	850	13.0	60	26.0	350	15.0	330	14.0	161	12.5
3	650	13.0	650	13.0	1080	15.0	980	13.0	120	25.0	425	13.0	430	12.0	247	12.2
4	690	10.0	690	10.0	1090	10.0	990	10.0	146	10.0	455	10.0	465	10.0	254	10.8
5	705	10.0	705	10.0	1110	10.0	1030	10.0	178	10.0	472	10.0	495	10.0	271	10.0
6	735	12.5	735	12.5	1120	14.0	1040	12.0	208	24.0	499	12.0	530	12.0	279	12.1
7	810	14.5	810	14.5	1190	16.0	1230	12.0	268	26.0	569	14.0	630	14.0	393	12.9
8	1200	21.0	1200	20.0	2200	27.0	2020	25.0	328	28.0	900	20.0	960	17.0	660	17.0

	K2		K3A		K3B		L2		L3		M2		N2		W2	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
1	0	22.0	0	20.0	0	20.0	0	19.0	0	18	0	15.5	0	17.0	0	17.5
2	20	21.0	390	14.5	390	14.5	80	17.0	1093	11.8	961	12.0	280	13.0	350	11.5
3	55	20.0	490	11.5	490	11.5	165	14.0	1210	11.7	1028	11.8	350	11.5	372	11.6
4	85	10.0	502	10.0	502	10.0	200	10.0	1215	10	1051	10.3	358	10.0	384	10.0
5	235	10.0	520	10.0	520	10.0	215	10.0	1225	10	1136	10.0	367	10.0	472	11.2
6	259	20.0	532	11.5	532	11.5	255	14.0	1232	11.7	1153	11.0	381	11.5	489	13.4
7	289	21.0	632	14.5	632	14.5	340	18.0	1372	11.8	1193	11.2	451	13.0	525	13.8
8	309	22.0	1022	20.0	1022	20.0	420	22.0	2000	18	1900	15.5	730	17.0	1005	17.5

Table E.3-3

Summary of Routing Channel Parameters – NSTEPS Used in HEC-1 Models (Existing Conditions)

Routing Channel	10-yr 6-hr	10-yr 24-hr	100-yr 6-hr	100-yr 24-hr	200-yr 24-hr	500-yr 24-hr	PMP 6-hr	PMP 72-hr
A1-A2	9	9	7	7	7	7	6	6
A2-A3	13	12	10	9	9	9	8	8
B1-B2	8	9	7	8	8	7	6	6
B2-B3	22	22	23	23	23	21	16	16
C1-C2	8	7	6	6	6	5	5	5
C2-C3	13	11	9	10	10	8	8	8
E1-E2	7	7	5	5	5	5	5	5
E2-E3	13	13	9	9	8	8	8	8
E3-E4	13	13	14	13	13	13	9	11
F3-E4	19	19	19	19	19	19	16	18
E4H2-E5	17	17	16	14	13	13	9	11
E5K3-E6	7	7	6	5	5	5	4	4
F1-F2	4	4	3	3	3	3	3	2
F2-F3	5	5	5	4	4	4	4	5
H1-H2	31	31	19	19	17	17	16	16
J1-J2	17	17	28	26	25	25	16	19
K1-K2	26	26	17	17	15	15	9	13
K2-K3	22	22	19	18	19	19	19	19
J2-K3	5	5	4	4	4	4	3	3
L1-L2	14	14	11	10	10	10	10	10
L2-L3	31	23	19	17	17	17	11	11
M1-M2	26	25	26	26	26	26	20	20
N1-N2	23	23	21	21	21	21	17	17
W1-W2	7	6	6	6	6	6	6	6

Table E.3-4

Summary of Routing Channel Parameters – NSTEPS Used in HEC-1 Models (Future Conditions)

Routing Channel	10-yr 6-hr	10-yr 24-hr	100-yr 6-hr	100-yr 24-hr	200-yr 24-hr	500-yr 24-hr	PMP 6-hr	PMP 72-hr
E1-E2	40	73	10	10	9	7	5	5
E2-E3	38	39	15	14	13	12	8	8
E3-E4	1	48	14	14	14	14	9	11
F3-E4	1	37	21	21	21	21	16	17
E4H2-E5	1	33	17	16	15	15	9	11

Routing Channel	10-yr 6-hr	10-yr 24-hr	100-yr 6-hr	100-yr 24-hr	200-yr 24-hr	500-yr 24-hr	PMP 6-hr	PMP 72-hr
E5K3-E6	11	12	6	6	5	5	3	4
F1-F2	22	28	8	6	5	4	3	2
F2-F3	1	16	6	6	5	5	4	5
H1-H2	55	151	31	32	27	23	17	17
J1-J2	1	1	38	37	35	30	17	19
K1-K2	23	25	17	18	17	16	11	13
K2-K3	25	26	21	20	20	20	18	20
J2-K3	1	1	6	6	6	6	4	4
L1-L2	14	14	11	11	10	10	10	10
L2-L3	35	34	22	22	20	20	20	11
M1-M2	56	56	30	30	29	29	28	21
N1-N2	48	47	26	26	24	24	23	17
W1-W2	7	6	6	6	6	6	6	6

E.4 Reservoir Routing Data

N/A

E.5 Flow Splits and Diversion Data

Table E.5-1

Increase of Peak and Runoff Volume in 100-Year 24-Hour Storm Event in Future Conditions

Station	Area [mi2]	100-YR 24-HR (existing)		100-YR 24-HR (future w/out retention)		% Increase	
		Peak [cfs]	Volume [ac-ft]	Peak [cfs]	Volume [ac-ft]	Peak	Volume
E	31.24	6068	1637	8616	2923	41.99%	78.56%
E1	0.96	790	63	904	107	14.43%	69.84%
E1-E2	0.96	679	63	802	107	18.11%	69.84%
E2	1.98	1548	123	1808	216	16.80%	75.61%
E2-E3	2.93	1684	184	2124	321	26.13%	74.46%
E3	2.49	1129	143	1443	265	27.81%	85.31%
E3-E4	5.42	2191	325	2950	582	34.64%	79.08%
E3R	2.93	2008	184	2422	321	20.62%	74.46%
E4	3.04	966	164	1332	319	37.89%	94.51%
E4H2-E5	16.98	4752	944	6611	1713	39.12%	81.46%
E4RA	5.42	2619	325	3436	582	31.20%	79.08%
E4RB	6.05	3398	406	4075	646	19.92%	59.11%
E5	1.31	645	74	819	136	26.98%	83.78%

Station	Area [mi2]	100-YR 24-HR (existing)		100-YR 24-HR (future w/out retention)		% Increase	
		Peak [cfs]	Volume [ac-ft]	Peak [cfs]	Volume [ac-ft]	Peak	Volume
E5K2-E6	29.2	6068	1531	8629	2773	42.21%	81.12%
E5R	16.98	5270	944	7116	1713	35.03%	81.46%
E6	2.04	1194	118	1356	176	13.57%	49.15%
E6R	29.2	6229	1531	8795	2773	41.19%	81.12%
ECP	31.24	6027	1628	8613	2922	42.91%	79.48%
F1	2.79	2147	223	2376	303	10.67%	35.87%
F1-F2	2.79	2005	223	2235	303	11.47%	35.87%
F2	2.53	1506	153	1828	275	21.38%	79.74%
F2-F3	5.31	3110	373	3667	574	17.91%	53.89%
F3	0.74	374	34	512	74	36.90%	117.65%
F3-E4	3.05	2583	406	3202	646	23.96%	59.11%
F3R	5.31	3484	373	4034	574	15.79%	53.89%
G1	1.12	820	68	899	96	9.63%	41.18%
GCP	1.12	820	68	899	96	9.63%	41.18%
H1	1.07	472	40	694	99	47.03%	147.50%
H1-H2	1.07	305	40	537	99	76.07%	147.50%
H2	1.4	432	64	638	139	47.69%	117.19%
J1	1.73	633	79	909	172	43.60%	117.72%
J1-J2	1.73	488	79	741	172	51.84%	117.72%
J2	3.64	1213	189	1679	374	38.42%	97.88%
J2-K3	5.37	1186	266	1805	543	52.19%	104.14%
K1	1.54	1432	146	1432	146	0.00%	0.00%
K1-K2	1.54	813	146	835	146	2.71%	0.00%
K2	2.37	694	139	852	219	22.77%	57.55%
K2-K3	3.91	1216	283	1390	363	14.31%	28.27%
K3	1.64	507	79	724	165	42.80%	108.86%
K3RA	3.91	1456	283	1640	363	12.64%	28.27%
K3RB	5.37	1207	266	1837	543	52.20%	104.14%
L	16.73	3781	976	5288	1770	39.86%	81.35%
L1	3.55	2267	298	2267	298	0.00%	0.00%
L1-L2	3.55	1803	298	1832	298	1.61%	0.00%
L2	7.33	2641	397	3556	791	34.65%	99.24%
L2-L3	10.88	3494	685	4412	1078	26.27%	57.37%
L3	5.85	2129	330	3075	744	44.43%	125.45%
L3R	10.88	4184	685	5103	1078	21.96%	57.37%
LCP	16.73	3781	976	5288	1770	39.86%	81.35%
M	13.12	3327	841	4136	1382	24.32%	64.33%
M1	5.59	3717	467	3723	469	0.16%	0.43%
M1-M2	5.59	2554	467	2559	469	0.20%	0.43%
M2	7.53	2304	397	3470	941	50.61%	137.03%
MCP	13.12	3327	841	4136	1382	24.32%	64.33%
N	4.85	1364	297	1749	475	28.23%	59.93%

Station	Area [mi2]	100-YR 24-HR (existing)		100-YR 24-HR (future w/out retention)		% Increase	
		Peak [cfs]	Volume [ac-ft]	Peak [cfs]	Volume [ac-ft]	Peak	Volume
N1	1.52	1211	103	1346	148	11.15%	43.69%
N1-N2	1.52	757	103	880	148	16.25%	43.69%
N2	3.33	1331	196	1633	330	22.69%	68.37%
NCP	4.85	1364	297	1749	475	28.23%	59.93%
O1	3.09	1163	180	1476	328	26.91%	82.22%
OCP	3.09	1163	180	1476	328	26.91%	82.22%
P1	2.44	1073	160	1171	204	9.13%	27.50%
PCP	2.44	1073	160	1171	204	9.13%	27.50%
Q1	2.23	1111	167	1141	180	2.70%	7.78%
QCP	2.23	1111	167	1141	180	2.70%	7.78%
R1	0.28	387	20	465	44	20.16%	120.00%
RCP	0.28	387	20	465	44	20.16%	120.00%
S1	1.41	1449	95	1575	137	8.70%	44.21%
SCP	1.41	1449	95	1575	137	8.70%	44.21%
T1	3.04	2151	234	2236	267	3.95%	14.10%
TCP	3.04	2151	234	2236	267	3.95%	14.10%
U1	1.37	1365	100	1427	122	4.54%	22.00%
UCP	1.37	1365	100	1427	122	4.54%	22.00%
V1	0.66	526	52	545	57	3.61%	9.62%
VCP	0.66	526	52	545	57	3.61%	9.62%
W	6.74	3648	471	3,766	512	3.23%	8.70%
W1	3.89	2976	304	2,976	304	0.00%	0.00%
W1-W2	3.89	2573	304	2,573	304	0.00%	0.00%
W2	2.85	2042	171	2,180	212	6.76%	23.98%
WCP	6.74	3648	471	3,766	512	3.23%	8.70%
X1	0.79	645	59	645	59	0.00%	0.00%
XCP	0.79	645	59	645	59	0.00%	0.00%
Y1	0.58	837	42	835	42	-0.24%	0.00%
YCP	0.58	837	42	835	42	-0.24%	0.00%
Z1	0.66	558	41	724	99	29.75%	141.46%
ZCP	0.66	558	41	724	99	29.75%	141.46%

Table E.5-2

Comparison of Peak and Runoff Volume between Existing and Future Conditions in 100-Year 24-Hour Storm Event

Station	Area [mi2]	100-YR 24-HR (existing)		Future Retention Volume [ac-ft]	100-YR 24-HR (future w/ retention)		% Increase	
		Peak [cfs]	Volume [ac-ft]		Peak [cfs]	Volume [ac-ft]	Peak [cfs]	Volume [ac-ft]
E	31.24	6068	1637		5088	1492	-16.15%	-8.86%
E1	0.96	790	63	53	904	107	14.43%	69.84%
E1-E2	0.96	679	63		505	54	-25.63%	-14.29%
E2	1.98	1548	123	118	1808	216	16.80%	75.61%
E2-E3	2.93	1684	184		1005	150	-40.32%	-18.48%
E3	2.49	1129	143	152	1443	265	27.81%	85.31%
E3-E4	5.42	2191	325		1365	259	-37.70%	-20.31%
E3R	2.93	2008	184		1455	150	-27.54%	-18.48%
E4	3.04	966	164	190	1332	319	37.89%	94.51%
E4H2-E5	16.98	4752	944		3148	744	-33.75%	-21.19%
E4RA	5.42	2619	325		1633	259	-37.65%	-20.31%
E4RB	6.05	3398	406		2694	338	-20.72%	-16.75%
E5	1.31	645	74	79	819	136	26.98%	83.78%
E5K2-E6	29.2	6068	1531		5063	1415	-16.56%	-7.58%
E5R	16.98	5270	944		3517	744	-33.26%	-21.19%
E6	2.04	1194	118	100	1356	176	13.57%	49.15%
E6R	29.2	6229	1531		5183	1415	-16.79%	-7.58%
ECP	31.24	6027	1628		5088	1492	-15.58%	-8.35%
F1	2.79	2147	223	133	2376	303	10.67%	35.87%
F1-F2	2.79	2005	223		1743	170	-13.07%	-23.77%
F2	2.53	1506	153	130	1828	275	21.38%	79.74%
F2-F3	5.31	3110	373		2483	311	-20.16%	-16.62%
F3	0.74	374	34	45	512	74	36.90%	117.65%
F3-E4	3.05	2583	406		1898	338	-26.52%	-16.75%
F3R	5.31	3484	373		2978	311	-14.52%	-16.62%
G1	1.12	820	68	47	899	96	9.63%	41.18%
GCP	1.12	820	68		786	49	-4.15%	-27.94%
H1	1.07	472	40	60	694	99	47.03%	147.50%
H1-H2	1.07	305	40		189	39	-38.03%	-2.50%
H2	1.4	432	64	88	638	139	47.69%	117.19%
J1	1.73	633	79	102	909	172	43.60%	117.72%
J1-J2	1.73	488	79		377	70	-22.75%	-11.39%
J2	3.64	1213	189	224	1679	374	38.42%	97.88%

Station	Area [mi2]	100-YR 24-HR (existing)		Future Retention Volume [ac-ft]	100-YR 24-HR (future w/ retention)		% Increase	
		Peak [cfs]	Volume [ac-ft]		Peak [cfs]	Volume [ac-ft]	Peak [cfs]	Volume [ac-ft]
J2-K3	5.37	1186	266		1002	217	-15.51%	-18.42%
K1	1.54	1432	146	0	1432	146	0.00%	0.00%
K1-K2	1.54	813	146		822	146	1.11%	0.00%
K2	2.37	694	139	128	852	219	22.77%	57.55%
K2-K3	3.91	1216	283		1007	238	-17.19%	-15.90%
K3	1.64	507	79	101	724	165	42.80%	108.86%
K3RA	3.91	1456	283		1350	238	-7.28%	-15.90%
K3RB	5.37	1207	266		1174	217	-2.73%	-18.42%
L	16.73	3781	976		2884	838	-23.72%	-14.14%
L1	3.55	2267	298	0	2267	298	0.00%	0.00%
L1-L2	3.55	1803	298		1832	298	1.61%	0.00%
L2	7.33	2641	397	475	3556	791	34.65%	99.24%
L2-L3	10.88	3494	685		2583	603	-26.07%	-11.97%
L3	5.85	2129	330	457	3075	744	44.43%	125.45%
L3R	10.88	4184	685		3810	603	-8.94%	-11.97%
LCP	16.73	3781	976		2884	838	-23.72%	-14.14%
M	13.12	3327	841		2948	627	-11.39%	-25.45%
M1	5.59	3717	467	170	3723	469	0.16%	0.43%
M1-M2	5.59	2554	467		1806	299	-29.29%	-35.97%
M2	7.53	2304	397	585	3470	941	50.61%	137.03%
MCP	13.12	3327	841		2948	627	-11.39%	-25.45%
N	4.85	1364	297		1276	260	-6.45%	-12.46%
N1	1.52	1211	103	65	1346	148	11.15%	43.69%
N1-N2	1.52	757	103		533	83	-29.59%	-19.42%
N2	3.33	1331	196	150	1633	330	22.69%	68.37%
NCP	4.85	1364	297		1276	260	-6.45%	-12.46%
O1	3.09	1163	180	150	1476	328	26.91%	82.22%
OCP	3.09	1163	180		1096	178	-5.76%	-1.11%
P1	2.44	1073	160	85	1171	204	9.13%	27.50%
PCP	2.44	1073	160		1064	119	-0.84%	-25.63%
Q1	2.23	1111	167	72	1141	180	2.70%	7.78%
QCP	2.23	1111	167		1059	109	-4.68%	-34.73%
R1	0.28	387	20	24	465	44	20.16%	120.00%
RCP	0.28	387	20		296	20	-23.51%	0.00%
S1	1.41	1449	95	61	1572	136	8.49%	43.16%
SCP	1.41	1449	95		1339	75	-7.59%	-21.05%
T1	3.04	2151	234	103	2231	266	3.72%	13.68%
TCP	3.04	2151	234		2067	163	-3.91%	-30.34%
U1	1.37	1365	100	47	1424	121	4.32%	21.00%
UCP	1.37	1365	100		1309	74	-4.10%	-26.00%

Station	Area [mi2]	100-YR 24-HR (existing)		Future Retention Volume [ac-ft]	100-YR 24-HR (future w/ retention)		% Increase	
		Peak [cfs]	Volume [ac-ft]		Peak [cfs]	Volume [ac-ft]	Peak [cfs]	Volume [ac-ft]
V1	0.66	526	52	23	545	57	3.61%	9.62%
VCP	0.66	526	52		487	34	-7.41%	-34.62%
W	6.74	3648	471		3575	382	-2.00%	-18.90%
W1	3.89	2976	304	0	2976	304	0.00%	0.00%
W1-W2	3.89	2573	304		2573	304	0.00%	0.00%
W2	2.85	2042	171	130	2180	212	6.76%	23.98%
WCP	6.74	3648	471		3575	382	-2.00%	-18.90%
X1	0.79	645	59	0	645	59	0.00%	0.00%
XCP	0.79	645	59		645	59	0.00%	0.00%
Y1	0.58	837	42	0	835	42	-0.24%	0.00%
YCP	0.58	837	42		835	42	-0.24%	0.00%
Z1	0.66	558	41	58	724	99	29.75%	141.46%
ZCP	0.66	558	41		476	41	-14.70%	0.00%

E.6 Hydrologic Calculations

Table E.6-1

Comparison of Peak Discharge for 15-Minute and 30-Minute Intervals

	15 min Interval		30 min Interval			
	Peak [cfs]	Tp [hours]	Peak [cfs]	Tp [hours]	Peak % Diff	Tp % Diff
A	2,433	13.42	2,410	13.33	0.9%	0.7%
A1	1,104	12.33	963	12.25	12.8%	0.6%
A1-A2	846	12.83	804	12.75	5.0%	0.6%
A2	997	12.75	978	12.67	1.9%	0.6%
A2-A3	1,495	13.5	1,463	13.42	2.1%	0.6%
A3	1,855	12.92	1,823	12.75	1.7%	1.3%
A3R	1,808	12.83	1,742	12.75	3.7%	0.6%
ACP	2,433	13.42	2,410	13.33	0.9%	0.7%
B	1,121	12.75	1,102	12.67	1.7%	0.6%
B1	448	12.42	398	12.33	11.2%	0.7%
B1-B2	363	13	349	12.92	3.9%	0.6%
B2	338	12.58	322	12.5	4.7%	0.6%
B2-B3	411	14.67	405	14.58	1.5%	0.6%
B3	1,125	12.75	1,107	12.67	1.6%	0.6%
B3R	566	12.83	551	12.75	2.7%	0.6%
BCP	1,121	12.75	1,102	12.67	1.7%	0.6%
C	3,793	13.67	3,728	13.58	1.7%	0.7%
C1	2,633	12.67	2,417	12.5	8.2%	1.3%

	15 min Interval		30 min Interval			
	Peak [cfs]	Tp [hours]	Peak [cfs]	Tp [hours]	Peak % Diff	Tp % Diff
C1-C2	2,244	13.08	2,205	13	1.7%	0.6%
C2	998	12.83	979	12.75	1.9%	0.6%
C2-C3	2,718	13.75	2,655	13.67	2.3%	0.6%
C3	1,506	13.17	1,487	13.08	1.3%	0.7%
C3R	3,074	13	3,016	13	1.9%	0.0%
C4	1,115	12.58	1,071	12.5	3.9%	0.6%
C4R	3,709	13.67	3,636	13.58	2.0%	0.7%
CCP	3,793	13.67	3,728	13.58	1.7%	0.7%

Table E.6-2

Comparison of Phoenix Valley and Desert/Rangeland S-Graphs

	Desert Rangeland		Phoenix Valley			
	Peak [cfs]	T_p [hr]	Peak [cfs]	T_p [hr]	Peak % Diff	Tp % Diff
A	2,461	13.42	2782	13.42	13.0%	0.0%
A1	1,104	12.33	1104	12.33	0.0%	0.0%
A1-A2	846	12.83	892	12.83	5.4%	0.0%
A2	997	12.75	1178	12.83	18.2%	0.6%
A2-A3	1,522	13.50	1697	13.5	11.5%	0.0%
A3	1,855	12.92	2227	13	20.1%	0.6%
A3R	1,808	12.83	2051	12.83	13.4%	0.0%
B	1,121	12.75	1319	12.92	17.7%	1.3%
B1	448	12.42	448	12.42	0.0%	0.0%
B1-B2	363	13.00	371	13	2.2%	0.0%
B2	338	12.58	389	12.67	15.1%	0.7%
B2-B3	407	14.67	423	14.58	3.9%	-0.6%
B3	1,125	12.75	1324	12.83	17.7%	0.6%
B3R	566	12.83	609	12.83	7.6%	0.0%
C	3,756	13.67	4098	13.67	9.1%	0.0%
C1	2,633	12.67	2633	12.67	0.0%	0.0%
C1-C2	2,244	13.08	2288	13.08	2.0%	0.0%
C2	998	12.83	1197	12.92	19.9%	0.7%
C2-C3	2,684	13.75	2888	13.75	7.6%	0.0%
C3	1,506	13.17	1852	13.25	23.0%	0.6%
C3R	3,074	13.00	3322	13	8.1%	0.0%
C4	1,115	12.58	1275	12.67	14.3%	0.7%

E.6.1 HEC-1 Output File 10-Year 6-Hour

E.6.1.a HEC-1 Output File for 10-year 6-hour Storm (Existing Conditions)

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*             MAY  1991             *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************

*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*          (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

                                    HEC-1 INPUT                                          PAGE  1

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

  1           ID  Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID  PBSJ - Modelers: Jacob Lesue & Wan Chen
  3           ID  10-year 6-hour
  4           ID  Existing Conditions
  5           ID  Area 3 - Sub-basins A-C
  6           ID  Rainfall Loss Method - Green & Ampt
  7           ID  Unit Hydrograph Method - FCDMC S-Graph
  8           ID  Channel Routing Method - Normal Depth
  9           ID  Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID  Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    2.08     0.01
              * 6-hour distribution, pattern 1.0
 16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 18           PC   0.962   0.972   0.983   0.991     1.0
 19           IN      15 01JAN94       0
 20           JD   2.068     0.5
              * 6-hour distribution, pattern 1.0
 21           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 22           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 23           PC   0.962   0.972   0.983   0.991     1.0
 24           IN      15 01JAN94       0
 25           JD   2.053     1.0
              * 6-hour distribution, pattern 1.4
 26           PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
 27           PC   0.087  0.0994  0.1188   0.149  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
 28           PC  0.9572  0.9684  0.9798  0.9898     1.0
 29           IN      15 01JAN94       0
 30           JD   1.997     5.0
              * 6-hour distribution, pattern 2.3
 31           PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
 32           PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.696  0.8233  0.8893  0.9293
 33           PC  0.9487   0.962  0.9743  0.9877     1.0
 34           IN      15 01JAN94       0
 35           JD   1.958    10.0
              * 6-hour distribution, pattern 2.7
 36           PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
 37           PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4684  0.6764  0.8069  0.8765  0.9189
 38           PC  0.9471  0.9608  0.9755  0.9873     1.0
 39           IN      15 01JAN94       0
 40           JD   1.893    20.0
              * 6-hour distribution, pattern 3.1
 41           PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
 42           PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
 43           PC  0.9434   0.958  0.9718  0.9863     1.0
                                    HEC-1 INPUT                                          PAGE  2

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

 44           KK      C1
 45           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 46           KM   L=3.99      Lca=2.01      S=387.22      Kn=0.030      LAG=51.0
 47           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 48           KO       0       0     0.0       1      22
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 49          BA  3.5862
 50          LG   0.215   0.296   3.933   0.407  21.409
             * C1
 51          UI     0.0  236.76  236.76  527.08  911.83 1306.09 1876.15 1799.13  2131.6 2781.78
 52          UI  2038.2 1574.43 1396.84 1275.29 1154.27 1044.98  935.76  822.33  695.81  603.68
 53          UI  561.29  519.88  455.15  388.96  307.02  297.68   259.3   259.3  183.85  181.51
 54          UI  181.51  121.77  115.86  115.86  115.86  107.68   45.38   45.38   45.38   45.38
 55          UI   45.38   45.38   45.38   45.38   45.38   45.38   45.38   45.38

 56          KK   C1-C2   CNAME     C2R
 57          KO       0       0     0.0       0      22
 58          RS       8    FLOW     0.0     0.0
 59          RC    0.05   0.044    0.05 18437.0  0.0176     0.0
             * C1-C2
 60          RX     0.0    35.0    90.0   138.0   159.0   209.0   264.0   309.0
 61          RY    21.0    19.0    16.0    10.0    10.0    15.0    20.0    24.0

 62          KK      C2
 63          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 64          KM   L=3.69     Lca=1.53     S=105.29     Kn=0.055     LAG=63.0
 65          KM   S-GRAPH TYPE=DESERT RANGELAND
 66          KO       0       0     0.0       1      22
 67          BA  1.9204
 68          LG    0.35    0.35    3.92   0.436     0.0
             * C2
 69          UI     0.0  102.69  102.63  122.26  304.94  432.24  556.99  679.25  778.73  881.69
 70          UI   929.5  983.56  983.56  952.35  904.47  807.23  701.83  605.44  531.11  463.45
 71          UI  404.15  349.94  303.68  267.04  229.18  194.49  177.79  157.37  130.91  108.78
 72          UI  108.78   77.86   70.25   70.25   70.25   44.14   24.98   24.98   24.98   24.98
 73          UI   24.98   24.98   24.98   24.98   24.98   24.98   24.98     0.0

 74          KK     C3R   CNAME   C2-C3
 75          KO       0       0     0.0       0      22
 76          RC       2     0.0

 77          KK   C2-C3   CNAME     C3R
 78          KO       0       0     0.0       0      22
 79          RS      13    FLOW     0.0     0.0
 80          RC   0.046    0.05  0.0462 23419.0  0.0107     0.0
             * C2-C3
 81          RX     0.0    60.0   125.0   140.0   172.0   232.0   292.0   352.0
 82          RY    26.0    25.0    23.0    10.0    10.0    16.0    20.0    23.0

 83          KK      C3
 84          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 85          KM   L=4.44     Lca=2.51     S=56.33     Kn=0.050     LAG=84.0
 86          KM   S-GRAPH TYPE=DESERT RANGELAND
 87          KO       0       0     0.0       1      22
 88          BA  3.7659
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REC-1 INPUT PAGE 3

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

 89          LG   0.345   0.345   4.357   0.372     0.0
             * C3
 90          UI     0.0  151.75  151.75  151.75  190.44  436.28  559.26  700.12  855.68  975.52
 91          UI  1073.3 1242.28 1321.31 1364.94 1436.99 1454.26 1454.26 1418.19 1372.63 1299.19
 92          UI  1161.9 1057.64   941.4  855.14  770.03  694.14  628.58  566.66   510.9  460.18
 93          UI   415.5   362.4  338.86  288.07  286.08  237.34  232.68  204.46  160.84  160.84
 94          UI  160.84  118.28  103.88  103.88  103.88  103.88   97.02   36.93   36.93   36.93
 95          UI   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93
 96          UI   36.93   36.93     0.0

 97          KK     C4R   CNAME   C3-C4
 98          KO       0       0     0.0       0      22
 99          RC       2     0.0

100          KK      C4
101          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
102          KM   L=2.18     Lca=0.88     S=44.31     Kn=0.045     LAG=40.0
103          KM   S-GRAPH TYPE=DESERT RANGELAND
104          KO       0       0     0.0       1      22
105          BA  1.4001
106          LG   0.327   0.327   4.737    0.29     0.0
             * C4
107          UI     0.0  117.85  153.21  496.59  642.02   849.8 1023.51 1108.81 1120.37 1044.09
108          UI  868.12  694.78   559.8  452.89  361.01  288.88  232.67  190.33  149.01  124.91
109          UI    88.1   80.67   73.19   28.68   28.68   28.68   28.68   28.68   28.68   28.68
110          UI     0.0

111          KK       C   CNAME     CCP
112          KO       0       0     0.0       0      22
113          RC       2     0.0

114          KK     CCP   CNAME       C
115          KO       0       0     0.0       0      22
116          KM     CCP

117          KK      B1
118          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
119          KM   L=2.52     Lca=1.19     S=227.45     Kn=0.050     LAG=38.0
120          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
121          KO       0       0     0.0       1      22
122          BA  0.5559
123          LG    0.35    0.35   3.733    0.47   6.272
             * B1
124          UI     0.0   49.25   72.53  179.11  283.42  353.86  433.69  556.28  354.96  293.83
125          UI  258.29  226.62  196.88  163.69   131.5  117.02  105.83   83.39    66.1   58.84
126          UI   53.95   40.03   37.76   29.84    24.1    24.1   23.99    9.44    9.44    9.44
127          UI    9.44    9.44    9.44    9.44    9.44    9.44

128          KK   B1-B2   CNAME     B2R
129          KO       0       0     0.0       0      22
130          RS       8    FLOW     0.0     0.0
131          RC   0.055   0.042   0.055 11334.0  0.0137     0.0
             * B1-B2
132          RX     0.0    75.0   140.0   167.0   193.0   226.0   296.0   371.0
133          RY    20.0    17.0    14.0    10.0    10.0    13.0    17.0    22.0
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REC-1 INPUT PAGE 4

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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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134          KK      B2
135          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
136          KM    L=2.21      Lca=0.98      S=84.6      Kn=0.050      LAG=48.0
137          KM    S-GRAPH TYPE=DESERT RANGELAND
138          KO       0        0      0.0        1       22
139          BA   0.4888
140          LG    0.35     0.35    3.617    0.513      0.0
             * B2
141          UI     0.0    36.57    36.57    108.2   170.94   233.37   285.41    325.0   349.22   347.33
142          UI  325.56   278.29   231.3   188.32   156.44   128.94   105.91    86.03    71.02    59.44
143          UI   49.34    38.76    32.78    25.03    25.03    18.39      8.9      8.9      8.9      8.9
144          UI     8.9      8.9      8.9      8.9

145          KK     B3R    CNAME    B2-B3
146          KO       0        0      0.0        0       22
147          BC       2      0.0

148          KK   B2-B3    CNAME      B3R
149          KO       0        0      0.0        0       22
150          RS      22     FLOW      0.0      0.0
151          BC    0.05    0.025     0.05 19622.0   0.0121      0.0
             * B2-B3
152          RX     0.0    120.0    278.0    285.0    301.5    312.5    446.5    529.5
153          RY    13.5     10.0     11.6     10.1     10.1     11.5     10.8     12.6

154          KK       B3
155          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
156          KM    L=3.72      Lca=1.65      S=63.31      Kn=0.045      LAG=59.6
157          KM    S-GRAPH TYPE=DESERT RANGELAND
158          KO       0        0      0.0        1       22
159          BA   1.987
160          LG   0.331    0.331    4.284    0.389      0.0
             * B3
161          UI     0.0   113.39   113.39    174.2   365.68   513.62   667.08   787.09   938.3 1014.02
162          UI  1066.6 1086.67 1065.15 1007.46   902.78   777.14   654.54   576.28   502.42   427.51
163          UI  369.72   321.51   269.65   233.59   211.46   173.87   138.42   120.18   120.18    89.23
164          UI   77.62    77.62    77.62    39.48     27.6     27.6     27.6     27.6     27.6     27.6
165          UI   27.6     27.6     27.6     27.6      0.0

166          KK      B     CNAME      BCP
167          KO       0        0      0.0        0       22
168          BC       2      0.0

169          KK     BCP    CNAME        B
170          KO       0        0      0.0        0       22
171          RW     BCP

172          KK      A1
173          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
174          KM    L=2.20      Lca=0.86      S=322.08      Kn=0.030      LAG=30.0
175          KM    S-GRAPH TYPE=PHOENIX MOUNTAIN
176          KO       0        0      0.0        1       22
177          BA   1.1067
178          LG    0.35     0.35    4.059    0.417    9.677
             * A1
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

179          UI     0.0   124.21   285.26   628.48   880.99 1178.37 1187.81   769.89   652.53   550.24
180          UI  454.03   347.39   294.06   245.68    184.1   150.55   131.95    95.22    84.09    60.78
181          UI   60.78    43.03    23.81    23.81    23.81    23.81    23.81    23.81      0.0

182          KK   A1-A2    CNAME      A2R
183          KO       0        0      0.0        0       22
184          RS       9     FLOW      0.0      0.0
185          BC    0.045    0.045    0.045 15153.0   0.0134      0.0
             * A1-A2
186          RX     0.0     75.0    125.0    185.0    190.0    220.0    280.0    340.0
187          RY    27.0     23.0     19.0     10.0     10.0     20.0     26.0     32.0

188          KK      A2
189          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
190          KM    L=3.34      Lca=1.28      S=94.61      Kn=0.055      LAG=57.0
191          KM    S-GRAPH TYPE=DESERT RANGELAND
192          KO       0        0      0.0        1       22
193          BA   1.6622
194          LG    0.35     0.35    4.547    0.339      0.0
             * A2
195          UI     0.0    98.18    98.18   167.77    329.1   468.89   598.13   713.32    831.1    883.8
196          UI  940.94   940.94   897.33   847.41   719.99   625.76   533.26   458.89   397.46    336.4
197          UI  288.45    247.3   210.36    188.1   155.06   143.14   104.07   104.07     78.8    67.21
198          UI   67.21    67.21    50.17     23.9     23.9     23.9     23.9     23.9     23.9     23.9
199          UI    23.9     23.9      0.0

200          KK     A2R    CNAME    A2-A3
201          KO       0        0      0.0        0       22
202          BC       2    2.769

203          KK   A2-A3    CNAME      A3R
204          KO       0        0      0.0        0       22
205          RS      13     FLOW      0.0      0.0
206          BC    0.05    0.043     0.05 18190.0   0.0116      0.0
             * A2-A3
207          RX     0.0     20.0     30.0    165.0    186.0    346.0    361.0    381.0
208          RY    20.0     19.0     18.0     10.0     10.0     20.0     21.0     22.0

209          KK      A3
210          KM    THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
211          KM    L=3.92      Lca=1.89      S=58.21      Kn=0.045      LAG=64.0
212          KM    S-GRAPH TYPE=DESERT RANGELAND
213          KO       0        0      0.0        1       22
214          BA   3.7284
215          LG    0.35     0.35    4.23    0.405      0.0
             * A3
216          UI     0.0    196.2    196.2    216.6   570.49   813.36 1043.19 1275.51 1464.32 1668.98
217          UI  1757.8 1876.99 1880.23 1841.12 1751.54 1592.99 1387.91 1202.84 1048.95   919.72
218          UI  805.43   710.05   606.86   538.24   447.15   397.83   367.89   300.84   250.73   207.95
219          UI  207.95   183.56    134.3    134.3    134.3   151.67    47.75    47.75    47.75    47.75
220          UI   47.75    47.75    47.75    47.75    47.75    47.75    47.75    47.75
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 221          KK       A   CNAME     ACP
 222          KO       0       0     0.0       0      22
 223          KC       2   6.498
 224          KK     ACP   CNAME       A
 225          KO       0       0     0.0       0      22
 226          KK     ACP
 ZZ
```

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	C1	1111.	4.67	264.	67.	22.	3.59		
+	ROUTED TO	C1-C2	962.	5.25	263.	67.	22.	3.59		
+	HYDROGRAPH AT	C2	305.	4.92	65.	16.	5.	1.92		
+	2 COMBINED AT	C3R	967.	5.25	275.	71.	24.	5.51		
+	ROUTED TO	C2-C3	851.	6.25	272.	71.	24.	5.51		
+	HYDROGRAPH AT	C3	356.	5.25	101.	25.	8.	3.79		
+	2 COMBINED AT	C4R	847.	6.17	306.	81.	27.	9.29		
+	HYDROGRAPH AT	C4	521.	4.58	73.	18.	6.	1.40		
+	2 COMBINED AT	C	855.	6.17	341.	91.	30.	10.69		
+	ROUTED TO	CCP	768.	6.25	314.	84.	28.	10.69		
+	HYDROGRAPH AT	B1	269.	4.50	38.	10.	3.	0.56		
+	ROUTED TO	B1-B2	199.	5.08	38.	10.	3.	0.56		
+	HYDROGRAPH AT	B2	189.	4.67	29.	7.	2.	0.49		
+	2 COMBINED AT	B3R	205.	5.08	50.	13.	4.	1.04		
+	ROUTED TO	B2-B3	154.	6.83	49.	13.	4.	1.04		
+	HYDROGRAPH AT	B3	372.	4.83	75.	19.	6.	1.99		
+	2 COMBINED AT	B	301.	4.83	87.	23.	8.	3.03		
+	ROUTED TO	BCP	301.	4.83	87.	23.	8.	3.03		
+	HYDROGRAPH AT	A1	515.	4.33	68.	17.	6.	1.11		
+	ROUTED TO	A1-A2	383.	5.00	67.	17.	6.	1.11		
+	HYDROGRAPH AT	A2	360.	4.83	70.	17.	6.	1.66		
+	2 COMBINED AT	A3R	512.	5.00	107.	27.	9.	2.77		
+	ROUTED TO	A2-A3	406.	5.92	107.	27.	9.	2.77		
+	HYDROGRAPH AT	A3	397.	4.92	86.	22.	7.	3.73		
+	2 COMBINED AT	A	411.	6.00	162.	41.	14.	6.50		
+	ROUTED TO	ACP	316.	6.08	131.	33.	11.	6.50		

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

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1*************************************                    *************************************
*                                   *                    *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *   U.S. ARMY CORPS OF ENGINEERS    *
*             MAY  1991             *                    *   HYDROLOGIC ENGINEERING CENTER   *
*           VERSION 4.0.1E          *                    *         609 SECOND STREET         *
*                                   *                    *      DAVIS, CALIFORNIA 95616      *
* RUN DATE            TIME          *                    *         (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

                                        HEC-1 INPUT                                          PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 6-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: maq_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    2.08     0.01
              * 6-hour distribution, pattern 1.0
 16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.634   0.911   0.931    0.95
 18           PC   0.962   0.972   0.983   0.991     1.0
 19           IN      15 01JAN94       0
 20           JD   2.068     0.5
              * 6-hour distribution, pattern 1.0
 21           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 22           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.634   0.911   0.931    0.95
 23           PC   0.962   0.972   0.983   0.991     1.0
 24           IN      15 01JAN94       0
 25           JD   2.053     1.0
              * 6-hour distribution, pattern 1.4
 26           PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
 27           PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
 28           PC  0.9572  0.9684  0.9798  0.9898     1.0
 29           IN      15 01JAN94       0
 30           JD   1.997     5.0
              * 6-hour distribution, pattern 2.3
 31           PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
 32           PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
 33           PC  0.9487   0.962  0.9743  0.9877     1.0
 34           IN      15 01JAN94       0
 35           JD   1.955    10.0
              * 6-hour distribution, pattern 2.7
 36           PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
 37           PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
 38           PC  0.9471  0.9608  0.9735  0.9873     1.0
 39           IN      15 01JAN94       0
 40           JD   1.893    20.0
              * 6-hour distribution, pattern 3.1
 41           PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
 42           PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
 43           PC  0.9434   0.958  0.9718  0.9863     1.0
 44           IN      15 01JAN94       0
 45           JD   1.851    30.0
              * 6-hour distribution, pattern 3.4
 46           PC     0.0  0.0172  0.0256  0.0378  0.0565  0.0719  0.0868   0.103  0.1191  0.1342
 47           PC  0.1513  0.1702  0.1961  0.2439  0.3263  0.4824  0.6655  0.7875   0.858  0.9031

                                        HEC-1 INPUT                                          PAGE  2

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

 48           PC   0.939  0.9544  0.9697  0.9851     1.0
 49           IN      15 01JAN94       0
 50           JD    1.81    40.0
              * 6-hour distribution, pattern 3.5
 51           PC     0.0  0.0182  0.0281  0.0413  0.0604  0.0759  0.0916  0.1088  0.1254   0.141
 52           PC  0.1586  0.1783  0.2056  0.2537  0.3362   0.487  0.6636  0.7836  0.8535  0.8991
 53           PC  0.9358  0.9519  0.9682  0.9843     1.0
 54           IN      15 01JAN94       0
 55           JD   1.664   100.0
              * 6-hour distribution, pattern 4.1
 56           PC     0.0  0.0212  0.0355  0.0515  0.0715  0.0877   0.106  0.1261  0.1443  0.1618
 57           PC  0.1812  0.2036  0.2347  0.2837   0.367   0.501  0.6559  0.7704  0.8392  0.8864
 58           PC  0.9256   0.944  0.9633  0.9817     1.0

 59           KK      G1
 60           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
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 61          KM   L=2.38     Lca=1.08     S=33.76     Kn=0.045     LAG=47.0
 62          KM   S-GRAPH TYPE=DESERT RANGELAND
 63          KO       0        0     0.0        1       22
 64          BA  1.1192
 65          LG    0.35     0.35   4.688    0.298      0.0
             * G1
 66          UI     0.0    80.18   80.18   213.21   355.01   484.39   602.77   698.96   750.35   768.35
 67          UI  735.76    667.1   553.81   458.12   381.96    318.8   263.39   222.24   176.97   151.15
 68          UI  124.99    103.3    84.98    70.61    54.88    54.88    43.59    19.51    19.51    19.51
 69          UI   19.51    19.51    19.51    19.51    19.51      0.0

 70          KK     GCP    CNAME        G
 71          KO       0        0     0.0        0       22
 72          KM     GCP

 73          KK      J1
 74          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 75          KM   L=4.09     Lca=1.78     S=70.82     Kn=0.055     LAG=75.0
 76          KM   S-GRAPH TYPE=DESERT RANGELAND
 77          KO       0        0     0.0        1       22
 78          BA  1.7341
 79          LG    0.35     0.35    3.25    0.652      0.0
             * J1
 80          UI     0.0    77.85   77.85    77.85   158.13    251.7   335.81   417.88   494.16   554.74
 81          UI  644.32   684.11  713.07   746.04   746.04   734.85   705.46   668.29   587.67   533.19
 82          UI  468.25   415.23  374.67   332.03   295.07   263.53   233.62   213.16   176.19   163.14
 83          UI  146.76   131.28  119.37   107.76    82.51    82.51    80.76    53.29    53.29    53.29
 84          UI   53.29     52.6   18.95    18.95    18.95    18.95    18.95    18.95    18.95    18.95
 85          UI   18.95    18.95   18.95    18.95    18.95    18.95

 86          KK   J1-J2    CNAME     J2R
 87          KO       0        0     0.0        0       22
 88          RS      17     FLOW     0.0      0.0
 89          RC   0.055     0.04   0.055 24090.0   0.0086      0.0
             * J1-J2
 90          RX     0.0    161.0   247.0    254.0    271.0    279.0    393.0    660.0
 91          RY    17.0     12.5    12.2     10.8     10.0     12.1     12.9     17.0
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HEC-1 INPUT PAGE 3

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

 92          KK      J2
 93          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 94          KM   L=5.18     Lca=2.51     S=45.01     Kn=0.050     LAG=93.0
 95          KM   S-GRAPH TYPE=DESERT RANGELAND
 96          KO       0        0     0.0        1       22
 97          BA  3.6379
 98          LG   0.349    0.348   3.623    0.495    0.281
             * J2
 99          UI     0.0   131.71  131.71   131.71   131.71    310.0   410.19    529.5   653.07   756.36
100          UI  857.31   932.01 1064.78  1131.28  1183.02  1211.17  1262.18  1262.18  1262.18  1218.5
101          UI  1189.1  1123.15 1016.12   925.88   854.59   766.34   699.91   639.83   585.77   530.32
102          UI  484.42   440.99  403.55   360.62   330.98    294.1   269.83    248.3   236.22   201.95
103          UI  201.95    172.6   139.6    139.6    139.6   118.12    90.16    90.16    90.16    90.16
104          UI   90.16    79.42   32.06    32.06    32.06    32.06    32.06    32.06    32.06    32.06
105          UI   32.06    32.06   32.06    32.06    32.06    32.06    32.06    32.06    32.06      0.0

106          KK    K3RB    CNAME   J2-K3
107          KO       0        0     0.0        0       22
108          RC       2    5.372

109          KK   J2-K3    CNAME    K3RB
110          KO       0        0     0.0        0       22
111          RS       5     FLOW     0.0      0.0
112          RC    0.05    0.048    0.05   4072.0   0.0059      0.0
             * J2-K3
113          RX     0.0    390.0   490.0    502.0    520.0    532.0    632.0   1022.0
114          RY    20.0     14.5    11.5     10.0     10.0     11.5     14.5     20.0

115          KK      K1
116          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
117          KM   L=3.23     Lca=1.84     S=681.00     Kn=0.050     LAG=40.0
118          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
119          KO       0        0     0.0        1       22
120          BA   1.543
121          LG   0.112    0.255   4.382    0.365    21.06
             * K1
122          UI     0.0   129.88  168.84   442.11   706.31   896.38  1061.91  1457.77  1111.25   821.11
123          UI  726.82   641.11  561.31   488.34   403.67   331.29   304.06   271.41   213.37   169.75
124          UI  154.58   142.25  108.11    99.57    85.17    63.56    63.56    63.56    38.81    24.89
125          UI   24.89    24.89   24.89    24.89    24.89    24.89    24.89      0.0

126          KK   K1-K2    CNAME     K2R
127          KO       0        0     0.0        0       22
128          RS      26     FLOW     0.0      0.0
129          RC   0.048     0.05   0.048 30021.0    0.015      0.0
             * K1-K2
130          RX     0.0     20.0    55.0     85.0    235.0    259.0    289.0    309.0
131          RY    22.0     21.0    20.0     10.0     10.0     20.0     21.0     22.0
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HEC-1 INPUT PAGE 4

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

132          KK      K2
133          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
134          KM   L=7.3      Lca=4.04     S=108.84     Kn=0.055     LAG=119.0
135          KM   S-GRAPH TYPE=DESERT RANGELAND
136          KO       0        0     0.0        1       22
137          BA   2.365
138          LG   0.341    0.346   4.471    0.348    1.018
             * K2
139          UI     0.0    66.91   66.91    66.91    66.91    66.91   132.91   192.38   234.97   273.87
140          UI  324.09   369.36  410.96   453.67   472.54   532.28   558.99    587.9   605.63   610.31
141          UI  641.26   641.26  641.26   641.26   620.87   601.29   597.45   565.84   516.46   476.06
142          UI  460.97   411.12  386.21   359.14   335.65   312.63   290.38   266.75   251.32   236.77
143          UI  209.97    203.8  183.22   181.03   149.42   149.42   135.15   126.15   126.15   109.44
144          UI   102.6    102.6   98.17    70.92    70.92    70.92    70.92    70.92    46.43     45.8
145          UI    45.8     45.8    45.8     45.8     45.8     45.8    16.92    16.29    16.29    16.29
146          UI  16.29    16.29   16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29
147          UI  16.29    16.29   16.29    16.29    16.29    16.29    16.29    16.29      0.0
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148          KK    K3RA   CNAME   K2-K3
149          KO       0       0     0.0       0      22
150          HC       2   3.908

151          KK   K2-K3   CNAME    K3RA
152          KO       0       0     0.0       0      22
153          RS      22    FLOW     0.0     0.0
154          RC    0.05   0.048    0.05 25950.0  0.0084     0.0
             * K2-K3
155          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
156          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

157          KK      F1
158          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
159          KM   L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
160          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
161          KO       0       0     0.0       1      22
162          BA  2.7854
163          LG   0.299    0.33   4.322   0.361  14.271
             * F1
164          UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
165          UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
166          UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
167          UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
168          UI   39.08   39.08   39.08     0.0

169          KK   F1-F2   CNAME     F2R
170          KO       0       0     0.0       0      22
171          RS       4    FLOW     0.0     0.0
172          RC   0.053   0.045   0.035  8635.0   0.012     0.0
             * F1-F2
173          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
174          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0
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HEC-1 INPUT PAGE 5

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

175          KK      F2
176          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
177          KM   L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
178          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
179          KO       0       0     0.0       1      22
180          BA  2.5261
181          LG   0.35    0.35   4.311   0.375   3.026
             * F2
182          UI     0.0  149.21  149.21  254.97  455.63  697.83  908.32 1043.12 1160.83 1374.76
183          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.63  584.61  511.95
184          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
185          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
186          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
187          UI    28.6    28.6    28.6     0.0

188          KK     F3R   CNAME   F2-F3
189          KO       0       0     0.0       0      22
190          HC       2   5.312

191          KK   F2-F3   CNAME     F3R
192          KO       0       0     0.0       0      22
193          RS       5    FLOW     0.0     0.0
194          RC    0.05   0.047   0.048  7059.0    0.01     0.0
             * F2-F3
195          RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
196          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

197          KK      F3
198          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
199          KM   L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
200          KM   S-GRAPH TYPE=DESERT RANGELAND
201          KO       0       0     0.0       1      22
202          BA  0.7363
203          LG    0.35    0.35   3.266   0.647     0.0
             * F3
204          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
205          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
206          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
207          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
208          UI     0.0

209          KK    E4RB   CNAME   F3-E4
210          KO       0       0     0.0       0      22
211          HC       2   6.048

212          KK   F3-E4   CNAME    E4RB
213          KO       0       0     0.0       0      22
214          RS      19    FLOW     0.0     0.0
215          RC    0.05   0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
216          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
217          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0
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HEC-1 INPUT PAGE 6

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

218          KK      H1
219          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
220          KM   L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
221          KM   S-GRAPH TYPE=DESERT RANGELAND
222          KO       0       0     0.0       1      22
223          BA  1.0659
224          LG    0.35    0.35   2.733   0.945     0.0
             * H1
225          UI     0.0   70.37   70.37  156.66  277.5  386.06  480.97  578.94  629.54  674.37
226          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
227          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
228          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

229          KK   H1-H2   CNAME     H2R
230          KO       0       0     0.0       0      22
231          RS      31    FLOW     0.0     0.0
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232          RC   0.053    0.05    0.053 21738.0  0.0082     0.0
             * H1-H2
233          RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
234          RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

235          KK      E1
236          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
237          KM   L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
238          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
239          KO       0       0     0.0       1      22
240          BA  0.9558
241          LG    0.35   0.378   5.377   0.222    0.69
             * E1
242          UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
243          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
244          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
245          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
246          UI     0.0

247          KK   E1-E2   CNAME     E2R
248          KO       0       0     0.0       0      22
249          RS       7    FLOW     0.0     0.0
250          RC    0.05   0.047   0.046 11365.0   0.016     0.0
             * E1-E2
251          RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
252          RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

253          KK      E2
254          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
255          KM   L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
256          KM   S-GRAPH TYPE=DESERT RANGELAND
257          KO       0       0     0.0       1      22
258          BA  1.9794
259          LG    0.35    0.36   5.043   0.256     0.0
             * E2
260          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
261          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
262          UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

263          UI   36.05   36.05   36.05   36.05

264          KK     E3R   CNAME   E2-E3
265          KO       0       0     0.0       0      22
266          HC       2.   2.935

267          KK   E2-E3   CNAME     E3R
268          KO       0       0     0.0       0      22
269          RS      13    FLOW     0.0     0.0
270          RC   0.052   0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
271          RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
272          RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

273          KK      E3
274          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
275          KM   L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
276          KM   S-GRAPH TYPE=DESERT RANGELAND
277          KO       0       0     0.0       1      22
278          BA  2.4882
279          LG    0.35    0.35   4.358   0.347     0.0
             * E3
280          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.87
281          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
282          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
283          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
284          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
285          UI   27.19   27.19   27.19   27.19   27.19   27.19

286          KK    E4RA   CNAME   E3-E4
287          KO       0       0     0.0       0      22
288          HC       2   5.423

289          KK   E3-E4   CNAME    E4RA
290          KO       0       0     0.0       0      22
291          RS      13    FLOW     0.0     0.0
292          RC   0.056   0.049   0.056 13855.0  0.0048     0.0
             * E3-E4
293          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
294          RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

295          KK      H2
296          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
297          KM   L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
298          KM   S-GRAPH TYPE=DESERT RANGELAND
299          KO       0       0     0.0       1      22
300          BA  1.4003
301          LG    0.35    0.35   3.222   0.664     0.0
             * H2
302          UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
303          UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
304          UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
305          UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
306          UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
307          UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

308          UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

309          KK      E4
310          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
311          KM   L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
312          KM   S-GRAPH TYPE=DESERT RANGELAND
313          KO       0       0     0.0       1      22
314          BA  3.0419
315          LG    0.35    0.35   3.816   0.439     0.0
             * E4
316          UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
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317          UI   566.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
318          UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
319          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
320          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
321          UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
322          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
323          UI   24.44   24.44   24.44   24.44   24.44   24.44

324          KK     E5R   CNAME  E4H2E5
325          KO       0       0     0.0       0      22
326          RC       5  16.979

327          KK  E4H2E5   CNAME     E5R
328          KO       0       0     0.0       0      22
329          RS      17    FLOW     0.0     0.0
330          RC    0.06    0.05    0.06 15206.0  0.0051     0.0
             * E4H2-E5
331          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
332          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

333          KK      K3
334          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
335          KM   L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
336          KM   S-GRAPH TYPE=DESERT RANGELAND
337          KO       0       0     0.0       1      22
338          BA  1.6364
339          LG    0.35    0.35   3.421   0.582     0.0
             * K3
340          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
341          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
342          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
343          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
344          UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
345          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
346          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

347          KK      E5
348          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
349          KM   L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
350          KM   S-GRAPH TYPE=DESERT RANGELAND
351          KO       0       0     0.0       1      22
352          BA  1.3075
353          LG   0.347   0.344    3.94   0.429   0.968
             * E5
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

354          UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
355          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
356          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
357          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
358          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

359          KK     E6R   CNAME  E5K2E6
360          KO       0       0     0.0       0      22
361          RC       5  29.203

362          KK  E5K2E6   CNAME     E6R
363          KO       0       0     0.0       0      22
364          RS       7    FLOW     0.0     0.0
365          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
             * E5K3-E6
366          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
367          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

368          KK      E6
369          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
370          KM   L=3.04      Lca=1.06      S=34.17      Kn=0.050      LAG=57.0
371          KM   S-GRAPH TYPE=DESERT RANGELAND
372          KO       0       0     0.0       1      22
373          BA  2.0375
374          LG   0.343   0.336   4.356   0.367   0.711
             * E6
375          UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
376          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
377          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
378          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
379          UI   29.29   29.29     0.0

380          KK       E   CNAME     ECP
381          KO       0       0     0.0       0      22
382          RC       2  31.241

383          KK     ECP   CNAME       E
384          KO       0       0     0.0       0      22
385          RN     ECP
386          ZZ
```

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	G1	359.	4.67	58.	14.	5.	1.12		
+	ROUTED TO	GCP	359.	4.67	58.	14.	5.	1.12		
+	HYDROGRAPH AT	J1	175.	5.08	44.	11.	4.	1.73		
+	ROUTED TO	J1-J2	129.	6.67	43.	11.	4.	1.73		
+	HYDROGRAPH AT	J2	228.	5.33	71.	18.	6.	3.64		

+	2 COMBINED AT	K3RB	152.	5.33	55.	14.	5.	5.37
+	ROUTED TO	J2-K3	149.	5.67	54.	14.	5.	5.37
+	HYDROGRAPH AT	K1	789.	4.50	144.	36.	12.	1.54
+	ROUTED TO	K1-K2	403.	6.33	143.	36.	12.	1.54
+	HYDROGRAPH AT	K2	225.	5.75	89.	23.	8.	2.37
+	2 COMBINED AT	K3RA	428.	6.58	197.	50.	17.	3.91
+	ROUTED TO	K2-K3	360.	8.33	191.	50.	17.	3.91
+	HYDROGRAPH AT	F1	844.	4.58	171.	43.	14.	2.79
+	ROUTED TO	F1-F2	772.	4.83	170.	43.	14.	2.79
+	HYDROGRAPH AT	F2	484.	4.75	96.	24.	8.	2.53
+	2 COMBINED AT	F3R	906.	4.83	213.	54.	18.	5.31
+	ROUTED TO	F2-F3	833.	5.17	213.	54.	18.	5.31
+	HYDROGRAPH AT	F3	175.	4.75	32.	8.	3.	0.74
+	2 COMBINED AT	E4RB	833.	5.17	214.	55.	18.	6.05
+	ROUTED TO	F3-E4	622.	6.75	204.	53.	18.	6.05
+	HYDROGRAPH AT	H1	141.	4.75	24.	6.	2.	1.07
+	ROUTED TO	H1-H2	82.	7.08	24.	6.	2.	1.07
+	HYDROGRAPH AT	E1	385.	4.50	58.	15.	5.	0.96
+	ROUTED TO	E1-E2	321.	5.00	58.	15.	5.	0.96
+	HYDROGRAPH AT	E2	589.	4.67	93.	23.	8.	1.98
+	2 COMBINED AT	E3R	596.	4.83	126.	31.	10.	2.93
+	ROUTED TO	E2-E3	489.	5.83	125.	31.	10.	2.93
+	HYDROGRAPH AT	E3	353.	5.08	89.	22.	7.	2.49
+	2 COMBINED AT	E4RA	498.	5.83	159.	41.	14.	5.42
+	ROUTED TO	E3-E4	435.	6.83	155.	41.	14.	5.42
+	HYDROGRAPH AT	H2	136.	5.25	40.	10.	3.	1.40
+	HYDROGRAPH AT	E4	232.	5.50	79.	20.	7.	3.04
+	5 COMBINED AT	E5R	612.	7.08	243.	67.	22.	16.98
+	ROUTED TO	E4H2E5	591.	7.92	239.	66.	22.	16.98
+	HYDROGRAPH AT	K3	153.	5.33	48.	12.	4.	1.64
+	HYDROGRAPH AT	E5	251.	4.92	57.	14.	5.	1.31
+	5 COMBINED AT	E6R	582.	8.25	309.	89.	30.	29.20
+	ROUTED TO	E5K2E6	519.	9.17	278.	80.	27.	29.20
+	HYDROGRAPH AT	E6	408.	4.83	80.	20.	7.	2.04
+	2 COMBINED AT	E	521.	9.17	278.	84.	28.	31.24
+	ROUTED TO	ECP	497.	9.25	267.	80.	27.	31.24

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

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY   1991             *
*          VERSION 4.0.1E           *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

```
                                        HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 6-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    2.08    0.01
              * 6-hour distribution, pattern 1.0
 16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 18           PC   0.962   0.972   0.983   0.991     1.0
 19           IN      15 01JAN94       0
 20           JD   2.068     0.5
              * 6-hour distribution, pattern 1.0
 21           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 22           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 23           PC   0.962   0.972   0.983   0.991     1.0
 24           IN      15 01JAN94       0
 25           JD   2.053     1.0
              * 6-hour distribution, pattern 1.4
 26           PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
 27           PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
 28           PC  0.9572  0.9684  0.9798  0.9898     1.0
 29           IN      15 01JAN94       0
 30           JD   1.997     5.0
              * 6-hour distribution, pattern 2.3
 31           PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
 32           PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
 33           PC  0.9487   0.962  0.9743  0.9877     1.0
 34           IN      15 01JAN94       0
 35           JD   1.955    10.0
              * 6-hour distribution, pattern 2.7
 36           PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
 37           PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
 38           PC  0.9471  0.9608  0.9735  0.9873     1.0
 39           IN      15 01JAN94       0
 40           JD   1.893    20.0
              * 6-hour distribution, pattern 3.1
 41           PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
 42           PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
 43           PC  0.9434   0.958  0.9718  0.9863     1.0
 44           IN      15 01JAN94       0
 45           JD   1.851    30.0
              * 6-hour distribution, pattern 3.4
 46           PC     0.0  0.0172  0.0256  0.0378  0.0565  0.0719  0.0868   0.103  0.1191  0.1342
 47           PC  0.1513  0.1702  0.1961  0.2439  0.3263  0.4824  0.6655  0.7875   0.858  0.9031

                                        HEC-1 INPUT                                                    PAGE  2

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

 48           PC   0.939  0.9544  0.9697  0.9851     1.0
 49           IN      15 01JAN94       0
 50           JD    1.81    40.0
              * 6-hour distribution, pattern 3.5
 51           PC     0.0  0.0182  0.0281  0.0413  0.0604  0.0759  0.0916  0.1088  0.1254   0.141
 52           PC  0.1586  0.1783  0.2056  0.2537  0.3362   0.487  0.6636  0.7836  0.8535  0.8991
 53           PC  0.9358  0.9519  0.9682  0.9843     1.0
 54           IN      15 01JAN94       0
 55           JD   1.664   100.0
              * 6-hour distribution, pattern 4.1
 56           PC     0.0  0.0212  0.0355  0.0515  0.0715  0.0877   0.106  0.1261  0.1443  0.1618
 57           PC  0.1812  0.2036  0.2347  0.2837   0.367   0.501  0.6559  0.7704  0.8392  0.8864
 58           PC  0.9256   0.944  0.9633  0.9817     1.0

 59           KK      R1
 60           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
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61          KM   L=1.01     Lca=0.46     S=213.31     Kn=0.050     LAG=19.0
62          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
63          KO      0        0     0.0        1       22
64          BA  0.2836
65          LG    0.35     0.35   4.358   0.374   8.387
            * R1
66          UI     0.0    62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
67          UI   57.54    39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

68          KK     RCP    CNAME       R
69          KO       0        0     0.0        0       22
70          RN     RCP

71          KK      L1
72          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
73          KM   L=4.93     Lca=2.29     S=308.27     Kn=0.050     LAG=61.0
74          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
75          KO       0        0     0.0        1       22
76          BA  3.5462
77          LG   0.271    0.318   4.357   0.352  16.317
            * L1
78          UI     0.0   195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
79          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
80          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
81          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
82          UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
83          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

84          KK   L1-L2    CNAME     L2R
85          KO       0        0     0.0        0       22
86          RS      14     FLOW     0.0      0.0
87          RC   0.046    0.045   0.046 28949.0  0.0147     0.0
            * L1-L2
88          RX     0.0     80.0   165.0   200.0   215.0   255.0   340.0   420.0
89          RY    19.0     17.0    14.0    10.0    10.0    14.0    18.0    22.0
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HEC-1 INPUT PAGE 3

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

90          KK      L2
91          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
92          KM   L=5.21     Lca=2.40     S=82.13     Kn=0.055     LAG=90.0
93          KM   S-GRAPH TYPE=DESERT RANGELAND
94          KO       0        0     0.0        1       22
95          BA  7.3294
96          LG    0.35     0.35   4.202   0.399     0.0
            * L2
97          UI     0.0    274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
98          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
99          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
100         UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
101         UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
102         UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
103         UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

104         KK     L3R    CNAME    L2-L3
105         KO       0        0     0.0        0       22
106         RC       2      0.0

107         KK   L2-L3    CNAME     L3R
108         KO       0        0     0.0        0       22
109         RS      31     FLOW     0.0      0.0
110         RC    0.05    0.045    0.06 20567.0  0.0084     0.0
            * L2-L3
111         RX     0.0   1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
112         RY    18.0     11.8    11.7    10.0    10.0    11.7    11.8    18.0

113         KK      L3
114         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
115         KM   L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
116         KM   S-GRAPH TYPE=DESERT RANGELAND
117         KO       0        0     0.0        1       22
118         BA  5.8518
119         LG   0.341    0.328    3.98   0.419    1.05
            * L3
120         UI     0.0   216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
121         UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
122         UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
123         UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
124         UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
125         UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
126         UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

127         KK       L    CNAME     LCP
128         KO       0        0     0.0        0       22
129         RC       2      0.0

130         KK     LCP    CNAME       L
131         KO       0        0     0.0        0       22
132         RN     LCP
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HEC-1 INPUT PAGE 4

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

133         KK      Z1
134         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
135         KM   L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
136         KM   S-GRAPH TYPE=DESERT RANGELAND
137         KO       0        0     0.0        1       22
138         BA  0.6644
139         LG   0.321    0.292   4.004    0.43   2.909
            * Z1
140         UI     0.0    57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
141         UI  399.44   319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
142         UI   39.26    39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

143         KK     ZCP    CNAME       Z
144         KO       0        0     0.0        0       22
145         RN     ZCP
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146          KK      M1
147          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
148          KM   L=4.99      Lca=1.81      S=302.46      Kn=0.050      LAG=56.0
149          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
150          KO       0        0      0.0        1       22
151          BA  5.5949
152          LG    0.35     0.35    4.306    0.347   17.122
             * M1
153          UI     0.0   336.39   336.39   603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
154          UI  4005.2  2791.27  2249.2  1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
155          UI   946.29   845.54   793.05   739.37   664.77   552.64   468.14   425.83   388.56   368.42
156          UI   333.06    257.9    257.9    257.9   168.35   164.62   164.62   164.62   164.62    94.92
157          UI    64.47    64.47    64.47    64.47    64.47    64.47    64.47    64.47    64.47    64.47
158          UI    64.47    64.47      0.0

159          KK   M1-M2    CNAME      M2R
160          KO       0        0      0.0        0       22
161          RS      26     FLOW      0.0      0.0
162          RC    0.04     0.04    0.045 38719.0   0.0133      0.0
             * M1-M2
163          RX     0.0    961.0   1028.0   1051.0   1136.0   1153.0   1193.0   1900.0
164          RY    15.5     12.0     11.8     10.3     10.0     11.0     11.2     15.5

165          KK      M2
166          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
167          KM   L=7.60      Lca=3.07      S=88.36      Kn=0.050      LAG=103.0
168          KM   S-GRAPH TYPE=DESERT RANGELAND
169          KO       0        0      0.0        1       22
170          BA  7.5274
171          LG    0.35     0.35    3.952    0.446    0.287
             * M2
172          UI     0.0   246.06   246.06   246.06   246.06   366.94   707.43   862.03 1046.84 1248.07
173          UI  1424.7  1592.75  1748.11  1929.89  2062.25  2176.05  2221.53  2334.54  2358.09  2358.09
174          UI  2358.0  2271.78  2217.13  2123.85  1976.02  1771.84  1691.54   1501.0   1393.0  1284.99
175          UI  1178.7   1088.8   995.34    919.2   857.56   754.59   708.67   673.74   569.64   549.46
176          UI  488.21   463.89   446.34   377.29   377.29   364.18    260.8    260.8    260.8    260.8
177          UI  201.47   168.43   168.43   168.43   168.43   168.43   168.43    90.19    59.89    59.89
178          UI   59.89    59.89    59.89    59.89    59.89    59.89    59.89    59.89    59.89    59.89
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

179          UI   59.89    59.89    59.89    59.89    59.89    59.89      0.0

180          KK       M    CNAME      MCP
181          KO       0        0      0.0        0       22
182          HC       2      0.0

183          KK     MCP    CNAME        M
184          KO       0        0      0.0        0       22
185          RN     MCP

186          KK      O1
187          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
188          KM   L=5.20      Lca=2.79      S=64.07      Kn=0.055      LAG=100.0
189          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
190          KO       0        0      0.0        1       22
191          BA  3.0883
192          LG    0.35     0.35    4.189    0.393    2.105
             * O1
193          UI     0.0   103.98   103.98   103.98   103.98   181.97   298.95   378.66   446.43   550.06
194          UI  624.46   676.83   731.54   781.25   824.52   905.38  1042.04  1204.77   1242.7   887.05
195          UI   765.3    690.9   643.35   614.88   590.49   558.55   530.78   506.48   485.09   454.93
196          UI  429.36   410.34    388.6   356.95   326.56    302.9   274.89   260.97   254.42   242.21
197          UI  239.16   221.76   217.42   189.46   170.83   170.83   140.46   132.86   132.86   129.07
198          UI  113.88   113.88   113.88   113.88    79.72    79.72    79.72    79.72    79.72    79.72
199          UI   50.88    50.88    50.88    50.88    50.88    50.88    50.88    50.88    50.88    32.31
200          UI   19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93
201          UI   19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93
202          UI   19.93    19.93    19.93      0.0

203          KK     OCP    CNAME        O
204          KO       0        0      0.0        0       22
205          RN     OCP

206          KK      N1
207          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
208          KM   L=2.79      Lca=1.44      S=340.38      Kn=0.050      LAG=40.0
209          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
210          KO       0        0      0.0        1       22
211          BA   1.524
212          LG    0.35     0.35    4.075    0.419    8.38
             * N1
213          UI     0.0   128.28   166.76   436.67   697.62   885.35  1048.84  1439.82  1097.57    811.0
214          UI  717.87   633.22   554.39   482.33    398.7   327.21   300.32   268.07   210.75   167.46
215          UI  152.67    140.5   106.78    98.35    84.12    62.78    62.78    62.78    38.33    24.59
216          UI   24.59    24.59    24.59    24.59    24.59    24.59    24.59      0.0

217          KK   N1-N2    CNAME      N2R
218          KO       0        0      0.0        0       22
219          RS      23     FLOW      0.0      0.0
220          RC    0.05    0.047     0.05 26511.0   0.0115      0.0
             * N1-N2
221          RX     0.0    280.0    350.0    358.0    367.0    381.0    451.0    730.0
222          RY    17.0     13.0     11.5     10.0     10.0     11.5     13.0     17.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

223          KK      M2
224          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
225          KM   L=5.64      Lca=3.27      S=170.14      Kn=0.055      LAG=91.0
226          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
227          KO       0        0      0.0        1       22
228          BA  3.3254
229          LG    0.35     0.35    4.117    0.405    2.67
             * M2
230          UI     0.0   123.04   123.04   123.04   123.04   310.82   395.95   496.74   616.34   730.85
231          UI  796.44   869.05   928.55   990.24  1125.95  1316.06  1517.94  1186.36   925.57   834.34
232          UI  764.31   726.51   694.11   654.42    619.9   586.86   557.14   517.77   491.74    466.8
233          UI  422.37   387.25    352.0   325.27   302.29   296.75   282.99   272.23   257.26   234.33
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234        UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
235        UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
236        UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
237        UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
238        UI   23.58   23.58   23.58   23.58   23.58

239        KK       N   CNAME     NCP
240        KO       0       0     0.0       0      22
241        BC       2     0.0

242        KK     NCP   CNAME       N
243        KO       0       0     0.0       0      22
244        RN     NCP

245        KK      P1
246        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
247        KM   L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
248        KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
249        KO       0       0     0.0       1      22
250        BA  2.4365
251        LG    0.35    0.35   4.193   0.396   6.712
           * P1
252        UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
253        UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
254        UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
255        UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
256        UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
257        UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
258        UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
259        UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0

260        KK     PCP   CNAME       P
261        KO       0       0     0.0       0      22
262        RN     PCP

263        KK      Q1
264        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
265        KM   L=5.23      Lca=2.81      S=228.56      Kn=0.055      LAG=78.0
266        KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
267        KO       0       0     0.0       1      22
268        BA  2.2336
269        LG    0.35    0.35   4.203    0.39  12.313
           * Q1
```



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

270        UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
271        UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
272        UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
273        UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
274        UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
275        UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
276        UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
277        UI   18.48   18.48   18.48

278        KK     QCP   CNAME       Q
279        KO       0       0     0.0       0      22
280        RN     QCP
281        ZZ
```

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	R1	254.	4.25	22.	6.	2.	0.28		
+	ROUTED TO	RCP	254.	4.25	22.	6.	2.	0.28		
+	HYDROGRAPH AT	L1	888.	4.83	227.	58.	19.	3.55		
+	ROUTED TO	L1-L2	713.	5.83	225.	58.	19.	3.55		
+	HYDROGRAPH AT	L2	369.	5.33	112.	28.	9.	7.33		
+	2 COMBINED AT	L3R	713.	5.92	265.	69.	23.	10.88		
+	ROUTED TO	L2-L3	576.	8.42	259.	68.	23.	10.88		
+	HYDROGRAPH AT	L3	392.	5.33	123.	31.	10.	5.85		
+	2 COMBINED AT	L	566.	8.42	308.	88.	29.	16.73		
+	ROUTED TO	LCP	453.	8.58	255.	72.	24.	16.73		
+	HYDROGRAPH AT	Z1	310.	4.50	43.	11.	4.	0.66		
+	ROUTED TO	ZCP	310.	4.50	43.	11.	4.	0.66		
+	HYDROGRAPH AT	M1	1184.	4.75	309.	79.	26.	5.59		
+	ROUTED TO	M1-M2	880.	6.83	301.	79.	26.	5.59		

```
          HYDROGRAPH AT
+                        M2      266.   5.50        92.        23.        8.      7.53
          2 COMBINED AT
+                         M      880.   6.83       348.        95.       32.     13.12
          ROUTED TO
+                       MCP      751.   6.83       296.        82.       27.     13.12
          HYDROGRAPH AT
+                        O1      319.   5.33        96.        25.        8.      3.09
          ROUTED TO
+                       OCP      319.   5.33        96.        25.        8.      3.09
          HYDROGRAPH AT
+                        N1      502.   4.50        81.        20.        7.      1.52
          ROUTED TO
+                     N1-N2      312.   6.33        80.        20.        7.      1.52
          HYDROGRAPH AT
+                        N2      354.   5.25       100.        26.        9.      3.33
          2 COMBINED AT
+                         N      309.   6.17       135.        35.       12.      4.85
          ROUTED TO
+                       NCP      295.   6.17       129.        34.       11.      4.85
          HYDROGRAPH AT
+                        P1      371.   5.17       104.        27.        9.      2.44
          ROUTED TO
+                       PCP      371.   5.17       104.        27.        9.      2.44
          HYDROGRAPH AT
+                        Q1      434.   5.00       121.        32.       11.      2.23
          ROUTED TO
+                       QCP      434.   5.00       121.        32.       11.      2.23

 *** NORMAL END OF HEC-1 ***
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
 *              MAY  1991            *
 *           VERSION 4.0.1E          *
 *                                   *
 *  RUN DATE            TIME         *
 *                                   *
 *************************************

 *************************************
 *                                   *
 *    U.S. ARMY CORPS OF ENGINEERS   *
 *    HYDROLOGIC ENGINEERING CENTER  *
 *          609 SECOND STREET        *
 *       DAVIS, CALIFORNIA 95616     *
 *           (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

                                        HEC-1 INPUT                                          PAGE  1

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

   1           ID   Buckeye/Sun Valley ADMS - 1 March 2004
   2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3           ID   10-year 6-hour
   4           ID   Existing Conditions
   5           ID   FRS #2 (Sub-basins S-U)
   6           ID   Rainfall Loss Method - Green & Ampt
   7           ID   Unit Hydrograph Method - FCDMC S-Graph
   8           ID   Channel Routing Method - Normal Depth
   9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
  10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
               *DIAGRAM
  12           IT       5  1JAN94       0    2000
  13           IO       3
  14           IN      15 01JAN94       0
  15           JD    2.07     0.01
               * 6-hour distribution, pattern 1.0
  16           PC     0.0    0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  17           PC   0.087    0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  18           PC   0.962    0.972   0.983   0.991     1.0
  19           IN      15 01JAN94       0
  20           JD   2.058      0.5
               * 6-hour distribution, pattern 1.0
  21           PC     0.0    0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  22           PC   0.087    0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  23           PC   0.962    0.972   0.983   0.991     1.0
  24           IN      15 01JAN94       0
  25           JD   2.043      1.0
               * 6-hour distribution, pattern 1.4
  26           PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
  27           PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
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 28          PC  0.9572  0.9684  0.9798  0.9898     1.0
 29          IN      15 01JAN94       0
 30          JD   1.987     5.0
             * 6-hour distribution, pattern 2.3
 31          PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
 32          PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
 33          PC  0.9487   0.962  0.9743  0.9877     1.0
 34          IN      15 01JAN94       0
 35          JD   1.946    10.0
             * 6-hour distribution, pattern 2.7
 36          PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
 37          PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
 38          PC  0.9471  0.9608  0.9735  0.9873     1.0

 39          KK      S1
 40          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 41          KM   L=2.32     Lca=0.52      S=143.99      Kn=0.050      LAG=29.0
 42          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 43          KO       0        0     0.0       1       22
 44          BA  1.4105
 45          LG    0.35     0.35   4.484   0.352   6.918
             * S1
 46          UI     0.0  163.76  399.96  663.78 1191.38 1674.04 1389.89  974.35  824.12  687.96
 47          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 48          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

 49          KK     SCP    CNAME       S
 50          KO       0        0     0.0       0       22
 51          RN     SCP

 52          KK      U1
 53          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 54          KM   L=2.37     Lca=1.03      S=326.50      Kn=0.050      LAG=33.0
 55          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 56          KO       0        0     0.0       1       22
 57          BA  1.3705
 58          LG    0.35     0.37   5.258   0.233   6.449
             * U1
 59          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
 60          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
 61          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
 62          UI    26.8     0.0

 63          KK     UCP    CNAME       U
 64          KO       0        0     0.0       0       22
 65          RN     UCP

 66          KK      T1
 67          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 68          KM   L=4.34     Lca=1.58      S=274.89      Kn=0.050      LAG=51.0
 69          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 70          KO       0        0     0.0       1       22
 71          BA  3.0415
 72          LG    0.35     0.35   4.644   0.299  11.497
             * T1
 73          UI     0.0    200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
 74          UI  1728.6 1335.29 1184.68 1081.59  976.95  886.26  793.63  697.43  590.13  511.99
 75          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 76          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 77          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

 78          KK     TCP    CNAME       T
 79          KO       0        0     0.0       0       22
 80          RN     TCP
 81          ZZ
```

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	S1	621.	4.33	77.	19.	6.	1.41		
+	ROUTED TO	SCP	621.	4.33	77.	19.	6.	1.41		
+	HYDROGRAPH AT	U1	638.	4.42	87.	22.	7.	1.37		
+	ROUTED TO	UCP	638.	4.42	87.	22.	7.	1.37		
+	HYDROGRAPH AT	T1	812.	4.67	172.	44.	15.	3.04		
+	ROUTED TO	TCP	812.	4.67	172.	44.	15.	3.04		

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

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*          MAY  1991                *
*        VERSION 4.0.1E             *
*                                   *
*  RUN DATE          TIME           *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*         (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.
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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

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 6-hour
  4           ID   Existing Conditions
  5           ID   FRS #3 (Sub-basins V-Y)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    2.07    0.01
              * 6-hour distribution, pattern 1.0
 16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 18           PC   0.962   0.972   0.983   0.991     1.0
 19           IN      15 01JAN94       0
 20           JD   2.058     0.5
              * 6-hour distribution, pattern 1.0
 21           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 22           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 23           PC   0.962   0.972   0.983   0.991     1.0
 24           IN      15 01JAN94       0
 25           JD   2.043     1.0
              * 6-hour distribution, pattern 1.4
 26           PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
 27           PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
 28           PC  0.9572  0.9684  0.9798  0.9898     1.0
 29           IN      15 01JAN94       0
 30           JD   1.987     5.0
              * 6-hour distribution, pattern 2.3
 31           PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
 32           PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
 33           PC  0.9487   0.962  0.9743  0.9877     1.0
 34           IN      15 01JAN94       0
 35           JD   1.946    10.0
              * 6-hour distribution, pattern 2.7
 36           PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
 37           PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
 38           PC  0.9471  0.9608  0.9735  0.9873     1.0

 39           KK      V1
 40           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 41           KM   L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
 42           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 43           KO       0       0     0.0       1      22
 44           BA  0.6646
 45           LG    0.35    0.35   3.972   0.405  13.864
              * V1
 46           UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  576.99  373.13
 47           UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
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HEC-1 INPUT PAGE 2

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

 48           UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
 49           UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
 50           UI     0.0

 51           KK     VCP   CNAME       V
 52           KO       0       0     0.0       0      22
 53           RN     VCP

 54           KK      W1
 55           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 56           KM   L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
 57           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 58           KO       0       0     0.0       1      22
 59           BA   3.894
 60           LG    0.35    0.35   3.976    0.41  15.199
              * W1
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 61          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 62          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
 63          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
 64          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 65          UI   57.11     0.0

 66          KK   W1-W2   CNAME     W2R
 67          KO       0       0     0.0       0      22
 68          RS       7    FLOW     0.0     0.0
 69          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
             * W1-W2
 70          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 71          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 72          KK      W2
 73          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 74          KM   L=3.25      Lca=1.19      S=178.54      Kn=0.050      LAG=44.0
 75          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 76          KO       0       0     0.0       1      22
 77          BA  2.8478
 78          LG    0.35    0.35   4.081   0.402   3.547
             * W2
 79          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 80          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 81          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
 82          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 83          UI   41.77     0.0

 84          KK       W   CNAME     WCP
 85          KO       0       0     0.0       0      22
 86          HC       2     0.0

 87          KK     WCP   CNAME       W
 88          KO       0       0     0.0       0      22
 89          RN     WCP
```



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

 90          KK      X1
 91          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 92          KM   L=2.60      Lca=1.44      S=288.89      Kn=0.050      LAG=40.0
 93          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 94          KO       0       0     0.0       1      22
 95          BA  0.7867
 96          LG    0.35    0.35   3.955   0.417  12.555
             * X1
 97          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
 98          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
 99          UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
100          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

101          KK     XCP   CNAME       X
102          KO       0       0     0.0       0      22
103          RN     XCP

104          KK      Y1
105          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
106          KM   L=1.37      Lca=0.53      S=771.84      Kn=0.050      LAG=17.0
107          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
108          KO       0       0     0.0       1      22
109          BA  0.5808
110          LG    0.35    0.35   4.044   0.415  10.947
             * Y1
111          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
112          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

113          KK     YCP   CNAME       Y
114          KO       0       0     0.0       0      22
115          RN     YCP
116          ZZ
```

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	V1	311.	4.50	53.	13.	4.	0.66		
+	ROUTED TO	VCP	311.	4.50	53.	13.	4.	0.66		
+	HYDROGRAPH AT	W1	933.	4.58	200.	51.	17.	3.89		
+	ROUTED TO	W1-W2	789.	5.08	199.	51.	17.	3.89		
+	HYDROGRAPH AT	W2	596.	4.58	100.	25.	8.	2.85		
+	2 COMBINED AT	W	818.	5.08	237.	61.	20.	6.74		
+	ROUTED TO	WCP	818.	5.08	237.	61.	20.	6.74		
+	HYDROGRAPH AT	X1	358.	4.50	57.	14.	5.	0.79		
+	ROUTED TO	XCP	358.	4.50	57.	14.	5.	0.79		
+	HYDROGRAPH AT	Y1	513.	4.17	45.	11.	4.	0.58		
	ROUTED TO									

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+                        YCP      513.    4.17         45.        11.         4.      0.58

*** NORMAL END OF HEC-1 ***
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E.6.1.bHEC-1 Output File for 10-year 6-hour Storm (Future Conditions)

```
1*************************************                    *************************************
*                                   *                    *                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *   U.S. ARMY CORPS OF ENGINEERS    *
*            MAY  1991              *                    *   HYDROLOGIC ENGINEERING CENTER   *
*          VERSION 4.0.1E           *                    *        609 SECOND STREET          *
*                                   *                    *      DAVIS, CALIFORNIA 95616      *
* RUN DATE          TIME            *                    *        (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

                                        HEC-1 INPUT                                        PAGE  1

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

   1          ID   Buckeye/Sun Valley ADMS - 23 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID   10-year 6-hour
   4          ID   Future Conditions
   5          ID   FRS #1 (Sub-basins E-K)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - Town of Buckeye LU District (2003)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       0
  14          IN      15 01JAN94       0
  15          JD    2.08     0.01
              * 6-hour distribution, pattern 1.0
  16          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  17          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  18          PC   0.962   0.972   0.983   0.991     1.0
  19          IN      15 01JAN94       0
  20          JD   2.068     0.5
              * 6-hour distribution, pattern 1.0
  21          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  22          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  23          PC   0.962   0.972   0.983   0.991     1.0
  24          IN      15 01JAN94       0
  25          JD   2.053     1.0
              * 6-hour distribution, pattern 1.4
  26          PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
  27          PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
  28          PC  0.9572  0.9684  0.9798  0.9898     1.0
  29          IN      15 01JAN94       0
  30          JD   1.997     5.0
              * 6-hour distribution, pattern 2.3
  31          PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
  32          PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
  33          PC  0.9487   0.962  0.9743  0.9877     1.0
  34          IN      15 01JAN94       0
  35          JD   1.955    10.0
              * 6-hour distribution, pattern 2.7
  36          PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
  37          PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
  38          PC  0.9471  0.9608  0.9735  0.9873     1.0
  39          IN      15 01JAN94       0
  40          JD   1.893    20.0
              * 6-hour distribution, pattern 3.1
  41          PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
  42          PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
  43          PC  0.9434   0.958  0.9718  0.9863     1.0
  44          IN      15 01JAN94       0
  45          JD   1.851    30.0
              * 6-hour distribution, pattern 3.4
  46          PC     0.0  0.0172  0.0256  0.0378  0.0565  0.0719  0.0868   0.103  0.1191  0.1342
  47          PC  0.1513  0.1702  0.1961  0.2439  0.3263  0.4824  0.6655  0.7875   0.858  0.9031

                                        HEC-1 INPUT                                        PAGE  2

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

  48          PC   0.939  0.9544  0.9697  0.9851     1.0
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 49          IN      15 01JAN94       0
 50          JD    1.81    40.0
             * 6-hour distribution, pattern 3.5
 51          PC     0.0  0.0182  0.0281  0.0413  0.0604  0.0759  0.0916  0.1088  0.1254   0.141
 52          PC  0.1586  0.1783  0.2056  0.2537  0.3362   0.487  0.6636  0.7836  0.8535  0.8991
 53          PC  0.9358  0.9519  0.9682  0.9843     1.0
 54          IN      15 01JAN94       0
 55          JD   1.664   100.0
             * 6-hour distribution, pattern 4.1
 56          PC     0.0  0.0212  0.0355  0.0515  0.0715  0.0877   0.106  0.1261  0.1443  0.1618
 57          PC  0.1812  0.2036  0.2347  0.2837   0.367   0.501  0.6559  0.7704  0.8392  0.8864
 58          PC  0.9256   0.944  0.9633  0.9817     1.0

 59          KK      G1
 60          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 61          KM         L=2.38      Lca=1.08     S=33.76      Kn=0.045      LAG=47.0
 62          KM         S-GRAPH TYPE=DESERT RANGELAND
 63          KO       0       0     0.0       1      22
 64          BA  1.1192
 65          LG   0.297   0.297   4.688   0.326  15.814
             * G1
 66          UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 67          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 68          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 69          UI   19.51   19.51   19.51   19.51   19.51     0.0

 70          KK   G1-Do
 71          KO       0       0     0.0       0      22
 72          DT    G1-D    47.0     0.0
             * Curve 1
 73          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 74          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 75          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 76          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 77          KK     GCP    CNAME       G
 78          KO       0       0     0.0       0      22
 79          RN     GCP

 80          KK      J1
 81          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 82          KM         L=4.09      Lca=1.78     S=70.82      Kn=0.055      LAG=75.0
 83          KM         S-GRAPH TYPE=DESERT RANGELAND
 84          KO       0       0     0.0       1      22
 85          BA  1.7341
 86          LG    0.25    0.27    3.25   0.657    30.0
             * J1
 87          UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
 88          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
 89          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
 90          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
 91          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
 92          UI   18.95   18.95   18.95   18.95   18.95   18.95
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 93          KK   J1-Do
 94          KO       0       0     0.0       0      22
 95          DT    J1-D   102.0     0.0
             * Curve 1
 96          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 97          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 98          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 99          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

100          KK   J1-J2    CNAME     J2R
101          KO       0       0     0.0       0      22
102          RS       1    FLOW     0.0     0.0
103          RC   0.055    0.04   0.055 24090.0  0.0086     0.0
             * J1-J2
104          RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
105          RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

106          KK      J2
107          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
108          KM         L=5.18      Lca=2.51     S=45.01      Kn=0.050      LAG=93.0
109          KM         S-GRAPH TYPE=DESERT RANGELAND
110          KO       0       0     0.0       1      22
111          BA  3.6379
112          LG    0.25    0.26   3.623   0.499    30.0
             * J2
113          UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
114          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
115          UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
116          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
117          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
118          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
119          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

120          KK   J2-Do
121          KO       0       0     0.0       0      22
122          DT    J2-D   224.0     0.0
             * Curve 1
123          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
124          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
125          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
126          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

127          KK    K3RB    CNAME   J2-K3
128          KO       0       0     0.0       0      22
129          HC       2     0.0

130          KK   J2-K3    CNAME    K3RB
131          KO       0       0     0.0       0      22
132          RS       1    FLOW     0.0     0.0
133          RC    0.05   0.048    0.05  4072.0  0.0059     0.0
             * J2-K3
134          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
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                                        HEC-1 INPUT                                                          PAGE  4

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

 135          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

 136          KK      K1
 137          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 138          KM         L=3.23     Lca=1.84     S=681.00     Kn=0.050     LAG=40.0
 139          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 140          KO       0       0     0.0       1      22
 141          BA   1.543
 142          LG   0.112   0.255   4.382   0.365   21.06
              * K1
 143          UI     0.0  129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
 144          UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
 145          UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
 146          UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0

 147          KK   K1-K2   CNAME     K2R
 148          KO       0       0     0.0       0      22
 149          RS      23    FLOW     0.0     0.0
 150          RC   0.048    0.05   0.048 30021.0   0.015     0.0
              * K1-K2
 151          RX     0.0    20.0    55.0    85.0   235.0   259.0   289.0   309.0
 152          RY    22.0    21.0    20.0    10.0    10.0    20.0    21.0    22.0

 153          KK      K2
 154          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 155          KM         L=7.3      Lca=4.04     S=108.84     Kn=0.055     LAG=139.0
 156          KM         S-GRAPH TYPE=DESERT RANGELAND
 157          KO       0       0     0.0       1      22
 158          BA   2.365
 159          LG   0.272   0.277   4.471   0.382   21.86
              * K2
 160          UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
 161          UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
 162          UI  641.26  641.26  641.26  641.26  620.87  603.29  597.45  565.84  516.46  476.06
 163          UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
 164          UI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
 165          UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
 166          UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
 167          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
 168          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

 169          KK   K2-Do
 170          KO       0       0     0.0       0      22
 171          DT    K2-D   128.0     0.0
              * Curve 1
 172          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 173          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 174          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 175          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
                                        HEC-1 INPUT                                                          PAGE  5

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

 176          KK    K3RA   CNAME   K2-K3
 177          KO       0       0     0.0       0      22
 178          HC       2   1.543

 179          KK   K2-K3   CNAME    K3RA
 180          KO       0       0     0.0       0      22
 181          RS      25    FLOW     0.0     0.0
 182          RC    0.05   0.048    0.05 25950.0  0.0084     0.0
              * K2-K3
 183          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
 184          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

 185          KK      F1
 186          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 187          KM         L=4.07     Lca=1.63     S=441.98     Kn=0.050     LAG=46.0
 188          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 189          KO       0       0     0.0       1      22
 190          BA  2.7854
 191          LG    0.24    0.27   4.322   0.384  32.052
              * F1
 192          UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
 193          UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
 194          UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
 195          UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
 196          UI   39.08   39.08   39.08     0.0

 197          KK   F1-Do
 198          KO       0       0     0.0       0      22
 199          DT    F1-D   133.0     0.0
              * Curve 1
 200          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 201          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 202          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 203          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 204          KK   F1-F2   CNAME     F2R
 205          KO       0       0     0.0       0      22
 206          RS      22    FLOW     0.0     0.0
 207          RC   0.053   0.045   0.055  8635.0   0.012     0.0
              * F1-F2
 208          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
 209          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

 210          KK      F2
 211          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 212          KM         L=3.88     Lca=1.76     S=161.6     Kn=0.050     LAG=57.0
 213          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 214          KO       0       0     0.0       1      22
 215          BA  2.5261
 216          LG    0.25    0.25   4.311   0.436  33.026
              * F2
 217          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
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218        UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95

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

219        UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
220        UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
221        UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
222        UI    28.6    28.6    28.6     0.0

223        KK    F2-D
224        KO       0       0     0.0       0      22
225        DT    F2-D   130.0     0.0
           * Curve 1
226        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
227        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
228        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
229        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

230        KK     F3R   CNAME   F2-F3
231        KO       0       0     0.0       0      22
232        HC       2     0.0

233        KK   F2-F3   CNAME     F3R
234        KO       0       0     0.0       0      22
235        RS       1    FLOW     0.0     0.0
236        RC    0.05   0.047   0.048  7059.0    0.01     0.0
           * F2-F3
237        RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
238        RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

239        KK      F3
240        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
241        KM         L=2.71     Lca=1.26     S=81.34     Kn=0.055     LAG=54.0
242        KM         S-GRAPH TYPE=DESERT RANGELAND
243        KO       0       0     0.0       1      22
244        BA  0.7363
245        LG    0.25    0.27   3.266   0.656    30.0
           * F3
246        UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
247        UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
248        UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
249        UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
250        UI     0.0

251        KK   F3-Do
252        KO       0       0     0.0       0      22
253        DT    F3-D    45.0     0.0
           * Curve 1
254        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
255        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
256        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
257        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

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

258        KK    E4RB   CNAME   F3-E4
259        KO       0       0     0.0       0      22
260        HC       2     0.0

261        KK   F3-E4   CNAME    E4RB
262        KO       0       0     0.0       0      22
263        RS       1    FLOW     0.0     0.0
264        RC    0.05   0.044    0.05 27656.0  0.0072     0.0
           * F3-E4
265        RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
266        RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

267        KK      H1
268        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
269        KM         L=2.41     Lca=1.09     S=64.59     Kn=0.055     LAG=51.0
270        KM         S-GRAPH TYPE=DESERT RANGELAND
271        KO       0       0     0.0       1      22
272        BA  1.0659
273        LG    0.25    0.29   2.733   0.945    30.0
           * H1
274        UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
275        UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
276        UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
277        UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

278        KK   H1-Do
279        KO       0       0     0.0       0      22
280        DT    H1-D    60.0     0.0
           * Curve 1
281        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
282        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
283        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
284        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

285        KK   H1-H2   CNAME     H2R
286        KO       0       0     0.0       0      22
287        RS     -55    FLOW     0.0     0.0
288        RC   0.053    0.05   0.053 21738.0  0.0082     0.0
           * H1-H2
289        RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
290        RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

291        KK      E1
292        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
293        KM         L=2.51     Lca=1.13     S=178.34     Kn=0.055     LAG=43.0
294        KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
295        KO       0       0     0.0       1      22
296        BA  0.9558
297        LG    0.25    0.25   5.377   0.273    30.69
           * E1
298        UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
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 299          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
 300          UI  107.54   95.41   81.97   76.8   57.38   57.38   44.3   36.62   36.62   36.62

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

 301          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
 302          UI     0.0

 303          KK   E1-Do
 304          KO      0       0     0.0       0      22
 305          DT    E1-D    53.0     0.0
              * Curve 1
 306          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 307          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 308          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 309          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 310          KK   E1-E2   CNAME     E2R
 311          KO      0       0     0.0       0      22
 312          RS     40    FLOW     0.0     0.0
 313          RC   0.05   0.047   0.046 11365.0   0.016     0.0
              * E1-E2
 314          RX    0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
 315          RY   24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

 316          KK      E2
 317          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 318          KM          L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
 319          KM          S-GRAPH TYPE=DESERT RANGELAND
 320          KO       0       0     0.0       1      22
 321          BA  1.9794
 322          LG    0.25    0.25   5.043   0.306    30.0
              * E2
 323          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
 324          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
 325          UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
 326          UI   36.05   36.05   36.05   36.05

 327          KK   E2-Do
 328          KO      0       0     0.0       0      22
 329          DT    E2-D   118.0     0.0
              * Curve 1
 330          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 331          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 332          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 333          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 334          KK     E3R   CNAME   E2-E3
 335          KO      0       0     0.0       0      22
 336          RC      2     0.0

 337          KK   E2-E3   CNAME     E3R
 338          KO      0       0     0.0       0      22
 339          RS     38    FLOW     0.0     0.0
 340          RC  0.052   0.046   0.052 19626.0  0.0088     0.0
              * E2-E3
 341          RX    0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
 342          RY   22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

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

 343          KK      E3
 344          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 345          KM          L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
 346          KM          S-GRAPH TYPE=DESERT RANGELAND
 347          KO       0       0     0.0       1      22
 348          BA  2.4882
 349          LG    0.25    0.25   4.358   0.377    30.0
              * E3
 350          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
 351          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
 352          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
 353          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
 354          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
 355          UI   27.19   27.19   27.19   27.19   27.19   27.19

 356          KK   E3-Do
 357          KO      0       0     0.0       0      22
 358          DT    E3-D   152.0     0.0
              * Curve 1
 359          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 360          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 361          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 362          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 363          KK    E4RA   CNAME   E3-E4
 364          KO      0       0     0.0       0      22
 365          RC      2     0.0

 366          KK   E3-E4   CNAME    E4RA
 367          KO      0       0     0.0       0      22
 368          RS      1    FLOW     0.0     0.0
 369          RC  0.056   0.049   0.056 13855.0  0.0048     0.0
              * E3-E4
 370          RX    0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
 371          RY   21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

 372          KK      H2
 373          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 374          KM          L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
 375          KM          S-GRAPH TYPE=DESERT RANGELAND
 376          KO       0       0     0.0       1      22
 377          BA  1.4003
 378          LG    0.25    0.27   3.222   0.664    30.0
              * H2
 379          UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
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380        UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
381        UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
382        UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
383        UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
384        UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
385        UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

386        KK   N2-Do
387        KO       0       0     0.0       0      22
388        DT    N2-D    88.0     0.0
           * Curve 1
389        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
390        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
391        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
392        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

393        KK      E4
394        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
395        KM          L=5.36     Lca=2.81     S=38.26     Kn=0.050     LAG=102.0
396        KM          S-GRAPH TYPE=DESERT RANGELAND
397        KO       0       0     0.0       1      22
398        BA  3.0419
399        LG    0.25    0.25   3.816   0.441    30.0
           * E4
400        UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
401        UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
402        UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
403        UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
404        UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
405        UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
406        UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
407        UI   24.44   24.44   24.44   24.44   24.44   24.44

408        KK   E4-Do
409        KO       0       0     0.0       0      22
410        DT    E4-D   190.0     0.0
           * Curve 1
411        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
412        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
413        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
414        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

415        KK     E5R   CNAME  E4H2E5
416        KO       0       0     0.0       0      22
417        HC       5     0.0

418        KK  E4H2E5   CNAME     E5R
419        KO       0       0     0.0       0      22
420        RS       1    FLOW     0.0     0.0
421        RC    0.06    0.05    0.06 15206.0  0.0051     0.0
           * E4H2-E5
422        RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
423        RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0
                                          HEC-1 INPUT                                          PAGE 11

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

424        KK      K3
425        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
426        KM          L=4.92     Lca=2.65     S=44.16     Kn=0.050     LAG=94.0
427        KM          S-GRAPH TYPE=DESERT RANGELAND
428        KO       0       0     0.0       1      22
429        BA  1.6364
430        LG    0.25    0.27   3.421     0.6    30.0
           * K3
431        UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
432        UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
433        UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
434        UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
435        UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
436        UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
437        UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

438        KK   K3-Do
439        KO       0       0     0.0       0      22
440        DT    K3-D   101.0     0.0
           * Curve 1
441        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
442        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
443        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
444        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

445        KK      E5
446        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
447        KM          L=3.01     Lca=1.41     S=28.56     Kn=0.050     LAG=66.0
448        KM          S-GRAPH TYPE=DESERT RANGELAND
449        KO       0       0     0.0       1      22
450        BA  1.3075
451        LG    0.25    0.25   3.94   0.473    30.0
           * E5
452        UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
453        UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
454        UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
455        UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
456        UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

457        KK   E5-Do
458        KO       0       0     0.0       0      22
459        DT    E5-D    79.0     0.0
           * Curve 1
460        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
461        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
462        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
```

```
 463          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

                                          HEC-1 INPUT                                          PAGE 12

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


 464          KK     E6R   CNAME  E5K2E6
 465          KO       0       0     0.0       0      22
 466          RC       5   1.543

 467          KK  E5K2E6   CNAME     E6R
 468          KO       0       0     0.0       0      22
 469          RS      11    FLOW     0.0     0.0
 470          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
              * E5K3-E6
 471          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
 472          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

 473          KK      E6
 474          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 475          KM          L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
 476          KM          S-GRAPH TYPE=DESERT RANGELAND
 477          KO       0       0     0.0       1      22
 478          BA  2.0375
 479          LG   0.289   0.269   4.356   0.392  18.293
              * E6
 480          UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
 481          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
 482          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
 483          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
 484          UI   29.29   29.29     0.0

 485          KK   E6-Do
 486          KO       0       0     0.0       0      22
 487          DT    E6-D   100.0     0.0
              * Curve 1
 488          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 489          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 490          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 491          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 492          KK       E   CNAME     ECP
 493          KO       0       0     0.0       0      22
 494          RC       2   1.543

 495          KK     ECP   CNAME       E
 496          KO       0       0     0.0       0      22
 497          RN     ECP
 498          ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	G1	475.	4.67	90.	23.	8.	1.12		
+	DIVERSION TO	G1-D	475.	4.67	90.	23.	8.	1.12		
+	HYDROGRAPH AT	G1-Do	0.	0.08	0.	0.	0.	1.12		
+	ROUTED TO	GCP	0.	0.08	0.	0.	0.	1.12		
+	HYDROGRAPH AT	J1	483.	5.08	150.	38.	13.	1.73		
+	DIVERSION TO	J1-D	483.	5.08	150.	38.	13.	1.73		
+	HYDROGRAPH AT	J1-Do	0.	0.08	0.	0.	0.	1.73		
+	ROUTED TO	J1-J2	0.	0.08	0.	0.	0.	1.73		
+	HYDROGRAPH AT	J2	804.	5.33	300.	78.	26.	3.64		
+	DIVERSION TO	J2-D	804.	5.33	300.	78.	26.	3.64		
+	HYDROGRAPH AT	J2-Do	0.	0.08	0.	0.	0.	3.64		
+	2 COMBINED AT	K3RB	0.	0.08	0.	0.	0.	5.37		
+	ROUTED TO	J2-K3	0.	0.08	0.	0.	0.	5.37		
+	HYDROGRAPH AT	K1	789.	4.50	144.	36.	12.	1.54		
+	ROUTED TO	K1-K2	392.	6.33	143.	36.	12.	1.54		
+	HYDROGRAPH AT	K2	419.	5.67	180.	47.	16.	2.37		
+	DIVERSION TO	K2-D	419.	5.67	180.	47.	16.	2.37		
+	HYDROGRAPH AT	K2-Do	0.	0.08	0.	0.	0.	2.37		

+	2 COMBINED AT	K3RA	392.	6.33	143.	36.	12.	1.54
+	ROUTED TO	K2-K3	303.	8.33	139.	36.	12.	1.54
+	HYDROGRAPH AT	F1	1167.	4.58	269.	68.	23.	2.79
+	DIVERSION TO	F1-D	1167.	4.58	257.	65.	22.	2.79
+	HYDROGRAPH AT	F1-Do	97.	5.75	13.	3.	1.	2.79
+	ROUTED TO	F1-F2	98.	6.33	13.	3.	1.	2.79
+	HYDROGRAPH AT	F2	923.	4.75	241.	62.	21.	2.53
+	DIVERSION TO	F2-D	923.	4.75	237.	61.	20.	2.53
+	HYDROGRAPH AT	F2-D	38.	6.92	5.	1.	0.	2.53
+	2 COMBINED AT	F3R	0.	0.08	0.	0.	0.	5.31
+	ROUTED TO	F2-F3	0.	0.08	0.	0.	0.	5.31
+	HYDROGRAPH AT	F3	331.	4.75	75.	19.	6.	0.74
+	DIVERSION TO	F3-D	331.	4.75	75.	19.	6.	0.74
+	HYDROGRAPH AT	F3-Do	0.	0.08	0.	0.	0.	0.74
+	2 COMBINED AT	E4RB	0.	0.08	0.	0.	0.	6.05
+	ROUTED TO	F3-E4	0.	0.08	0.	0.	0.	6.05
+	HYDROGRAPH AT	H1	399.	4.67	92.	23.	8.	1.07
+	DIVERSION TO	H1-D	399.	4.67	92.	23.	8.	1.07
+	HYDROGRAPH AT	H1-Do	0.	0.08	0.	0.	0.	1.07
+	ROUTED TO	H1-H2	0.	0.08	0.	0.	0.	1.07
+	HYDROGRAPH AT	E1	566.	4.50	109.	28.	9.	0.96
+	DIVERSION TO	E1-D	566.	4.50	107.	27.	9.	0.96
+	HYDROGRAPH AT	E1-Do	32.	6.50	4.	1.	0.	0.96
+	ROUTED TO	E1-E2	23.	7.75	4.	1.	0.	0.96
+	HYDROGRAPH AT	E2	984.	4.58	205.	52.	17.	1.98
+	DIVERSION TO	E2-D	984.	4.58	205.	52.	17.	1.98
+	HYDROGRAPH AT	E2-Do	0.	0.08	0.	0.	0.	1.98
+	2 COMBINED AT	E3R	27.	7.75	4.	1.	0.	2.94
+	ROUTED TO	E2-E3	4.	10.83	1.	0.	0.	2.94
+	HYDROGRAPH AT	E3	770.	5.08	237.	61.	20.	2.49
+	DIVERSION TO	E3-D	770.	5.08	237.	61.	20.	2.49
+	HYDROGRAPH AT	E3-Do	0.	0.08	0.	0.	0.	2.49
+	2 COMBINED AT	E4RA	0.	0.08	0.	0.	0.	5.42
+	ROUTED TO	E3-E4	0.	0.08	0.	0.	0.	5.42
+	HYDROGRAPH AT	H2	358.	5.25	124.	32.	11.	1.40
+	DIVERSION TO	H2-D	358.	5.25	124.	32.	11.	1.40
+	HYDROGRAPH AT	H2-Do	0.	0.08	0.	0.	0.	1.40
+	HYDROGRAPH AT	E4	687.	5.42	269.	71.	24.	3.04

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          DIVERSION TO
+                    E4-D     687.   5.42      269.      71.      24.     3.04
          HYDROGRAPH AT
+                   E4-Do       0.   0.08        0.       0.       0.     3.04
          5 COMBINED AT
+                     E5R       0.   0.08        0.       0.       0.    16.98
          ROUTED TO
+                  E4H2E5       0.   0.08        0.       0.       0.    16.98
          HYDROGRAPH AT
+                      K3     394.   5.33      143.      37.      12.     1.64
          DIVERSION TO
+                    K3-D     394.   5.33      143.      37.      12.     1.64
          HYDROGRAPH AT
+                   K3-Do       0.   0.08        0.       0.       0.     1.64
          HYDROGRAPH AT
+                      E5     470.   4.92      128.      33.      11.     1.31
          DIVERSION TO
+                    E5-D     470.   4.92      128.      33.      11.     1.31
          HYDROGRAPH AT
+                   E5-Do       0.   0.08        0.       0.       0.     1.31
          5 COMBINED AT
+                     E6R     315.   8.33      159.      46.      15.     1.54
          ROUTED TO
+                  E5K2E6     302.   9.17      157.      46.      15.     1.54
          HYDROGRAPH AT
+                      E6     627.   4.83      148.      38.      13.     2.04
          DIVERSION TO
+                    E6-D     627.   4.83      148.      38.      13.     2.04
          HYDROGRAPH AT
+                   E6-Do       0.   0.08        0.       0.       0.     2.04
          2 COMBINED AT
+                       E     302.   9.17      157.      46.      15.     1.54
          ROUTED TO
+                     ECP     302.   9.17      157.      46.      15.     1.54

 *** NORMAL END OF HEC-1 ***
1*************************************                    *************************************
 *                                   *                    *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *   U.S. ARMY CORPS OF ENGINEERS    *
 *             MAY  1991             *                    *  HYDROLOGIC ENGINEERING CENTER    *
 *           VERSION 4.0.1E          *                    *        609 SECOND STREET          *
 *                                   *                    *      DAVIS, CALIFORNIA 95616      *
 *  RUN DATE            TIME         *                    *        (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

                                        HEC-1 INPUT                                        PAGE  1

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

   1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
   2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3           ID   10-year 6-hour
   4           ID   Future Conditions
   5           ID   FRS #1 (Sub-basins L-R)
   6           ID   Rainfall Loss Method - Green & Ampt
   7           ID   Unit Hydrograph Method - FCDMC S-Graph
   8           ID   Channel Routing Method - Normal Depth
   9           ID   Land Use - Town of Buckeye LU Districts (2003)
  10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
               *DIAGRAM
  12           IT       5  1JAN94       0    2000
  13           IO       0
  14           IN      15 01JAN94       0
  15           JD    2.08    0.01
               * 6-hour distribution, pattern 1.0
  16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  18           PC   0.962   0.972   0.983   0.991     1.0
  19           IN      15 01JAN94       0
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 20        JD   2.068     0.5
           * 6-hour distribution, pattern 1.0
 21        PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 22        PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 23        PC   0.962   0.972   0.983   0.991     1.0
 24        IN      15 01JAN94       0
 25        JD   2.053     1.0
           * 6-hour distribution, pattern 1.4
 26        PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
 27        PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
 28        PC  0.9572  0.9684  0.9798  0.9898     1.0
 29        IN      15 01JAN94       0
 30        JD   1.997     5.0
           * 6-hour distribution, pattern 2.3
 31        PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
 32        PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
 33        PC  0.9487   0.962  0.9743  0.9877     1.0
 34        IN      15 01JAN94       0
 35        JD   1.955    10.0
           * 6-hour distribution, pattern 2.7
 36        PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
 37        PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
 38        PC  0.9471  0.9608  0.9735  0.9873     1.0
 39        IN      15 01JAN94       0
 40        JD   1.893    20.0
           * 6-hour distribution, pattern 3.1
 41        PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
 42        PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
 43        PC  0.9434   0.958  0.9718  0.9863     1.0
 44        IN      15 01JAN94       0
 45        JD   1.851    30.0
           * 6-hour distribution, pattern 3.4
 46        PC     0.0  0.0172  0.0256  0.0378  0.0565  0.0719  0.0868   0.103  0.1191  0.1342
 47        PC  0.1513  0.1702  0.1961  0.2439  0.3263  0.4824  0.6655  0.7875   0.858  0.9031
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 48        PC   0.939  0.9544  0.9697  0.9851     1.0
 49        IN      15 01JAN94       0
 50        JD    1.81    40.0
           * 6-hour distribution, pattern 3.5
 51        PC     0.0  0.0182  0.0281  0.0413  0.0604  0.0759  0.0916  0.1088  0.1254   0.141
 52        PC  0.1586  0.1783  0.2056  0.2537  0.3362   0.487  0.6636  0.7836  0.8535  0.8991
 53        PC  0.9358  0.9519  0.9682  0.9843     1.0
 54        IN      15 01JAN94       0
 55        JD   1.664   100.0
           * 6-hour distribution, pattern 4.1
 56        PC     0.0  0.0212  0.0355  0.0515  0.0715  0.0877   0.106  0.1261  0.1443  0.1618
 57        PC  0.1812  0.2036  0.2347  0.2837   0.367   0.501  0.6559  0.7704  0.8392  0.8864
 58        PC  0.9256   0.944  0.9633  0.9817     1.0

 59        KK      R1
 60        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 61        KM         L=1.01     Lca=0.46     S=213.31     Kn=0.050     LAG=19.0
 62        KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 63        KO       0       0     0.0       1      22
 64        BA  0.2836
 65        LG   0.181   0.282   4.358   0.474  62.581
           * R1
 66        UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
 67        UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

 68        KK   R1-Do
 69        KO       0       0     0.0       0      22
 70        DT    R1-D    24.0     0.0
           * Curve 1
 71        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 72        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
 73        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 74        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 75        KK     RCP    CNAME       R
 76        KO       0       0     0.0       0      22
 77        RN     RCP

 78        KK      L1
 79        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 80        KM         L=4.93     Lca=2.29     S=308.27     Kn=0.050     LAG=61.0
 81        KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 82        KO       0       0     0.0       1      22
 83        BA  3.5462
 84        LG   0.271   0.318   4.357   0.352  16.317
           * L1
 85        UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1267.07 1452.32 1611.06
 86        UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
 87        UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
 88        UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
 89        UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
 90        UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 91        KK   L1-L2    CNAME     L2R
 92        KO       0       0     0.0       0      22
 93        RS      14    FLOW     0.0     0.0
 94        RC   0.046   0.045   0.046 28949.0  0.0147     0.0
           * L1-L2
 95        RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
 96        RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

 97        KK      L2
 98        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 99        KM         L=5.21     Lca=2.40     S=82.13     Kn=0.055     LAG=90.0
100        KM         S-GRAPH TYPE=DESERT RANGELAND
101        KO       0       0     0.0       1      22
102        BA  7.3294
103        LG    0.24   0.257   4.202   0.462  33.542
           * L2
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104          UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
105          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
106          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
107          UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
108          UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
109          UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
110          UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

111          KK   L2-Do
112          KO       0       0     0.0       0      22
113          DT    L2-D   475.0     0.0
             * Curve 1
114          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
115          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
116          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
117          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

118          KK     L3R   CNAME   L2-L3
119          KO       0       0     0.0       0      22
120          HC       2     0.0

121          KK   L2-L3   CNAME     L3R
122          KO       0       0     0.0       0      22
123          RS      35    FLOW     0.0     0.0
124          RC    0.05   0.045    0.06 20567.0  0.0084     0.0
             * L2-L3
125          RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
126          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

127          KK      L3
128          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
129          KM         L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
130          KM         S-GRAPH TYPE=DESERT RANGELAND
131          KO       0       0     0.0       1      22
132          BA  5.8518
133          LG   0.205   0.257    3.98   0.449  45.272
             * L3
```



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

134          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
135          UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
136          UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
137          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
138          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
139          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
140          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

141          KK   L3-Do
142          KO       0       0     0.0       0      22
143          DT    L3-D   456.9     0.0
             * Curve 2
144          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
145          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
146          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
147          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

148          KK       L   CNAME     LCP
149          KO       0       0     0.0       0      22
150          HC       2     0.0

151          KK     LCP   CNAME       L
152          KO       0       0     0.0       0      22
153          RN     LCP

154          KK      Z1
155          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
156          KM         L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
157          KM         S-GRAPH TYPE=DESERT RANGELAND
158          KO       0       0     0.0       1      22
159          BA  0.6644
160          LG   0.168   0.277   4.004   0.499  58.182
             * Z1
161          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
162          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85   60.8   54.09
163          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

164          KK   Z1-Do
165          KO       0       0     0.0       0      22
166          DT    Z1-D    58.0     0.0
             * Curve 1
167          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
168          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
169          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
170          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

171          KK     ZCP   CNAME       Z
172          KO       0       0     0.0       0      22
173          RN     ZCP
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

174          KK      M1
175          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
176          KM         L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
177          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
178          KO       0       0     0.0       1      22
179          BA  5.5949
180          LG   0.349   0.349   4.306   0.348  17.433
             * M1
181          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
182          UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
183          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
184          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
185          UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
186          UI   64.47   64.47     0.0
```

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187         KK   M1-Do
188         KO       0       0     0.0       0      22
189         DT    M1-D   170.0     0.0
            * Curve 1
190         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
191         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
192         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
193         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

194         KK   M1-M2   CNAME     M2R
195         KO       0       0     0.0       0      22
196         RS     -56    FLOW     0.0     0.0
197         RC    0.04    0.04   0.045 38719.0  0.0133     0.0
            * M1-M2
198         RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
199         RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

200         KK      M2
201         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
202         KM         L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
203         KM         S-GRAPH TYPE=DESERT RANGELAND
204         KO       0       0     0.0       1      22
205         BA  7.5274
206         LG   0.205   0.255   3.952   0.547  45.552
            * M2
207         UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
208         UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
209         UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
210         UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
211         UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
212         UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
213         UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
214         UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0
```



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

215         KK   M2-Do
216         KO       0       0     0.0       0      22
217         DT    M2-D   585.0     0.0
            * Curve 1
218         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
219         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
220         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
221         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

222         KK       M   CNAME     MCP
223         KO       0       0     0.0       0      22
224         NC       2     0.0

225         KK     MCP   CNAME       M
226         KO       0       0     0.0       0      22
227         RN     MCP

228         KK      O1
229         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
230         KM         L=5.26     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
231         KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
232         KO       0       0     0.0       1      22
233         BA  3.0883
234         LG   0.252   0.252   4.189   0.443   31.44
            * O1
235         UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
236         UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
237         UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
238         UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
239         UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
240         UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
241         UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
242         UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
243         UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
244         UI   19.93   19.93   19.93     0.0

245         KK   O1-Do
246         KO       0       0     0.0       0      22
247         DT    O1-D   150.0     0.0
            * Curve 1
248         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
249         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
250         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
251         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

252         KK     OCP   CNAME       O
253         KO       0       0     0.0       0      22
254         RN     OCP
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

255         KK      N1
256         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
257         KM         L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
258         KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
259         KO       0       0     0.0       1      22
260         BA   1.524
261         LG   0.289   0.289   4.075   0.469  26.648
            * N1
262         UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
263         UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
264         UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
265         UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

266         KK   N1-Do
267         KO       0       0     0.0       0      22
268         DT    N1-D    65.0     0.0
            * Curve 1
```

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269          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
270          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
271          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
272          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

273          KK   N1-N2    CNAME     N2R
274          KO       0        0     0.0       0      22
275          RS      48     FLOW     0.0     0.0
276          RC    0.05    0.047    0.05 26511.0  0.0115     0.0
             * N1-N2
277          RX     0.0    280.0    350.0    358.0    367.0    381.0    451.0    730.0
278          RY    17.0     13.0     11.5     10.0     10.0     11.5     13.0     17.0

279          KK      N2
280          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
281          KM          L=5.64      Lca=3.27      S=170.14      Kn=0.055      LAG=91.0
282          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
283          KO       0        0     0.0       1      22
284          BA  3.3254
285          LG   0.268    0.268   4.117   0.446  27.305
             * N2
286          UI     0.0   123.04   123.04   123.04   123.04   310.82   395.95   496.74   616.34   730.85
287          UI   796.44   869.05   928.55   990.24 1125.95 1316.06 1517.94 1186.36   925.57   834.34
288          UI   764.31   726.51   694.11   654.42    619.9   586.86   557.14   517.77   491.74    466.8
289          UI   422.37   387.25    352.0   325.27   302.29   296.75   282.99   272.23   257.26   234.33
290          UI   202.13   202.13   163.14   157.21   157.21   143.92   134.76   134.76   134.76   103.63
291          UI    94.33    94.33    94.33    94.33    83.75    60.21    60.21    60.21    60.21    60.21
292          UI    60.21    60.21    60.21    32.52    23.58    23.58    23.58    23.58    23.58    23.58
293          UI    23.58    23.58    23.58    23.58    23.58    23.58    23.58    23.58    23.58    23.58
294          UI    23.58    23.58    23.58    23.58    23.58
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

295          KK   N2-Do
296          KO       0        0     0.0       0      22
297          DT    N2-D    150.0     0.0
             * Curve 1
298          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
299          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
300          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
301          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

302          KK       N    CNAME     NCP
303          KO       0        0     0.0       0      22
304          HC       2      0.0

305          KK     NCP    CNAME       N
306          KO       0        0     0.0       0      22
307          RM     NCP

308          KK      P1
309          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
310          KM          L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
311          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
312          KO       0        0     0.0       1      22
313          BA  2.4365
314          LG   0.312    0.312   4.193   0.424    18.0
             * P1
315          UI     0.0    96.51    96.51    96.51    112.8   277.47   344.99    422.5   544.66   601.48
316          UI   664.09    718.1   766.78   866.24 1024.06 1185.36   901.23   714.77   637.57   587.86
317          UI   562.05   530.68   496.62   470.96   448.38    414.0   389.12   369.81   331.31    304.2
318          UI   272.76   252.72   236.15   228.64   221.98   205.23    201.8   160.29   158.56   138.12
319          UI   123.32   123.32   114.16    105.7    105.7    105.7    75.58    73.99    73.99    73.99
320          UI    73.99    51.24    47.23    47.23    47.23    47.23    47.23    47.23    47.23    22.52
321          UI     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5
322          UI     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5      0.0

323          KK   P1-Do
324          KO       0        0     0.0       0      22
325          DT    P1-D     85.0     0.0
             * Curve 1
326          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
327          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
328          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
329          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

330          KK     PCP    CNAME       P
331          KO       0        0     0.0       0      22
332          RM     PCP
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

333          KK      Q1
334          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
335          KM          L=5.23      Lca=2.81      S=228.56      Kn=0.055      LAG=78.0
336          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
337          KO       0        0     0.0       1      22
338          BA  2.2336
339          LG   0.338     0.34   4.203   0.396  15.896
             * Q1
340          UI     0.0    96.42    96.42    96.42    170.9   292.35   386.45   493.18   585.93   645.92
341          UI   711.02   763.18   869.42 1043.58 1161.91   814.93   681.34   610.73   571.35   541.64
342          UI   505.03   473.57   449.52   412.98   385.87   360.82   325.28   298.43   254.89   242.17
343          UI   233.02   221.76   208.77    201.6   161.51    158.4   132.21    123.2    123.2   106.72
344          UI    105.6    105.6    84.69    73.92    73.92    73.92    73.92    47.72    47.18    47.18
345          UI    47.18    47.18    47.18    47.18    28.58    18.48    18.48    18.48    18.48    18.48
346          UI    18.48    18.48    18.48    18.48    18.48    18.48    18.48    18.48    18.48    18.48
347          UI    18.48    18.48    18.48

348          KK   Q1-Do
349          KO       0        0     0.0       0      22
350          DT    Q1-D     71.5     0.0
             * Curve 1
351          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
352          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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                 * Curve 1
 353             DQ      0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 354             DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 355             KK     QCP    CNAME       Q
 356             KO       0        0     0.0       0      22
 357             RN     QCP
 358             ZZ
```

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	R1	368.	4.25	46.	12.	4.	0.28		
+	DIVERSION TO	R1-D	368.	4.25	46.	12.	4.	0.28		
+	HYDROGRAPH AT	R1-Do	0.	0.08	0.	0.	0.	0.28		
+	ROUTED TO	RCP	0.	0.08	0.	0.	0.	0.28		
+	HYDROGRAPH AT	L1	888.	4.83	227.	58.	19.	3.55		
+	ROUTED TO	L1-L2	713.	5.83	225.	58.	19.	3.55		
+	HYDROGRAPH AT	L2	1556.	5.25	598.	157.	52.	7.33		
+	DIVERSION TO	L2-D	1556.	5.25	598.	157.	52.	7.33		
+	HYDROGRAPH AT	L2-Do	0.	0.08	0.	0.	0.	7.33		
+	2 COMBINED AT	L3R	719.	5.92	229.	59.	20.	10.88		
+	ROUTED TO	L2-L3	386.	8.75	179.	47.	16.	10.88		
+	HYDROGRAPH AT	L3	1623.	5.25	630.	165.	55.	5.85		
+	DIVERSION TO	L3-D	1623.	5.25	630.	165.	55.	5.85		
+	HYDROGRAPH AT	L3-Do	0.	0.08	0.	0.	0.	5.85		
+	2 COMBINED AT	L	386.	8.75	179.	47.	16.	16.73		
+	ROUTED TO	LCP	317.	9.08	161.	43.	14.	16.73		
+	HYDROGRAPH AT	Z1	535.	4.50	102.	26.	9.	0.66		
+	DIVERSION TO	Z1-D	535.	4.50	102.	26.	9.	0.66		
+	HYDROGRAPH AT	Z1-Do	0.	0.08	0.	0.	0.	0.66		
+	ROUTED TO	ZCP	0.	0.08	0.	0.	0.	0.66		
+	HYDROGRAPH AT	M1	1193.	4.75	312.	80.	27.	5.59		
+	DIVERSION TO	M1-D	1193.	4.75	312.	80.	27.	5.59		
+	HYDROGRAPH AT	M1-Do	0.	0.08	0.	0.	0.	5.59		
+	ROUTED TO	M1-M2	0.	0.08	0.	0.	0.	5.59		
+	HYDROGRAPH AT	M2	1720.	5.50	743.	197.	66.	7.53		
+	DIVERSION TO	M2-D	1720.	5.50	743.	197.	66.	7.53		
+	HYDROGRAPH AT	M2-Do	0.	0.08	0.	0.	0.	7.53		
+	2 COMBINED AT	M	0.	0.08	0.	0.	0.	13.12		
+	ROUTED TO	MCP	0.	0.08	0.	0.	0.	13.12		
+	HYDROGRAPH AT	O1	717.	5.33	267.	72.	24.	3.09		
+	DIVERSION TO	O1-D	717.	5.33	263.	70.	23.	3.09		
+	HYDROGRAPH AT	O1-Do	33.	8.17	7.	2.	1.	3.09		

```
+          ROUTED TO
                          OCP      33.   8.17        7.        2.        1.     3.09
+          HYDROGRAPH AT
                           N1     691.   4.50      133.       34.       11.     1.52
+          DIVERSION TO
                         N1-D     691.   4.50      125.       31.       10.     1.52
+          HYDROGRAPH AT
                        N1-Do      74.   5.75        9.        2.        1.     1.52
+          ROUTED TO
                        N1-N2      35.   8.33        9.        2.        1.     1.52
+          HYDROGRAPH AT
                           N2     736.   5.25      259.       69.       23.     3.33
+          DIVERSION TO
                         N2-D     736.   5.25      255.       67.       22.     3.33
+          HYDROGRAPH AT
                        N2-Do      29.   7.92        6.        1.        0.     3.33
+          2 COMBINED AT
                            N      35.   8.25        9.        2.        1.     4.85
+          ROUTED TO
                          NCP       3.   8.25        1.        0.        0.     4.85
+          HYDROGRAPH AT
                           P1     496.   5.17      154.       41.       14.     2.44
+          DIVERSION TO
                         P1-D     496.   5.17      147.       38.       13.     2.44
+          HYDROGRAPH AT
                        P1-Do      49.   7.17       10.        2.        1.     2.44
+          ROUTED TO
                          PCP      49.   7.17       10.        2.        1.     2.44
+          HYDROGRAPH AT
                           Q1     473.   5.00      136.       36.       12.     2.23
+          DIVERSION TO
                         Q1-D     473.   5.00      126.       32.       11.     2.23
+          HYDROGRAPH AT
                        Q1-Do      68.   6.67       12.        3.        1.     2.23
+          ROUTED TO
                          QCP      68.   6.67       12.        3.        1.     2.23
```

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 *** NORMAL END OF HEC-1 ***
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
 *            MAY  1991              *
 *          VERSION 4.0.1E           *
 *                                   *
 *  RUN DATE          TIME           *
 *                                   *
 *************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
```

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

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

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

HEC-1 INPUT PAGE 1

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

   1          ID   Buckeye/Sun Valley ADMS - 23 March 2004
   2          ID   PB54J - Modelers: Jacob Lesue & Wen Chen
   3          ID   10-year 6-hour
   4          ID   Future Conditions
   5          ID   FRS #2 (Sub-basins S-U)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - Town of Buckeye LU Districts (2003)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       0
  14          IN      15 01JAN94       0
  15          JD    2.07    0.01
              * 6-hour distribution, pattern 1.0
  16          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  17          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
```

```
18          PC   0.962   0.972   0.983   0.991     1.0
19          IN      15 01JAN94       0
20          JD   2.058     0.5
            * 6-hour distribution, pattern 1.0
21          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
22          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
23          PC   0.962   0.972   0.983   0.991     1.0
24          IN      15 01JAN94       0
25          JD   2.043     1.0
            * 6-hour distribution, pattern 1.4
26          PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
27          PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
28          PC  0.9572  0.9684  0.9798  0.9898     1.0
29          IN      15 01JAN94       0
30          JD   1.987     5.0
            * 6-hour distribution, pattern 2.3
31          PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
32          PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
33          PC  0.9487   0.962  0.9743  0.9877     1.0
34          IN      15 01JAN94       0
35          JD   1.946    10.0
            * 6-hour distribution, pattern 2.7
36          PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
37          PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
38          PC  0.9471  0.9608  0.9735  0.9873     1.0

39          KK      S1
40          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
41          KM         L=2.32     Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
42          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
43          KO       0       0     0.0       1      22
44          BA  1.4105
45          LG   0.289   0.313   4.485   0.392  25.978
            * S1
46          UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
47          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

48          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

49          KK   S1-Do
50          KO       0       0     0.0       0      22
51          DT    S1-D    61.0     0.0
            * Curve 1
52          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
53          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
54          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
55          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

56          KK     SCP   CNAME       S
57          KO       0       0     0.0       0      22
58          RN     SCP

59          KK      U1
60          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
61          KM         L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
62          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
63          KO       0       0     0.0       1      22
64          BA  1.3705
65          LG   0.316   0.329   5.226   0.254  17.067
            * U1
66          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
67          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
68          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
69          UI    26.8     0.0

70          KK   U1-Do
71          KO       0       0     0.0       0      22
72          DT    U1-D    47.0     0.0
            * Curve 1
73          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
74          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
75          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
76          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

77          KK     UCP   CNAME       U
78          KO       0       0     0.0       0      22
79          RN     UCP

80          KK      T1
81          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
82          KM         L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
83          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
84          KO       0       0     0.0       1      22
85          BA  3.0415
86          LG   0.327   0.327   4.641   0.316    18.7
            * T1
87          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
88          UI  1728.6 1335.29 1184.68 1081.59  976.95  886.26  793.63  697.43  590.13  511.99
89          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
90          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

91          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

92          KK   T1-Do
93          KO       0       0     0.0       0      22
94          DT    T1-D   103.0     0.0
            * Curve 2
95          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
96          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
97          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
98          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

99          KK     TCP   CNAME       T
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100          KO      0       0     0.0       0      22
101          RM    TCP
102          ZZ
```

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	S1	808.	4.33	125.	31.	10.	1.41		
+	DIVERSION TO	S1-D	808.	4.33	118.	30.	10.	1.41		
+	HYDROGRAPH AT	S1-Do	66.	5.50	7.	2.	1.	1.41		
+	ROUTED TO	SCP	66.	5.50	7.	2.	1.	1.41		
+	HYDROGRAPH AT	U1	735.	4.42	113.	28.	9.	1.37		
+	DIVERSION TO	U1-D	735.	4.42	94.	24.	8.	1.37		
+	HYDROGRAPH AT	U1-Do	214.	5.00	19.	5.	2.	1.37		
+	ROUTED TO	UCP	214.	5.00	19.	5.	2.	1.37		
+	HYDROGRAPH AT	T1	930.	4.67	211.	54.	18.	3.04		
+	DIVERSION TO	T1-D	930.	4.67	197.	50.	17.	3.04		
+	HYDROGRAPH AT	T1-Do	112.	5.58	15.	4.	1.	3.04		
+	ROUTED TO	TCP	112.	5.58	15.	4.	1.	3.04		

```
*** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY  1991            *
*            VERSION 4.0.1E         *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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

HEC-1 INPUT PAGE 1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 6-hour
  4           ID   Future Conditions
  5           ID   FRS #3 (Sub-basins V-Y)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    2.07    0.01
              * 6-hour distribution, pattern 1.0
 16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 18           PC   0.962   0.972   0.983   0.991     1.0
 19           IN      15 01JAN94       0
 20           JD   2.058     0.5
              * 6-hour distribution, pattern 1.0
 21           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
```

```
22          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
23          PC   0.962   0.972   0.983   0.991     1.0
24          IN      15 01JAN94       0
25          JD   2.043     1.0
            * 6-hour distribution, pattern 1.4
26          PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
27          PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
28          PC  0.9572  0.9684  0.9798  0.9898     1.0
29          IN      15 01JAN94       0
30          JD   1.987     5.0
            * 6-hour distribution, pattern 2.3
31          PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
32          PC   0.103  0.1173  0.1363  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
33          PC  0.9487   0.962  0.9743  0.9877     1.0
34          IN      15 01JAN94       0
35          JD   1.946    10.0
            * 6-hour distribution, pattern 2.7
36          PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0816  0.0949  0.1076
37          PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
38          PC  0.9471  0.9608  0.9735  0.9873     1.0

39          KK      V1
40          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
41          KM         L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
42          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
43          KO       0       0     0.0       1      22
44          BA  0.6646
45          LG   0.335   0.335   3.971   0.405  18.644
            * V1
46          UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
47          UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
```



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

48          UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
49          UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
50          UI     0.0

51          KK   V1-Do
52          KO      0       0     0.0       0      22
53          DT    V1-D    23.0     0.0
            * Curve 3
54          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
55          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
56          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
57          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

58          KK     VCP   CNAME       V
59          KO       0       0     0.0       0      22
60          RN     VCP

61          KK      W1
62          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
63          KM         L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
64          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
65          KO       0       0     0.0       1      22
66          BA   3.894
67          LG    0.35    0.35   3.975    0.41  15.228
            * W1
68          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
69          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
70          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
71          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
72          UI   57.11     0.0

73          KK   W1-W2   CNAME     W2R
74          KO       0       0     0.0       0      22
75          RS       7    FLOW     0.0     0.0
76          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
            * W1-W2
77          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
78          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

79          KK      W2
80          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
81          KM         L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
82          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
83          KO       0       0     0.0       1      22
84          BA  2.8478
85          LG   0.321   0.321   4.063   0.409  12.128
            * W2
86          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
87          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
88          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
89          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
90          UI   41.77     0.0
```



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

91          KK   W2-Do
92          KO       0       0     0.0       0      22
93          DT    W2-D   130.0     0.0
            * Curve 1
94          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
95          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 2
96          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
97          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

98          KK       W   CNAME     WCP
99          KO       0       0     0.0       0      22
100         HC       2     0.0

101         KK     WCP   CNAME       W
102         KO       0       0     0.0       0      22
103         RN     WCP

104         KK      X1
```

```
105          KM        THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
106          KM        L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
107          KM        S-GRAPH TYPE=PHOENIX MOUNTAIN
108          KO     0      0     0.0       1      22
109          BA  0.7867
110          LG   0.35   0.35   3.947   0.418  12.841
             * X1
111          UI    0.0  66.22  86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
112          UI 370.57 326.87 286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
113          UI  78.81  72.53  55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
114          UI  12.69  12.69  12.69   12.69   12.69   12.69   12.69     0.0

115          KK    XCP   CNAME      X
116          KO      0      0     0.0       0      22
117          RN    XCP

118          KK     Y1
119          KM        THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
120          KM        L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
121          KM        S-GRAPH TYPE=PHOENIX MOUNTAIN
122          KO     0      0     0.0       1      22
123          BA  0.5808
124          LG   0.35   0.35   4.051   0.415  10.599
             * Y1
125          UI    0.0 162.05 614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
126          UI  88.37  57.25  43.55   22.05   22.05   22.05     0.0

127          KK    YCP   CNAME      Y
128          KO      0      0     0.0       0      22
129          RN    YCP
130          ZZ
```

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	V1	334.	4.50	59.	15.	5.	0.66		
+	DIVERSION TO	V1-D	334.	4.50	46.	12.	4.	0.66		
+	HYDROGRAPH AT	V1-Do	79.	5.17	13.	3.	1.	0.66		
+	ROUTED TO	VCP	79.	5.17	13.	3.	1.	0.66		
+	HYDROGRAPH AT	W1	934.	4.58	200.	51.	17.	3.89		
+	ROUTED TO	W1-W2	790.	5.08	199.	51.	17.	3.89		
+	HYDROGRAPH AT	W2	781.	4.58	152.	38.	13.	2.85		
+	DIVERSION TO	W2-D	781.	4.58	152.	38.	13.	2.85		
+	HYDROGRAPH AT	W2-Do	0.	0.08	0.	0.	0.	2.85		
+	2 COMBINED AT	W	791.	5.08	201.	51.	17.	6.74		
+	ROUTED TO	WCP	640.	5.17	173.	45.	15.	6.74		
+	HYDROGRAPH AT	X1	359.	4.50	58.	14.	5.	0.79		
+	ROUTED TO	XCP	359.	4.50	58.	14.	5.	0.79		
+	HYDROGRAPH AT	Y1	512.	4.17	44.	11.	4.	0.58		
+	ROUTED TO	YCP	512.	4.17	44.	11.	4.	0.58		

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

E.6.2 ..... HEC-1 Output File 10-Year 24-Hour

E.6.2.a HEC-1 Output File for 10-Year 24-Hour (Existing Conditions)

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY   1991             *
*          VERSION 4.0.1E           *
*                                   *
* RUN DATE            TIME          *
*                                   *
*************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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

HEC-1 INPUT PAGE 1

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

  1           ID  Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID  PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID  10-year 24-hour
  4           ID  Existing Conditions
  5           ID  Area 3 - Sub-basins A-C
  6           ID  Rainfall Loss Method - Green & Ampt
  7           ID  Unit Hydrograph Method - FCDMC S-Graph
  8           ID  Channel Routing Method - Normal Depth
  9           ID  Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID  Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    2.63    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   2.498    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   2.414    20.0
              * 24-hour distribution
 40           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
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HEC-1 INPUT PAGE 2

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

 50           KK      C1
 51           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 52           KM   L=3.99      Lca=2.01      S=387.22      Kn=0.050      LAG=51.0
 53           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 54           KO       0       0     0.0       1      22
 55           BA  3.5862
 56           LG   0.215   0.296   3.933   0.407  21.409
              * C1
 57           UI     0.0  236.76  236.76  527.08  911.83 1306.09 1576.15 1799.13  2131.6 2781.78
 58           UI  2038.2 1574.43 1396.84 1275.29 1154.27 1044.98  935.76  822.33  695.81  603.68
 59           UI  561.29  519.88  455.15  388.96  307.02  297.68   259.3   259.3  183.85  181.51
 60           UI  181.51  121.77  115.86  115.86  115.86  107.68   45.38   45.38   45.38   45.38
 61           UI   45.38   45.38   45.38   45.38   45.38   45.38   45.38   45.38

 62           KK   C1-C2    CNAME     C2R
 63           KO       0       0     0.0       0      22
 64           RS       7    FLOW     0.0     0.0
 65           RC    0.05   0.044    0.05 18437.0  0.0176     0.0
              * C1-C2
 66           RX     0.0    35.0    90.0   138.0   159.0   209.0   264.0   309.0
 67           RY    21.0    19.0    16.0    10.0    10.0    15.0    20.0    24.0

 68           KK      C2
 69           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 70           KM   L=3.69      Lca=1.53      S=105.29      Kn=0.055      LAG=63.0
 71           KM   S-GRAPH TYPE=DESERT RANGELAND
 72           KO       0       0     0.0       1      22
```

```
 73          BA  1.9204
 74          LG    0.35     0.35     3.92    0.436      0.0
             * C2
 75          UI     0.0   102.63   102.63   122.26   304.94   432.24   556.99   679.25   778.73   881.69
 76          UI   929.5   983.56   983.56   952.35   904.47   807.23   701.83   605.44   531.11   463.45
 77          UI  404.15   349.94   303.68   267.04   229.18   194.49   177.79   157.37   130.91   108.78
 78          UI  108.78    77.56    70.25    70.25    70.25    44.14    24.98    24.98    24.98    24.98
 79          UI   24.98    24.98    24.98    24.98    24.98    24.98    24.98      0.0

 80          KK     C3R    CNAME    C2-C3
 81          KO       0        0      0.0        0       22
 82          HC       2      0.0

 83          KK   C2-C3    CNAME      C3R
 84          KO       0        0      0.0        0       22
 85          RS      11     FLOW      0.0      0.0
 86          RC   0.046     0.05   0.0462  23418.0   0.0107      0.0
             * C2-C3
 87          RX     0.0     60.0    125.0    140.0    172.0    232.0    292.0    352.0
 88          RY    26.0     25.0     23.0     10.0     10.0     16.0     20.0     23.0

 89          KK      C3
 90          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM   L=4.44      Lca=2.51      S=56.33      Kn=0.050      LAG=84.0
 92          KM   S-GRAPH TYPE=DESERT RANGELAND
 93          KO       0        0      0.0        1       22
 94          BA   3.7859
```



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

 95          LG   0.345    0.345    4.357    0.372      0.0
             * C3
 96          UI     0.0   151.75   151.75   151.75   190.44   436.28   559.26   700.12   855.69   975.52
 97          UI  1073.3  1242.28  1321.31  1364.94  1436.99  1454.26  1454.26  1418.19  1372.63  1299.19
 98          UI  1161.9  1057.64    941.4   855.14   770.03   694.14   628.58   566.66    510.9   460.18
 99          UI   415.5    362.4   338.86   288.07   286.08   237.34   232.68   204.46   160.84   160.84
100          UI  160.84   118.28   103.88   103.88   103.88   103.88    97.02    36.93    36.93    36.93
101          UI   36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93
102          UI   36.93    36.93      0.0

103          KK     C4R    CNAME    C3-C4
104          KO       0        0      0.0        0       22
105          HC       2      0.0

106          KK      C4
107          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
108          KM   L=2.18      Lca=0.88      S=44.31      Kn=0.045      LAG=40.0
109          KM   S-GRAPH TYPE=DESERT RANGELAND
110          KO       0        0      0.0        1       22
111          BA   1.4001
112          LG   0.327    0.327    4.737    0.29      0.0
             * C4
113          UI     0.0   117.85   153.21   406.59   642.02   848.8  1023.51  1108.81  1120.37  1044.08
114          UI  868.12   694.78    559.8   452.89   361.01   288.88   232.67   190.33   149.01   124.91
115          UI    88.1    80.67    73.19    28.68    28.68    28.68    28.68    28.68    28.68    28.68
116          UI     0.0

117          KK       C    CNAME      CCP
118          KO       0        0      0.0        0       22
119          HC       2      0.0

120          KK     CCP    CNAME        C
121          KO       0        0      0.0        0       22
122          RN     CCP

123          KK      B1
124          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
125          KM   L=2.52      Lca=1.19      S=227.45      Kn=0.050      LAG=38.0
126          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
127          KO       0        0      0.0        1       22
128          BA   0.3559
129          LG    0.35     0.35    3.733     0.47    6.272
             * B1
130          UI     0.0    49.25    72.53   179.11   283.42   353.86   433.69   556.28   354.96   293.83
131          UI  258.29   226.62   196.88   163.69    131.5   117.02   105.83    83.39     66.1    58.84
132          UI   53.95    48.03    37.76    29.84     24.1     24.1    23.99     9.44     9.44     9.44
133          UI    9.44     9.44     9.44     9.44     9.44     9.44

134          KK   B1-B2    CNAME      B2R
135          KO       0        0      0.0        0       22
136          RS       9     FLOW      0.0      0.0
137          RC   0.055    0.042    0.055  11334.0   0.0137      0.0
             * B1-B2
138          RX     0.0     75.0    140.0    167.0    193.0    226.0    296.0    371.0
139          RY    20.0     17.0     14.0     10.0     10.0     13.0     17.0     22.0
```



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

140          KK      B2
141          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
142          KM   L=2.21      Lca=0.98      S=84.6      Kn=0.050      LAG=45.0
143          KM   S-GRAPH TYPE=DESERT RANGELAND
144          KO       0        0      0.0        1       22
145          BA   0.4888
146          LG    0.35     0.35    3.617    0.513      0.0
             * B2
147          UI     0.0    36.57    36.57    108.2   170.94   233.37   285.41    325.0   349.22   347.33
148          UI  325.56   278.29    231.3   188.32   156.44   128.94   105.91    86.03    71.02    59.44
149          UI   49.34    38.76    32.78    25.03    25.03    18.39      8.9      8.9      8.9      8.9
150          UI     8.9      8.9      8.9      8.9

151          KK     B3R    CNAME    B2-B3
152          KO       0        0      0.0        0       22
153          HC       2      0.0

154          KK   B2-B3    CNAME      B3R
155          KO       0        0      0.0        0       22
156          RS      22     FLOW      0.0      0.0
157          RC    0.05    0.025     0.05  19622.0   0.0121      0.0
```

```
                * B2-B3
158             RX     0.0   120.0   278.0   285.0   301.5   312.5   446.5   529.5
159             RY    13.5    10.0    11.6    10.1    10.1    11.5    10.8    12.6

160             KK      B3
161             KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
162             KM   L=3.72      Lca=1.65      S=63.31      Kn=0.045      LAG=59.0
163             KM   S-GRAPH TYPE=DESERT RANGELAND
164             KO      0       0     0.0       1      22
165             BA   1.987
166             LG   0.331   0.331   4.284   0.389     0.0
                * B3
167             UI     0.0  113.39  113.39   174.2  365.68  513.62  667.08  787.09   935.3 1014.02
168             UI  1066.6 1086.67 1065.15 1007.46  902.78  777.14  664.54  576.28  502.42  427.51
169             UI  369.72  321.51  269.65  233.59  211.46  173.87  158.42  120.18  120.18   89.23
170             UI   77.62   77.62   77.62   39.48    27.6    27.6    27.6    27.6    27.6    27.6
171             UI    27.6    27.6    27.6    27.6     0.0

172             KK       B   CNAME     BCP
173             KO       0       0     0.0       0      22
174             RC       2     0.0       .

175             KK     BCP   CNAME       B
176             KO       0       0     0.0       0      22
177             RN     BCP

178             KK      A1
179             KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
180             KM   L=2.20      Lca=0.86      S=322.08      Kn=0.050      LAG=30.0
181             KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
182             KO      0       0     0.0       1      22
183             BA  1.1067
184             LG   0.35    0.35   4.058   0.417   9.677
                * A1
```



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

185             UI     0.0  124.21  285.26  628.48  880.99 1178.37 1187.81  769.89  652.53  550.24
186             UI  454.03  347.39  294.06  245.68   184.1  150.55  131.95   95.22   84.89   60.78
187             UI   60.78   43.03   23.81   23.81   23.81   23.81   23.81   23.81     0.0

188             KK   A1-A2   CNAME     A2R
189             KO       0       0     0.0       0      22
190             RS       9    FLOW     0.0     0.0
191             RC   0.045   0.045   0.045 15153.0  0.0134     0.0
                * A1-A2
192             RX     0.0    75.0   125.0   185.0   190.0   220.0   280.0   340.0
193             RY    27.0    23.0    19.0    10.0    10.0    20.0    26.0    32.0

194             KK      A2
195             KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
196             KM   L=3.34      Lca=1.28      S=94.61      Kn=0.055      LAG=57.0
197             KM   S-GRAPH TYPE=DESERT RANGELAND
198             KO      0       0     0.0       1      22
199             BA  1.6622
200             LG   0.35    0.35   4.547   0.339     0.0
                * A2
201             UI     0.0   98.18   98.18  167.77   329.1  468.89  598.13  713.32   831.1   883.8
202             UI  940.94  940.94  897.33  847.41  719.99  625.76  533.26  458.89  397.46   336.4
203             UI  288.45   247.3  210.36   185.1  155.06  143.14  104.07  104.07    78.8   67.21
204             UI   67.21   67.21   30.17    23.9    23.9    23.9    23.9    23.9    23.9    23.9
205             UI    23.9    23.9     0.0

206             KK    A3R   CNAME   A2-A3
207             KO      0       0     0.0       0      22
208             RC      2   2.769

209             KK   A2-A3   CNAME     A3R
210             KO      0       0     0.0       0      22
211             RS     12    FLOW     0.0     0.0
212             RC   0.05   0.043    0.05 18190.0  0.0116     0.0
                * A2-A3
213             RX     0.0    20.0    30.0   165.0   186.0   346.0   361.0   381.0
214             RY    20.0    19.0    18.0    10.0    10.0    20.0    21.0    22.0

215             KK      A3
216             KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
217             KM   L=3.92      Lca=1.89      S=58.21      Kn=0.045      LAG=64.0
218             KM   S-GRAPH TYPE=DESERT RANGELAND
219             KO      0       0     0.0       1      22
220             BA  3.7294
221             LG   0.35    0.35   4.23   0.405     0.0
                * A3
222             UI     0.0   196.2   196.2   216.8  570.49  813.36 1043.19 1275.51 1464.32 1668.95
223             UI  1757.8 1876.99 1880.23 1841.12 1751.54 1592.99 1387.91 1202.84 1048.95  919.72
224             UI  805.43  710.05  606.86  538.24  447.15  397.83  367.89  300.84  290.73  207.95
225             UI  207.95  183.56   134.3   134.3   134.3  131.67   47.75   47.75   47.75   47.75
226             UI   47.75   47.75   47.75   47.75   47.75   47.75   47.75   47.75
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LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

227             KK       A   CNAME     ACP
228             KO       0       0     0.0       0      22
229             RC       2   6.498

230             KK     ACP   CNAME       A
231             KO       0       0     0.0       0      22
232             RN     ACP
233                     ZZ
```

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									

```
+                          C1     1340.  12.67      286.      86.      29.     3.59
        ROUTED TO
+                       C1-C2     1085.  13.17      284.      86.      29.     3.59
        HYDROGRAPH AT
+                          C2      386.  12.92       82.      20.       7.     1.92
        2 COMBINED AT
+                          C3R    1393.  13.17      363.     106.      35.     5.51
        ROUTED TO
+                       C2-C3     1176.  14.00      358.     106.      35.     5.51
        HYDROGRAPH AT
+                          C3      606.  13.17      170.      43.      14.     3.79
        2 COMBINED AT
+                          C4R    1455.  14.00      514.     147.      49.     9.29
        HYDROGRAPH AT
+                          C4      526.  12.58       73.      18.       6.     1.40
        2 COMBINED AT
+                           C     1457.  14.00      580.     164.      55.    10.69
        ROUTED TO
+                         CCP     1457.  14.00      580.     164.      55.    10.69
        HYDROGRAPH AT
+                          B1      193.  12.50       29.       8.       3.     0.56
        ROUTED TO
+                       B1-B2      142.  13.17       29.       8.       3.     0.56
        HYDROGRAPH AT
+                          B2      128.  12.67       20.       5.       2.     0.49
        2 COMBINED AT
+                          B3R     195.  13.08       48.      13.       4.     1.04
        ROUTED TO
+                       B2-B3      145.  14.92       47.      13.       4.     1.04
        HYDROGRAPH AT
+                          B3      455.  12.83       91.      23.       8.     1.99
        2 COMBINED AT
+                           B      453.  12.83      133.      35.      12.     3.03
        ROUTED TO
+                         BCP      453.  12.83      133.      35.      12.     3.03
        HYDROGRAPH AT
+                          A1      493.  12.33       64.      18.       6.     1.11
        ROUTED TO
+                       A1-A2      360.  13.00       64.      18.       6.     1.11
        HYDROGRAPH AT
+                          A2      405.  12.83       78.      19.       6.     1.66
        2 COMBINED AT
+                          A3R     726.  12.92      141.      37.      12.     2.77
        ROUTED TO
+                       A2-A3      583.  13.83      140.      37.      12.     2.77
        HYDROGRAPH AT
+                          A3      744.  12.92      160.      40.      13.     3.73
        2 COMBINED AT
+                           A      811.  13.75      295.      76.      25.     6.50
        ROUTED TO
+                         ACP      811.  13.75      295.      76.      25.     6.50

*** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*             MAY   1991            *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************

*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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
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                                    HEC-1 INPUT                                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    2.62    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   2.489    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   2.405    20.0
              * 24-hour distribution
 40           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 50           IN      15 01JAN94       0
 51           JD   2.324    40.0
              * 24-hour distribution
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                                    HEC-1 INPUT                                                                    PAGE  2

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

 52           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62           IN      15 01JAN94       0
 63           JD   2.245    80.0
              * 24-hour distribution
 64           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74           KK      G1
 75           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76           KM   L=2.38      Lca=1.08      S=33.76      Kn=0.045      LAG=47.0
 77           KM   S-GRAPH TYPE=DESERT RANGELAND
 78           KO       0       0     0.0       1      22
 79           BA  1.1192
 80           LG    0.35    0.35   4.688   0.298     0.0
              * G1
 81           UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 82           UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 83           UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 84           UI   19.51   19.51   19.51   19.51   19.51     0.0

 85           KK     GCP    CNAME       G
 86           KO       0       0     0.0       0      22
 87           RN     GCP

 88           KK      J1
 89           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 90           KM   L=4.09      Lca=1.78      S=70.82      Kn=0.055      LAG=75.0
 91           KM   S-GRAPH TYPE=DESERT RANGELAND
 92           KO       0       0     0.0       1      22
 93           BA  1.7341
 94           LG    0.35    0.35    3.25   0.652     0.0
              * J1
```

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 95          UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
 96          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
 97          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
 98          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
 99          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
100          UI   18.95   18.95   18.95   18.95   18.95   18.95
                                          REC-1 INPUT                                          PAGE  3
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

101          KK   J1-J2   CNAME     J2R
102          KO       0       0     0.0       0      22
103          RS      17    FLOW     0.0     0.0
104          RC   0.055    0.04   0.055 24090.0  0.0086     0.0
             * J1-J2
105          RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
106          RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

107          KK      J2
108          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
109          KM   L=5.18      Lca=2.51      S=45.01      Kn=0.050      LAG=93.0
110          KM   S-GRAPH TYPE=DESERT RANGELAND
111          KO       0       0     0.0       1      22
112          BA  3.6379
113          LG   0.349   0.348   3.623   0.498   0.281
             * J2
114          UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
115          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18 1218.5
116          UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
117          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
118          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
119          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
120          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

121          KK    K3RB   CNAME   J2-K3
122          KO       0       0     0.0       0      22
123          RC       2   5.372

124          KK   J2-K3   CNAME    K3RB
125          KO       0       0     0.0       0      22
126          RS       5    FLOW     0.0     0.0
127          RC    0.05   0.048    0.05  4072.0  0.0059     0.0
             * J2-K3
128          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
129          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

130          KK      K1
131          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
132          KM   L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
133          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
134          KO       0       0     0.0       1      22
135          BA   1.543
136          LG   0.112   0.255   4.382   0.365   21.06
             * K1
137          UI     0.0  129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
138          UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
139          UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
140          UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0
                                          REC-1 INPUT                                          PAGE  4
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

141          KK   K1-K2   CNAME    K2R
142          KO       0       0     0.0       0      22
143          RS      26    FLOW     0.0     0.0
144          RC   0.048    0.05   0.048 30021.0   0.015     0.0
             * K1-K2
145          RX     0.0    20.0    55.0    85.0   235.0   259.0   289.0   309.0
146          RY    22.0    21.0    20.0    10.0    10.0    20.0    21.0    22.0

147          KK      K2
148          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
149          KM   L=7.3      Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
150          KM   S-GRAPH TYPE=DESERT RANGELAND
151          KO       0       0     0.0       1      22
152          BA   2.365
153          LG   0.341   0.346   4.471   0.348   1.018
             * K2
154          UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
155          UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
156          UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
157          UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
158          UI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
159          UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
160          UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
161          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
162          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

163          KK    K3RA   CNAME   K2-K3
164          KO       0       0     0.0       0      22
165          RC       2   3.908

166          KK   K2-K3   CNAME    K3RA
167          KO       0       0     0.0       0      22
168          RS      22    FLOW     0.0     0.0
169          RC    0.05   0.048    0.05 25950.0  0.0084     0.0
             * K2-K3
170          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
171          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

172          KK      F1
173          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
174          KM   L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
175          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
176          KO       0       0     0.0       1      22
177          BA  2.7854
178          LG   0.299    0.33   4.322   0.361  14.271
             * F1
179          UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
180          UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
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181          UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.60   99.77
182          UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
183          UI   39.08   39.08   39.08     0.0
                                        HEC-1 INPUT                                          PAGE  5
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

184          KK   F1-F2   CNAME     F2R
185          KO       0       0     0.0       0      22
186          RS       4    FLOW     0.0     0.0
187          RC   0.053   0.045   0.055  8635.0   0.012     0.0
             * F1-F2
188          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
189          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

190          KK      F2
191          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
192          KM   L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
193          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
194          KO       0       0     0.0       1      22
195          BA  2.5261
196          LG    0.35    0.35   4.311   0.375   3.026
             * F2
197          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
198          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
199          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
200          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
201          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
202          UI    28.6    28.6    28.6     0.0

203          KK     F3R   CNAME   F2-F3
204          KO       0       0     0.0       0      22
205          HC       2   5.312

206          KK   F2-F3   CNAME     F3R
207          KO       0       0     0.0       0      22
208          RS       5    FLOW     0.0     0.0
209          RC    0.05   0.047   0.048  7059.0    0.01     0.0
             * F2-F3
210          RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
211          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

212          KK      F3
213          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
214          KM   L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
215          KM   S-GRAPH TYPE=DESERT RANGELAND
216          KO       0       0     0.0       1      22
217          BA  0.7363
218          LG    0.35    0.35   3.266   0.647     0.0
             * F3
219          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
220          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
221          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
222          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
223          UI     0.0
                                        HEC-1 INPUT                                          PAGE  6
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

224          KK    E4RB   CNAME   F3-E4
225          KO       0       0     0.0       0      22
226          HC       2   6.048

227          KK   F3-E4   CNAME    E4RB
228          KO       0       0     0.0       0      22
229          RS      19    FLOW     0.0     0.0
230          RC    0.05   0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
231          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
232          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

233          KK      H1
234          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
235          KM   L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
236          KM   S-GRAPH TYPE=DESERT RANGELAND
237          KO       0       0     0.0       1      22
238          BA  1.0659
239          LG    0.35    0.35   2.733   0.945     0.0
             * H1
240          UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
241          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
242          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
243          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

244          KK   H1-H2   CNAME     H2R
245          KO       0       0     0.0       0      22
246          RS      31    FLOW     0.0     0.0
247          RC   0.053    0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
248          RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
249          RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

250          KK      E1
251          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
252          KM   L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
253          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
254          KO       0       0     0.0       1      22
255          BA  0.9558
256          LG    0.35   0.378   5.377   0.222    0.69
             * E1
257          UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
258          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
259          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
260          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
261          UI     0.0

262          KK   E1-E2   CNAME     E2R
263          KO       0       0     0.0       0      22
264          RS       7    FLOW     0.0     0.0
265          RC    0.05   0.047   0.046 11365.0   0.016     0.0
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            * E1-E2
266         RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
267         RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

                                    HEC-1 INPUT                                                    PAGE  7

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

268         KK      E2
269         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
270         KM   L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
271         KM   S-GRAPH TYPE=DESERT RANGELAND
272         KO      0       0     0.0       1      22
273         BA  1.9794
274         LG    0.35    0.36   5.043   0.256     0.0
            * E2
275         UI     0.0   148.1   148.1   438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
276         UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
277         UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
278         UI   36.05   36.05   36.05   36.05

279         KK     E3R   CNAME   E2-E3
280         KO       0       0     0.0       0      22
281         RC       2   2.935

282         KK   E2-E3   CNAME     E3R
283         KO       0       0     0.0       0      22
284         RS      13    FLOW     0.0     0.0
285         RC   0.052   0.046   0.052 19626.0  0.0088     0.0
            * E2-E3
286         RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
287         RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

288         KK      E3
289         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
290         KM   L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
291         KM   S-GRAPH TYPE=DESERT RANGELAND
292         KO       0       0     0.0       1      22
293         BA  2.4882
294         LG    0.35    0.35   4.358   0.347     0.0
            * E3
295         UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
296         UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
297         UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
298         UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
299         UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
300         UI   27.19   27.19   27.19   27.19   27.19   27.19

301         KK    E4RA   CNAME   E3-E4
302         KO       0       0     0.0       0      22
303         RC       2   5.423

304         KK   E3-E4   CNAME    E4RA
305         KO       0       0     0.0       0      22
306         RS      13    FLOW     0.0     0.0
307         RC   0.056   0.049   0.056 13855.0  0.0048     0.0
            * E3-E4
308         RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
309         RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

                                    HEC-1 INPUT                                                    PAGE  8

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

310         KK      E2
311         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
312         KM   L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
313         KM   S-GRAPH TYPE=DESERT RANGELAND
314         KO       0       0     0.0       1      22
315         BA  1.4003
316         LG    0.35    0.35   3.222   0.664     0.0
            * E2
317         UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
318         UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
319         UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
320         UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
321         UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
322         UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
323         UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

324         KK      E4
325         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
326         KM   L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
327         KM   S-GRAPH TYPE=DESERT RANGELAND
328         KO       0       0     0.0       1      22
329         BA  3.0419
330         LG    0.35    0.35   3.816   0.439     0.0
            * E4
331         UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
332         UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
333         UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
334         UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
335         UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
336         UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
337         UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
338         UI   24.44   24.44   24.44   24.44   24.44   24.44

339         KK     E5R   CNAME  E4H2E5
340         KO       0       0     0.0       0      22
341         RC       5  16.979

342         KK  E4H2E5   CNAME     E5R
343         KO       0       0     0.0       0      22
344         RS      17    FLOW     0.0     0.0
345         RC    0.06    0.05    0.06 15206.0  0.0051     0.0
            * E4H2-E5
346         RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
347         RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

348         KK      K3
349         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
350         KM   L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
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351          KM   S-GRAPH TYPE=DESERT RANGELAND
352          KO       0       0     0.0       1      22
353          BA  1.6364
354          LG    0.35    0.35   3.421   0.582     0.0
             * K3
355          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

356          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
357          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
358          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
359          UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
360          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
361          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

362          KK      E5
363          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
364          KM   L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
365          KM   S-GRAPH TYPE=DESERT RANGELAND
366          KO       0       0     0.0       1      22
367          BA  1.3075
368          LG   0.347   0.344    3.94   0.429   0.968
             * E5
369          UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
370          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
371          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
372          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
373          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

374          KK     E6R    CNAME   E5K2E6
375          KO       0        0     0.0       0      22
376          HC       5   29.203

377          KK  E5K2E6    CNAME     E6R
378          KO       0        0     0.0       0      22
379          RS       7     FLOW     0.0     0.0
380          RC   0.063    0.051   0.063  5083.0  0.0037     0.0
             * E5K3-E6
381          RX     0.0    850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
382          RY    25.0     13.0    13.0    10.0    10.0    12.0    12.0    25.0

383          KK      E6
384          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
385          KM   L=3.04      Lca=1.06      S=34.17      Kn=0.050      LAG=57.0
386          KM   S-GRAPH TYPE=DESERT RANGELAND
387          KO       0       0     0.0       1      22
388          BA  2.0375
389          LG   0.343   0.336   4.356   0.367   0.711
             * E6
390          UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
391          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
392          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
393          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
394          UI   29.29   29.29     0.0

395          KK       E    CNAME     ECP
396          KO       0        0     0.0       0      22
397          HC       2   31.241
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

398          KK     ECP    CNAME       E
399          KO       0        0     0.0       0      22
400          RN     ECP
401          ZZ
```

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	G1	346.	12.67	55.	14.	5.	1.12		
+	ROUTED TO	GCP	346.	12.67	55.	14.	5.	1.12		
+	HYDROGRAPH AT	J1	227.	13.08	57.	14.	5.	1.73		
+	ROUTED TO	J1-J2	188.	14.42	56.	14.	5.	1.73		
+	HYDROGRAPH AT	J2	468.	13.33	146.	37.	12.	3.64		
+	2 COMBINED AT	K3RB	465.	13.33	196.	50.	17.	5.37		
+	ROUTED TO	J2-K3	454.	13.67	195.	50.	17.	5.37		
+	HYDROGRAPH AT	K1	741.	12.50	131.	39.	13.	1.54		
+	ROUTED TO	K1-K2	336.	14.50	131.	39.	13.	1.54		
+	HYDROGRAPH AT	K2	282.	13.67	111.	29.	10.	2.37		
+	2 COMBINED AT	K3RA	516.	14.50	238.	67.	22.	3.91		

+	ROUTED TO	K2-K3	425.	16.25	233.	67.	22.	3.91
+	HYDROGRAPH AT	F1	1020.	12.58	189.	55.	18.	2.79
+	ROUTED TO	F1-F2	922.	12.83	189.	55.	18.	2.79
+	HYDROGRAPH AT	F2	649.	12.75	124.	32.	11.	2.53
+	2 COMBINED AT	F3R	1538.	12.75	310.	87.	29.	5.31
+	ROUTED TO	F2-F3	1371.	13.08	310.	87.	29.	5.31
+	HYDROGRAPH AT	F3	136.	12.75	25.	6.	2.	0.74
+	2 COMBINED AT	E4RB	1461.	13.08	333.	92.	31.	6.05
+	ROUTED TO	F3-E4	1094.	14.67	330.	92.	31.	6.05
+	HYDROGRAPH AT	H1	134.	12.75	23.	6.	2.	1.07
+	ROUTED TO	H1-H2	79.	15.17	23.	6.	2.	1.07
+	HYDROGRAPH AT	E1	349.	12.50	52.	13.	4.	0.96
+	ROUTED TO	E1-E2	284.	13.00	52.	13.	4.	0.96
+	HYDROGRAPH AT	E2	655.	12.67	101.	25.	8.	1.98
+	2 COMBINED AT	E3R	756.	12.83	151.	38.	13.	2.93
+	ROUTED TO	E2-E3	632.	13.67	150.	38.	13.	2.93
+	HYDROGRAPH AT	E3	460.	13.08	115.	29.	10.	2.49
+	2 COMBINED AT	E4RA	883.	13.58	260.	66.	22.	5.42
+	ROUTED TO	E3-E4	770.	14.67	255.	66.	22.	5.42
+	HYDROGRAPH AT	W2	154.	13.25	46.	11.	4.	1.40
+	HYDROGRAPH AT	E4	378.	13.42	128.	32.	11.	3.04
+	5 COMBINED AT	E5R	1921.	14.58	705.	193.	65.	16.98
+	ROUTED TO	E4R2E5	1717.	15.92	700.	193.	65.	16.98
+	HYDROGRAPH AT	K3	187.	13.33	59.	15.	5.	1.64
+	HYDROGRAPH AT	E5	259.	12.92	58.	15.	5.	1.31
+	5 COMBINED AT	E6R	2051.	15.92	1075.	309.	103.	29.20
+	ROUTED TO	E5R2E6	2001.	16.42	1069.	309.	103.	29.20
+	HYDROGRAPH AT	E6	491.	12.83	96.	24.	8.	2.04
+	2 COMBINED AT	E	1999.	16.42	1101.	330.	110.	31.24
+	ROUTED TO	ECP	1983.	16.42	1093.	328.	110.	31.24

```
*** NORMAL END OF HEC-1 ***
1*****************************************
*                                         *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)     *
*              MAY  1991                  *
*            VERSION 4.0.1E               *
*                                         *
*  RUN DATE            TIME               *
*                                         *
*******************************************
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*******************************************
*                                         *
*    U.S. ARMY CORPS OF ENGINEERS         *
*    HYDROLOGIC ENGINEERING CENTER        *
*          609 SECOND STREET              *
*       DAVIS, CALIFORNIA 95616           *
*          (916) 551-1748                 *
*                                         *
*******************************************
```

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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 -MSKK- 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   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    2.62     0.01
              * 24-hour distribution
 16           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   2.489     10.0
              * 24-hour distribution
 28           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   2.405     20.0
              * 24-hour distribution
 40           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
 50           IN      15 01JAN94       0
 51           JD   2.324     40.0
              * 24-hour distribution

                                    HEC-1 INPUT                                                          PAGE  2

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

 52           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
 62           IN      15 01JAN94       0
 63           JD   2.245     80.0
              * 24-hour distribution
 64           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
 74           IN      15 01JAN94       0
 75           JD   2.203    120.0
              * 24-hour distribution
 76           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 77           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 78           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 79           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 80           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 81           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 82           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 83           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 84           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 85           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
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 86          IN      15 01JAN94       0
 87          JD   2.148   200.0
             * 24-hour distribution
 88          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 89          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 90          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 91          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 92          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 93          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 94          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 95          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 96          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 97          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 98          IN      15 01JAN94       0
 99          JD   2.112   300.0
             * 24-hour distribution
100          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
101          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
102          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
```



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

103          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
104          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
105          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
106          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
107          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
108          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
109          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
110          IN      15 01JAN94       0
111          JD   2.051   500.0
             * 24-hour distribution
112          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
113          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
114          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
115          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
116          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
117          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
118          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
119          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
120          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
121          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

122          KK      R1
123          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
124          KM   L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
125          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
126          KO      0         0     0.0         1        22
127          BA  0.2836
128          LG    0.35      0.35   4.358   0.374   8.387
             * R1
129          UI     0.0    62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
130          UI   57.54    39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

131          KK     RCP    CNAME       R
132          KO       0        0     0.0        0        22
133          RN     RCP

134          KK      L1
135          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
136          KM   L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
137          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
138          KO       0        0     0.0        1        22
139          BA  3.5462
140          LG   0.271    0.318   4.357   0.352  16.317
             * L1
141          UI     0.0   195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
142          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
143          UI  701.21   620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
144          UI  241.82   214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
145          UI   95.79    95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
146          UI   37.52    37.52   37.52   37.52   37.52   37.52   37.52     0.0
```



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

147          KK   L1-L2    CNAME     L2R
148          KO       0        0     0.0        0        22
149          RS      14     FLOW     0.0      0.0
150          RC   0.046    0.045   0.046 28949.0  0.0147     0.0
             * L1-L2
151          RX     0.0     80.0   165.0   200.0   215.0   255.0   340.0   420.0
152          RY    19.0     17.0    14.0    10.0    10.0    14.0    18.0    22.0

153          KK      L2
154          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
155          KM   L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
156          KM   S-GRAPH TYPE=DESERT RANGELAND
157          KO       0        0     0.0        1        22
158          BA  7.3294
159          LG    0.35     0.35   4.202   0.399     0.0
             * L2
160          UI     0.0    274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1628.88
161          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
162          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
163          UI  919.78   837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
164          UI  319.44   290.62  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69
165          UI   88.02    66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
166          UI   66.74    66.74   66.74   66.74   66.74   66.74   66.74

167          KK     L3R    CNAME   L2-L3
168          KO       0        0     0.0        0        22
169          RC       2      0.0

170          KK   L2-L3    CNAME     L3R
171          KO       0        0     0.0        0        22
172          RS      23     FLOW     0.0      0.0
173          RC    0.05    0.048    0.06 20567.0  0.0084     0.0
             * L2-L3
174          RX     0.0   1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
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175          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

176          KK      L3
177          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
178          KM   L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
179          KM   S-GRAPH TYPE=DESERT RANGELAND
180          KO       0        0     0.0       1      22
181          BA  5.8518
182          LG  0.341   0.328    3.98   0.419    1.05
             * L3
183          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
184          UI  1460.0 1557.79 1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
185          UI  1920.6 1789.16 1583.46 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
186          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
187          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
188          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
189          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0
```



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

190          KK       L   CNAME     LCP
191          KO       0       0     0.0       0      22
192          HC       2     0.0

193          KK     LCP   CNAME       L
194          KO       0       0     0.0       0      22
195          RN     LCP

196          KK      Z1
197          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
198          KM   L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
199          KM   S-GRAPH TYPE=DESERT RANGELAND
200          KO       0        0     0.0       1      22
201          BA  0.6644
202          LG  0.321   0.292   4.004    0.43   2.909
             * Z1
203          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
204          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
205          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

206          KK     ZCP   CNAME       Z
207          KO       0       0     0.0       0      22
208          RN     ZCP

209          KK      M1
210          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
211          KM   L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
212          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
213          KO       0        0     0.0       1      22
214          BA  5.5949
215          LG    0.35     0.35   4.306   0.347  17.122
             * M1
216          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
217          UI  4005.2 2791.27 2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
218          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
219          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
220          UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
221          UI   64.47   64.47     0.0

222          KK   M1-M2   CNAME     M2R
223          KO       0       0     0.0       0      22
224          RS      25    FLOW     0.0     0.0
225          RC    0.04    0.04   0.045 38719.0  0.0133     0.0
             * M1-M2
226          RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
227          RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

228          KK      M2
229          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
230          KM   L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
231          KM   S-GRAPH TYPE=DESERT RANGELAND
232          KO       0        0     0.0       1      22
233          BA  7.5274
234          LG    0.35     0.35   3.952   0.446   0.287
             * M2
```



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

235          UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
236          UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
237          UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
238          UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
239          UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
240          UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
241          UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
242          UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

243          KK       M   CNAME     MCP
244          KO       0       0     0.0       0      22
245          HC       2     0.0

246          KK     MCP   CNAME       M
247          KO       0       0     0.0       0      22
248          RN     MCP

249          KK      O1
250          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
251          KM   L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
252          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
253          KO       0        0     0.0       1      22
254          BA  3.0883
255          LG    0.35     0.35   4.189   0.393   2.105
             * O1
256          UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
257          UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
258          UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
259          UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
260          UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
261          UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
```

```
262          UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
263          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
264          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
265          UI   19.93   19.93   19.93     0.0

266          KK     OCP   CNAME       O
267          KO       0       0     0.0       0      22
268          RN     OCP

269          KK      N1
270          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
271          KM   L=2.79      Lca=1.44      S=340.38      Kn=0.050      LAG=40.0
272          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
273          KO       0       0     0.0       1      22
274          BA   1.524
275          LG    0.35    0.35   4.075   0.419    8.38
             * N1
276          UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
277          UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
278          UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
279          UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0
```



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

280          KK   N1-N2   CNAME     N2R
281          KO       0       0     0.0       0      22
282          RS      23    FLOW     0.0     0.0
283          RC    0.05   0.047    0.05 26511.0  0.0115     0.0
             * N1-N2
284          RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
285          RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

286          KK      N2
287          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
288          KM   L=5.64      Lca=3.27      S=170.14      Kn=0.055      LAG=91.0
289          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
290          KO       0       0     0.0       1      22
291          BA   3.3254
292          LG    0.35    0.35   4.117   0.405    2.67
             * N2
293          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
294          UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
295          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
296          UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
297          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
298          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
299          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
300          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
301          UI   23.58   23.58   23.58   23.58   23.58

302          KK       N   CNAME     NCP
303          KO       0       0     0.0       0      22
304          BC       2     0.0

305          KK     NCP   CNAME       N
306          KO       0       0     0.0       0      22
307          RN     NCP

308          KK      P1
309          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
310          KM   L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
311          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
312          KO       0       0     0.0       1      22
313          BA   2.4365
314          LG    0.35    0.35   4.193   0.396   6.712
             * P1
315          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
316          UI  664.09  718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
317          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
318          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
319          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
320          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
321          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
322          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

323          KK     PCP   CNAME       P
324          KO       0       0     0.0       0      22
325          RN     PCP

326          KK      Q1
327          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
328          KM   L=5.23      Lca=2.81      S=228.56      Kn=0.055      LAG=78.0
329          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
330          KO       0       0     0.0       1      22
331          BA   2.2336
332          LG    0.35    0.35   4.203    0.39  12.313
             * Q1
333          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
334          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
335          UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
336          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
337          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
338          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
339          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
340          UI   18.48   18.48   18.48

341          KK     OCP   CNAME       Q
342          KO       0       0     0.0       0      22
343          RN     OCP
344          ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	R1	179.	12.25	17.	5.	2.	0.28		
+	ROUTED TO	RCP	179.	12.25	17.	5.	2.	0.28		
+	HYDROGRAPH AT	L1	1090.	12.75	255.	75.	25.	3.55		
+	ROUTED TO	L1-L2	830.	13.83	253.	75.	25.	3.55		
+	HYDROGRAPH AT	L2	1037.	13.25	312.	78.	26.	7.33		
+	2 COMBINED AT	L3R	1603.	13.67	553.	150.	50.	10.88		
+	ROUTED TO	L2-L3	1339.	15.50	544.	150.	50.	10.88		
+	HYDROGRAPH AT	L3	858.	13.33	264.	67.	22.	5.85		
+	2 COMBINED AT	L	1362.	15.50	718.	207.	69.	16.73		
+	ROUTED TO	LCP	1362.	15.50	718.	207.	69.	16.73		
+	HYDROGRAPH AT	Z1	239.	12.50	34.	9.	3.	0.66		
+	ROUTED TO	ZCP	239.	12.50	34.	9.	3.	0.66		
+	HYDROGRAPH AT	M1	1777.	12.75	394.	117.	39.	5.59		
+	ROUTED TO	M1-M2	1176.	14.75	391.	116.	39.	5.59		
+	HYDROGRAPH AT	M2	893.	13.50	306.	77.	26.	7.53		
+	2 COMBINED AT	M	1459.	14.67	660.	188.	63.	13.12		
+	ROUTED TO	MCP	1459.	14.67	660.	188.	63.	13.12		
+	HYDROGRAPH AT	O1	489.	13.33	142.	37.	12.	3.09		
+	ROUTED TO	OCP	489.	13.33	142.	37.	12.	3.09		
+	HYDROGRAPH AT	N1	534.	12.50	84.	24.	8.	1.52		
+	ROUTED TO	N1-N2	321.	14.33	84.	24.	8.	1.52		
+	HYDROGRAPH AT	N2	564.	13.25	154.	41.	14.	3.33		
+	2 COMBINED AT	N	566.	13.25	235.	64.	21.	4.85		
+	ROUTED TO	NCP	566.	13.25	235.	64.	21.	4.85		
+	HYDROGRAPH AT	P1	471.	13.17	129.	36.	12.	2.44		
+	ROUTED TO	PCP	471.	13.17	129.	36.	12.	2.44		
+	HYDROGRAPH AT	Q1	505.	13.00	137.	40.	13.	2.23		
+	ROUTED TO	QCP	505.	13.00	137.	40.	13.	2.23		

```
 *** NORMAL END OF HEC-1 ***
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              MAY  1991            *
 *           VERSION 4.0.1E          *
 *                                   *
 *  RUN DATE            TIME         *
 *                                   *
 *************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (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
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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 SUBKERGENCE , 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   Buckeye/Sun Valley ADMS - 1 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #2 (Sub-basins S-U)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD   2.56    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   2.432    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 38           KK      S1
 39           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM   L=2.32    Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
 41           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0       0     0.0       1      22
 43           BA  1.4105
 44           LG    0.35    0.35   4.484   0.352   6.918
              * S1
 45           UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
 46           UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
 47           UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

                                        HEC-1 INPUT                                                    PAGE  2

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

 48           KK     SCP   CNAME       S
 49           KO       0       0     0.0       0      22
 50           RN     SCP

 51           KK      U1
 52           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 53           KM   L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
 54           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 55           KO       0       0     0.0       1      22
 56           BA  1.3705
 57           LG    0.35    0.37   5.258   0.233   6.449
              * U1
 58           UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
 59           UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
 60           UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
 61           UI    26.8     0.0

 62           KK     UCP   CNAME       U
 63           KO       0       0     0.0       0      22
 64           RN     UCP

 65           KK      T1
 66           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 67           KM   L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
 68           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 69           KO       0       0     0.0       1      22
 70           BA  3.0415
 71           LG    0.35    0.35   4.644   0.299  11.497
              * T1
 72           UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.78 1525.87 1807.83 2359.26
 73           UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
 74           UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 75           UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 76           UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

 77           KK     TCP   CNAME       T
 78           KO       0       0     0.0       0      22
 79           RN     TCP
 80           ZZ
```

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	S1	624.	12.33	76.	21.	7.	1.41		
+	ROUTED TO	SCP	624.	12.33	76.	21.	7.	1.41		
+	HYDROGRAPH AT	U1	615.	12.42	81.	22.	7.	1.37		
+	ROUTED TO	UCP	615.	12.42	81.	22.	7.	1.37		
+	HYDROGRAPH AT	T1	979.	12.67	191.	54.	18.	3.04		
+	ROUTED TO	TCP	979.	12.67	191.	54.	18.	3.04		

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*** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY  1991              *
*          VERSION 4.0.1E           *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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

HEC-1 INPUT PAGE 1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #3 (Sub-basins V-Y)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Date: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    2.58    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   2.451    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 38           KK      V1
 39           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM   L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
 41           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO      0       0     0.0       1      22
 43           BA  0.6646
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 44          LG    0.35    0.35   3.972   0.405  13.864
             * V1
 45          UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
 46          UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
 47          UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
 48          UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
 49          UI    0.0
                                          REC-1 INPUT                                          PAGE  2

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

 50          KK     VCP   CNAME       V
 51          KO       0       0     0.0       0      22
 52          RN     VCP

 53          KK      W1
 54          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 55          KM   L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
 56          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 57          KO       0       0     0.0       1      22
 58          BA   3.894
 59          LG    0.35    0.35   3.976    0.41  15.199
             * W1
 60          UI     0.0  297.97  297.97  920.94 1416.37 1694.97 2238.82 2710.48 3465.75 2237.36
 61          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
 62          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
 63          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 64          UI   57.11     0.0

 65          KK   W1-W2   CNAME     W2R
 66          KO       0       0     0.0       0      22
 67          RS       6    FLOW     0.0     0.0
 68          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
             * W1-W2
 69          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 70          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 71          KK      W2
 72          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 73          KM   L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
 74          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 75          KO       0       0     0.0       1      22
 76          BA  2.8478
 77          LG    0.35    0.35   4.081   0.402   3.547
             * W2
 78          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 79          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 80          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
 81          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 82          UI   41.77     0.0

 83          KK       W   CNAME     WCP
 84          KO       0       0     0.0       0      22
 85          HC       2     0.0

 86          KK     WCP   CNAME       W
 87          KO       0       0     0.0       0      22
 88          RN     WCP

 89          KK      X1
 90          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM   L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
 92          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 93          KO       0       0     0.0       1      22
 94          BA  0.7867
                                          REC-1 INPUT                                          PAGE  3

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

 95          LG    0.35    0.35   3.955   0.417  12.555
             * X1
 96          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
 97          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
 98          UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
 99          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

100          KK     XCP   CNAME       X
101          KO       0       0     0.0       0      22
102          RN     XCP

103          KK      Y1
104          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM   L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
106          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
107          KO       0       0     0.0       1      22
108          BA  0.5808
109          LG    0.35    0.35   4.044   0.415  10.947
             * Y1
110          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
111          UI   88.57   57.25   43.85   22.05   22.05   22.05     0.0

112          KK     YCP   CNAME       Y
113          KO       0       0     0.0       0      22
114          RN     YCP
115          ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	V1	236.	12.50	42.	12.	4.	0.66		
+	ROUTED TO	VCP	236.	12.50	42.	12.	4.	0.66		

```
          HYDROGRAPH AT
+                        W1      1343.  12.58        249.        74.        25.      3.89
          ROUTED TO
+                      W1-W2     1083.  13.00        248.        73.        25.      3.89
          HYDROGRAPH AT
+                        W2       848.  12.58        134.        36.        12.      2.85
          2 COMBINED AT
+                         W      1478.  13.00        378.       108.        36.      6.74
          ROUTED TO
+                       WCP      1478.  13.00        378.       108.        36.      6.74
          HYDROGRAPH AT
+                        X1       288.  12.50         48.        14.         5.      0.79
          ROUTED TO
+                       XCP       288.  12.50         48.        14.         5.      0.79
          HYDROGRAPH AT
+                        Y1       371.  12.17         34.        10.         3.      0.58
          ROUTED TO
+                       YCP       371.  12.17         34.        10.         3.      0.58

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

E.6.2.bHEC-1 Output File for 10-Year 24-Hour (Future Conditions)

```
1*************************************                    *************************************
*                                   *                    *                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *  U.S. ARMY CORPS OF ENGINEERS     *
*            MAY  1991              *                    *  HYDROLOGIC ENGINEERING CENTER    *
*          VERSION 4.0.1E           *                    *        609 SECOND STREET          *
*                                   *                    *     DAVIS, CALIFORNIA 95616       *
* RUN DATE            TIME          *                    *        (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

                                        HEC-1 INPUT                                          PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 24-hour
  4           ID   Future Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU District (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    2.62    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   2.489    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
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 35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38          IN      15 01JAN94       0
 39          JD   2.405    20.0
             * 24-hour distribution
 40          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 50          IN      15 01JAN94       0
 51          JD   2.324    40.0
             * 24-hour distribution
```



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

 52          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62          IN      15 01JAN94       0
 63          JD   2.245    80.0
             * 24-hour distribution
 64          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      G1
 75          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM          L=2.38     Lca=1.08     S=33.76      Kn=0.045      LAG=47.0
 77          KM          S-GRAPH TYPE=DESERT RANGELAND
 78          KO       0       0     0.0       1      22
 79          BA  1.1192
 80          LG   0.297   0.297   4.688   0.326  15.814
             * G1
 81          UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 82          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 83          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 84          UI   19.51   19.51   19.51   19.51   19.51     0.0

 85          KK   G1-Do
 86          KO       0       0     0.0       0      22
 87          DT    G1-D    47.0     0.0
             * Curve 1
 88          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 89          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 90          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 91          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 92          KK     GCP    CNAME       G
 93          KO       0       0     0.0       0      22
 94          RN     GCP
```



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

 95          KK      J1
 96          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 97          KM          L=4.09     Lca=1.78     S=70.82      Kn=0.055      LAG=75.0
 98          KM          S-GRAPH TYPE=DESERT RANGELAND
 99          KO       0       0     0.0       1      22
100          BA  1.7341
101          LG    0.25    0.27    3.25   0.657    30.0
             * J1
102          UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
103          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
104          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
105          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
106          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
107          UI   18.95   18.95   18.95   18.95   18.95   18.95

108          KK   J1-Do
109          KO       0       0     0.0       0      22
110          DT    J1-D   102.0     0.0
             * Curve 1
111          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
112          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
113          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
114          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

115          KK   J1-J2    CNAME     J2R
116          KO       0       0     0.0       0      22
117          RS       1    FLOW     0.0     0.0
118          RC   0.055    0.04   0.055 24090.0  0.0086     0.0
             * J1-J2
119          RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
120          RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

121          KK      J2
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122        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
123        KM         L=5.18     Lca=2.51     S=45.01     Kn=0.050     LAG=93.0
124        KM         S-GRAPH TYPE=DESERT RANGELAND
125        KO       0       0     0.0       1      22
126        BA   3.6379
127        LG    0.25    0.26   3.623   0.499    30.0
           * J2
128        UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
129        UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
130        UI  1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
131        UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
132        UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
133        UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
134        UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

135        KK   J2-Do
136        KO       0       0     0.0       0      22
137        DT    J2-D   224.0     0.0
           * Curve 1
138        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
139        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
140        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
141        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

142        KK    K3RB   CNAME   J2-K3
143        KO       0       0     0.0       0      22
144        HC       2     0.0

145        KK   J2-K3   CNAME    K3RB
146        KO       0       0     0.0       0      22
147        RS       1    FLOW     0.0     0.0
148        RC    0.05   0.048    0.05  4072.0  0.0059     0.0
           * J2-K3
149        RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
150        RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

151        KK      K1
152        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
153        KM         L=3.23     Lca=1.84     S=681.00     Kn=0.050     LAG=40.0
154        KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
155        KO       0       0     0.0       1      22
156        BA   1.543
157        LG   0.112   0.255   4.382   0.365   21.06
           * K1
158        UI     0.0  129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
159        UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
160        UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
161        UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0

162        KK   K1-K2   CNAME     K2R
163        KO       0       0     0.0       0      22
164        RS      25    FLOW     0.0     0.0
165        RC   0.048    0.05   0.048 30021.0   0.015     0.0
           * K1-K2
166        RX     0.0    20.0    55.0    85.0   235.0   259.0   289.0   309.0
167        RY    22.0    21.0    20.0    10.0    10.0    20.0    21.0    22.0

168        KK      K2
169        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
170        KM         L=7.3      Lca=4.04     S=108.84     Kn=0.055     LAG=119.0
171        KM         S-GRAPH TYPE=DESERT RANGELAND
172        KO       0       0     0.0       1      22
173        BA   2.365
174        LG   0.272   0.277   4.471   0.382   21.86
           * K2
175        UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
176        UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
177        UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

178        UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
179        UI  209.97   203.6  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
180        UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
181        UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
182        UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
183        UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

184        KK   K2-Do
185        KO       0       0     0.0       0      22
186        DT    K2-D   128.0     0.0
           * Curve 1
187        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
188        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
189        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
190        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

191        KK    K3RA   CNAME   K2-K3
192        KO       0       0     0.0       0      22
193        HC       2   1.543

194        KK   K2-K3   CNAME    K3RA
195        KO       0       0     0.0       0      22
196        RS      26    FLOW     0.0     0.0
197        RC    0.05   0.048    0.05 25950.0  0.0084     0.0
           * K2-K3
198        RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
199        RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

200        KK      F1
201        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
202        KM         L=4.07     Lca=1.63     S=441.98     Kn=0.050     LAG=46.0
203        KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
204        KO       0       0     0.0       1      22
205        BA   2.7854
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206          LG    0.24    0.27   4.322   0.384  32.052
             * F1
207          UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
208          UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
209          UI  380.98  319.46  260.61  239.96  223.29  181.76   156.3   156.3  107.68   99.77
210          UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
211          UI   39.08   39.08   39.08     0.0

212          KK   F1-Do
213          KO       0       0     0.0       0      22
214          DT    F1-D   133.0     0.0
             * Curve 1
215          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
216          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
217          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
218          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

                                        HEC-1 INPUT                                          PAGE  6

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

219          KK   F1-F2   CNAME     F2R
220          KO       0       0     0.0       0      22
221          RS      28    FLOW     0.0     0.0
222          RC   0.053   0.045   0.055  8635.0   0.012     0.0
             * F1-F2
223          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
224          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

225          KK      F2
226          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
227          KM          L=3.88     Lca=1.76     S=161.6     Kn=0.050     LAG=57.0
228          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
229          KO       0       0     0.0       1      22
230          BA  2.5261
231          LG    0.25    0.25   4.311   0.436  33.026
             * F2
232          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
233          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
234          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
235          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
236          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
237          UI    28.6    28.6    28.6     0.0

238          KK    F2-D
239          KO       0       0     0.0       0      22
240          DT    F2-D   130.0     0.0
             * Curve 1
241          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
242          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
243          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
244          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

245          KK     F3R   CNAME   F2-F3
246          KO       0       0     0.0       0      22
247          HC       2     0.0

248          KK   F2-F3   CNAME     F3R
249          KO       0       0     0.0       0      22
250          RS      16    FLOW     0.0     0.0
251          RC    0.05   0.047   0.048  7059.0    0.01     0.0
             * F2-F3
252          RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
253          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

254          KK      F3
255          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
256          KM          L=2.71     Lca=1.26     S=81.34     Kn=0.055     LAG=54.0
257          KM          S-GRAPH TYPE=DESERT RANGELAND
258          KO       0       0     0.0       1      22
259          BA  0.7363
260          LG    0.25    0.27   3.266   0.656    30.0
             * F3
261          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37

                                        HEC-1 INPUT                                          PAGE  7

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

262          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
263          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
264          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
265          UI     0.0

266          KK   F3-Do
267          KO       0       0     0.0       0      22
268          DT    F3-D    45.0     0.0
             * Curve 1
269          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
270          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
271          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
272          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

273          KK    E4RB   CNAME   F3-E4
274          KO       0       0     0.0       0      22
275          HC       2     0.0

276          KK   F3-E4   CNAME    E4RB
277          KO       0       0     0.0       0      22
278          RS      37    FLOW     0.0     0.0
279          RC    0.05   0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
280          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
281          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

282          KK      H1
283          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
284          KM          L=2.41     Lca=1.09     S=64.59     Kn=0.055     LAG=51.0
285          KM          S-GRAPH TYPE=DESERT RANGELAND
286          KO       0       0     0.0       1      22
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287          BA  1.0659
288          LG    0.25    0.29   2.733   0.945    30.0
             * H1
289          UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
290          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
291          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
292          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

293          KK   H1-Do
294          KO       0       0     0.0       0      22
295          DT    H1-D    60.0     0.0
             * Curve 1
296          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
297          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
298          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
299          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

300          KK   H1-H2   CNAME     H2R
301          KO       0       0     0.0       0      22
302          RS    -151    FLOW     0.0     0.0
303          RC   0.053    0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
304          RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
305          RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

306          KK      E1
307          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
308          KM          L=2.51     Lca=1.13     S=178.34     Kn=0.055     LAG=43.0
309          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
310          KO       0       0     0.0       1      22
311          BA  0.9558
312          LG    0.25    0.25   5.377   0.273    30.69
             * E1
313          UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  836.61
314          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
315          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
316          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
317          UI     0.0

318          KK   E1-Do
319          KO       0       0     0.0       0      22
320          DT    E1-D    53.0     0.0
             * Curve 1
321          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
322          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
323          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
324          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

325          KK   E1-E2   CNAME     E2R
326          KO       0       0     0.0       0      22
327          RS      73    FLOW     0.0     0.0
328          RC    0.05   0.047   0.046 11365.0   0.016     0.0
             * E1-E2
329          RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
330          RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

331          KK      E2
332          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
333          KM          L=2.92     Lca=0.80     S=96.39     Kn=0.055     LAG=45.0
334          KM          S-GRAPH TYPE=DESERT RANGELAND
335          KO       0       0     0.0       1      22
336          BA  1.9794
337          LG    0.25    0.25   5.043   0.306    30.0
             * E2
338          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
339          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
340          UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
341          UI   36.05   36.05   36.05   36.05
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

342          KK   E2-Do
343          KO       0       0     0.0       0      22
344          DT    E2-D   118.0     0.0
             * Curve 1
345          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
346          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
347          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
348          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

349          KK     E3R   CNAME   E2-E3
350          KO       0       0     0.0       0      22
351          HC       2     0.0

352          KK   E2-E3   CNAME     E3R
353          KO       0       0     0.0       0      22
354          RS      39    FLOW     0.0     0.0
355          RC   0.052   0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
356          RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
357          RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

358          KK      E3
359          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
360          KM          L=3.87     Lca=1.99     S=49.65     Kn=0.050     LAG=75.0
361          KM          S-GRAPH TYPE=DESERT RANGELAND
362          KO       0       0     0.0       1      22
363          BA  2.4882
364          LG    0.25    0.25   4.358   0.377    30.0
             * E3
365          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
366          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
367          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
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368          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
369          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
370          UI   27.19   27.19   27.19   27.19   27.19   27.19

371          KK   E3-Do
372          KO       0       0     0.0       0      22
373          DT    E3-D   152.0     0.0
             * Curve 1
374          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
375          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
376          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
377          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

378          KK    E4RA   CNAME   E3-E4
379          KO       0       0     0.0       0      22
380          HC       2     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

381          KK   E3-E4   CNAME    E4RA
382          KO       0       0     0.0       0      22
383          RS      48    FLOW     0.0     0.0
384          RC   0.056   0.049   0.056 13855.0  0.0048     0.0
             * E3-E4
385          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
386          RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

387          KK      N2
388          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
389          KM          L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
390          KM          S-GRAPH TYPE=DESERT RANGELAND
391          KO       0       0     0.0       1      22
392          BA  1.4003
393          LG    0.25    0.27   3.222   0.664    30.0
             * N2
394          UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
395          UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
396          UI  456.78  413.67  373.55  343.34  306.19   279.6  254.36  232.34  208.24  189.81
397          UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
398          UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
399          UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
400          UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

401          KK   H2-Do
402          KO       0       0     0.0       0      22
403          DT    H2-D    88.0     0.0
             * Curve 1
404          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
405          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
406          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
407          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

408          KK      E4
409          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
410          KM          L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
411          KM          S-GRAPH TYPE=DESERT RANGELAND
412          KO       0       0     0.0       1      22
413          BA  3.0419
414          LG    0.25    0.25   3.816   0.441    30.0
             * E4
415          UI     0.0  100.41  100.41  100.41  100.41   158.4  268.68  358.14  433.81  515.03
416          UI   586.7  661.72  710.69  802.46  849.75  890.64  905.96  962.27  962.27  962.27
417          UI  958.04  920.58  904.74  855.35  781.12  732.29  671.26  604.24  557.18   512.1
418          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
419          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
420          UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
421          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
422          UI   24.44   24.44   24.44   24.44   24.44   24.44
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

423          KK   E4-Do
424          KO       0       0     0.0       0      22
425          DT    E4-D   190.0     0.0
             * Curve 1
426          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
427          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
428          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
429          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

430          KK     E5R   CNAME  E4H2E5
431          KO       0       0     0.0       0      22
432          HC       5     0.0

433          KK  E4H2E5    CNAME     E5R
434          KO       0       0     0.0       0      22
435          RS      33    FLOW     0.0     0.0
436          RC    0.06    0.05    0.06 15206.0  0.0051     0.0
             * E4H2-E5
437          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
438          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

439          KK      K3
440          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
441          KM          L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
442          KM          S-GRAPH TYPE=DESERT RANGELAND
443          KO       0       0     0.0       1      22
444          BA  1.6364
445          LG    0.25    0.27   3.421     0.6    30.0
             * K3
446          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
447          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
448          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
449          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
450          UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
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451        UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
452        UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

453        KK   K3-Do
454        KO       0       0     0.0       0      22
455        DT    K3-D   101.0     0.0
           * Curve 1
456        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
457        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
458        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
459        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

460        KK      E5
461        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
462        KM          L=3.01     Lca=1.41     S=28.56     Kn=0.050     LAG=66.0
463        KM          S-GRAPH TYPE=DESERT RANGELAND
464        KO       0       0     0.0       1      22
465        BA  1.3075
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

466        LG    0.25    0.25    3.94   0.473    30.0
           * E5
467        UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
468        UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
469        UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
470        UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
471        UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

472        KK   E5-Do
473        KO       0       0     0.0       0      22
474        DT    E5-D    79.0     0.0
           * Curve 1
475        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
476        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
477        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
478        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

479        KK     E6R   CNAME  E5K2E6
480        KO       0       0     0.0       0      22
481        RC       5   1.543

482        KK  E5K2E6   CNAME     E6R
483        KO       0       0     0.0       0      22
484        RS      12    FLOW     0.0     0.0
485        RC   0.063   0.051   0.063  5083.0  0.0037     0.0
           * E5K3-E6
486        RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
487        RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

488        KK      E6
489        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
490        KM          L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
491        KM          S-GRAPH TYPE=DESERT RANGELAND
492        KO       0       0     0.0       1      22
493        BA  2.0375
494        LG   0.289   0.289   4.356   0.392  18.293
           * E6
495        UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
496        UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
497        UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
498        UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
499        UI   29.29   29.29     0.0

500        KK   E6-Do
501        KO       0       0     0.0       0      22
502        DT    E6-D   100.0     0.0
           * Curve 1
503        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
504        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
505        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
506        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

507        KK       E    CNAME     ECP
508        KO       0       0     0.0       0      22
509        RC       2   1.543

510        KK     ECP    CNAME       E
511        KO       0       0     0.0       0      22
512        RN     ECP
513        ZZ
```

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	G1	427.	12.67	82.	24.	8.	1.12		
+	DIVERSION TO	G1-D	427.	12.67	82.	24.	8.	1.12		
+	HYDROGRAPH AT	G1-Do	2.	16.42	2.	1.	0.	1.12		
+	ROUTED TO	GCP	2.	16.42	2.	1.	0.	1.12		
	HYDROGRAPH AT									

+		J1	459.	13.08	147.	47.	16.	1.73
+	DIVERSION TO	J1-D	459.	13.08	147.	47.	16.	1.73
+	HYDROGRAPH AT	J1-Do	0.	0.08	0.	0.	0.	1.73
+	ROUTED TO	J1-J2	0.	0.08	0.	0.	0.	1.73
+	HYDROGRAPH AT	J2	858.	13.33	322.	102.	34.	3.64
+	DIVERSION TO	J2-D	858.	13.33	322.	102.	34.	3.64
+	HYDROGRAPH AT	J2-Do	0.	0.08	0.	0.	0.	3.64
+	2 COMBINED AT	K3RB	0.	0.08	0.	0.	0.	5.37
+	ROUTED TO	J2-K3	0.	0.08	0.	0.	0.	5.37
+	HYDROGRAPH AT	K1	741.	12.50	131.	39.	13.	1.54
+	ROUTED TO	K1-K2	333.	14.50	131.	39.	13.	1.54
+	HYDROGRAPH AT	K2	418.	13.67	185.	57.	19.	2.37
+	DIVERSION TO	K2-D	418.	13.67	185.	57.	19.	2.37
+	HYDROGRAPH AT	K2-Do	0.	0.08	0.	0.	0.	2.37
+	2 COMBINED AT	K3RA	333.	14.50	131.	39.	13.	1.54
+	ROUTED TO	K2-K3	268.	16.50	129.	39.	13.	1.54
+	HYDROGRAPH AT	F1	1246.	12.58	265.	84.	28.	2.79
+	DIVERSION TO	F1-D	1246.	12.58	243.	67.	22.	2.79
+	HYDROGRAPH AT	F1-Do	172.	14.17	51.	17.	6.	2.79
+	ROUTED TO	F1-F2	150.	14.83	50.	17.	6.	2.79
+	HYDROGRAPH AT	F2	959.	12.75	240.	76.	26.	2.53
+	DIVERSION TO	F2-D	959.	12.75	233.	66.	22.	2.53
+	HYDROGRAPH AT	F2-D	66.	15.58	31.	11.	4.	2.53
+	2 COMBINED AT	F3R	163.	14.83	78.	27.	9.	5.31
+	ROUTED TO	F2-F3	144.	16.17	76.	27.	9.	5.31
+	HYDROGRAPH AT	F3	257.	12.75	63.	20.	7.	0.74
+	DIVERSION TO	F3-D	257.	12.75	63.	20.	7.	0.74
+	HYDROGRAPH AT	F3-Do	0.	0.08	0.	0.	0.	0.74
+	2 COMBINED AT	E4RB	144.	16.17	76.	27.	9.	6.05
+	ROUTED TO	F3-E4	122.	16.50	68.	27.	9.	6.05
+	HYDROGRAPH AT	H1	337.	12.67	83.	27.	9.	1.07
+	DIVERSION TO	H1-D	337.	12.67	83.	27.	9.	1.07
+	HYDROGRAPH AT	H1-Do	0.	0.08	0.	0.	0.	1.07
+	ROUTED TO	H1-H2	0.	0.08	0.	0.	0.	1.07
+	HYDROGRAPH AT	E1	480.	12.50	96.	30.	10.	0.96
+	DIVERSION TO	E1-D	480.	12.50	94.	27.	9.	0.96
+	HYDROGRAPH AT	E1-Do	12.	14.58	8.	3.	1.	0.96
+	ROUTED TO	E1-E2	11.	15.83	8.	3.	1.	0.96
	HYDROGRAPH AT							

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+                    E2      935.  12.58      191.      59.      20.     1.98
        DIVERSION TO
+                    E2-D    935.  12.58      191.      59.      20.     1.98
        HYDROGRAPH AT
+                    E2-Do     4.  18.75        3.       1.       0.     1.98
        2 COMBINED AT
+                    E3R      13.  18.75       10.       3.       1.     2.94
        ROUTED TO
+                    E2-E3    12.  21.92        9.       3.       1.     2.94
        HYDROGRAPH AT
+                    E3      741.  13.08      232.      73.      24.     2.49
        DIVERSION TO
+                    E3-D    741.  13.08      232.      73.      24.     2.49
        HYDROGRAPH AT
+                    E3-Do     2.  24.75        0.       0.       0.     2.49
        2 COMBINED AT
+                    E4RA     12.  21.92       10.       3.       1.     5.42
        ROUTED TO
+                    E3-E4    10.  25.42        8.       3.       1.     5.42
        HYDROGRAPH AT
+                    H2      323.  13.25      118.      38.      13.     1.40
        DIVERSION TO
+                    H2-D    323.  13.25      118.      38.      13.     1.40
        HYDROGRAPH AT
+                    H2-Do     0.   0.08        0.       0.       0.     1.40
        HYDROGRAPH AT
+                    E4      684.  13.42      275.      87.      29.     3.04
        DIVERSION TO
+                    E4-D    684.  13.42      275.      87.      29.     3.04
        HYDROGRAPH AT
+                    E4-Do     0.   0.08        0.       0.       0.     3.04
        5 COMBINED AT
+                    E5R     123.  18.50       69.      29.      10.    16.98
        ROUTED TO
+                    E4H2E5   62.  22.00       48.      22.       7.    16.98
        HYDROGRAPH AT
+                    K3      368.  13.33      140.      45.      15.     1.64
        DIVERSION TO
+                    K3-D    368.  13.33      140.      45.      15.     1.64
        HYDROGRAPH AT
+                    K3-Do     0.   0.08        0.       0.       0.     1.64
        HYDROGRAPH AT
+                    E5      417.  12.92      119.      37.      13.     1.31
        DIVERSION TO
+                    E5-D    417.  12.92      119.      37.      13.     1.31
        HYDROGRAPH AT
+                    E5-Do     0.   0.08        0.       0.       0.     1.31
        5 COMBINED AT
+                    E6R     268.  16.50      170.      71.      24.     1.54
        ROUTED TO
+                    E5K2E6  261.  17.42      168.      71.      24.     1.54
        HYDROGRAPH AT
+                    E6      643.  12.83      151.      45.      15.     2.04
        DIVERSION TO
+                    E6-D    643.  12.83      151.      45.      15.     2.04
        HYDROGRAPH AT
+                    E6-Do     0.   0.08        0.       0.       0.     2.04
        2 COMBINED AT
+                    E       261.  17.42      168.      71.      24.     1.54
        ROUTED TO
+                    ECP     261.  17.42      168.      71.      24.     1.54

 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*              MAY  1991            *
*           VERSION 4.0.1E          *
*                                   *
* RUN DATE            TIME          *
*                                   *
*************************************

*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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
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                                        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   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 24-hour
  4           ID   Future Conditions
  5           ID   FRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)    Lca(mi)    S(ft/mi)    LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    2.62    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   2.489    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   2.405    20.0
              * 24-hour distribution
 40           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 50           IN      15 01JAN94       0
 51           JD   2.324    40.0
              * 24-hour distribution

                                        HEC-1 INPUT                                                    PAGE  2

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

 52           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62           IN      15 01JAN94       0
 63           JD   2.245    80.0
              * 24-hour distribution
 64           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74           KK      R1
 75           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76           KM         L=1.01     Lca=0.46     S=213.31     Kn=0.050     LAG=19.0
 77           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 78           KO      0       0     0.0       1      22
 79           BA  0.2836
 80           LG   0.181   0.282   4.358   0.474  62.581
              * R1
 81           UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
 82           UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0
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 83          KK   R1-Do
 84          KO       0       0     0.0       0      22
 85          DT    R1-D    24.0     0.0
             * Curve 1
 86          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 87          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 88          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 89          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 90          KK     RCP   CNAME       R
 91          KO       0       0     0.0       0      22
 92          RN     RCP

 93          KK      L1
 94          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 95          KM         L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
 96          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 97          KO       0       0     0.0       1      22
 98          BA  3.5462
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 99          LG   0.271   0.318   4.357   0.352  16.317
             * L1
100          UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
101          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
102          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
103          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
104          UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
105          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

106          KK   L1-L2   CNAME     L2R
107          KO       0       0     0.0       0      22
108          RS      14    FLOW     0.0     0.0
109          RC   0.046   0.045   0.046 28949.0  0.0147     0.0
             * L1-L2
110          RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
111          RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

112          KK      L2
113          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
114          KM         L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
115          KM         S-GRAPH TYPE=DESERT RANGELAND
116          KO       0       0     0.0       1      22
117          BA  7.3294
118          LG    0.24   0.257   4.202   0.462  33.542
             * L2
119          UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
120          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
121          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
122          UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
123          UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
124          UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
125          UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

126          KK   L2-Do
127          KO       0       0     0.0       0      22
128          DT    L2-D   475.0     0.0
             * Curve 1
129          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
130          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
131          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
132          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

133          KK     L3R   CNAME   L2-L3
134          KO       0       0     0.0       0      22
135          HC       2     0.0

136          KK   L2-L3   CNAME     L3R
137          KO       0       0     0.0       0      22
138          RS      34    FLOW     0.0     0.0
139          RC    0.05   0.045    0.06 20567.0  0.0084     0.0
             * L2-L3
140          RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
141          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

142          KK      L3
143          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
144          KM         L=4.75      Lca=2.00      S=44.27      Kn=0.055      LAG=91.0
145          KM         S-GRAPH TYPE=DESERT RANGELAND
146          KO       0       0     0.0       1      22
147          BA  5.8518
148          LG   0.205   0.257    3.98   0.449  45.272
             * L3
149          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
150          UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
151          UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
152          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
153          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
154          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
155          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

156          KK   L3-Do
157          KO       0       0     0.0       0      22
158          DT    L3-D   456.9     0.0
             * Curve 2
159          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
160          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
161          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
162          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

163          KK       L   CNAME     LCP
164          KO       0       0     0.0       0      22
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165          RC       2     0.0

166          KK     LCP   CNAME       L
167          KO       0       0     0.0       0      22
168          RN     LCP

169          KK      Z1
170          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
171          KM          L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
172          KM          S-GRAPH TYPE=DESERT RANGELAND
173          KO       0       0     0.0       1      22
174          BA  0.6644
175          LG   0.168   0.277   4.004   0.499  58.182
             * Z1
176          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
177          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
178          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

179          KK   Z1-Do
180          KO       0       0     0.0       0      22
181          DT    Z1-D    58.0     0.0
             * Curve 1
182          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
183          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
184          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

185          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

186          KK     ZCP   CNAME       Z
187          KO       0       0     0.0       0      22
188          RN     ZCP

189          KK      M1
190          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
191          KM          L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
192          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
193          KO       0       0     0.0       1      22
194          BA  5.5949
195          LG   0.349   0.349   4.306   0.348  17.433
             * M1
196          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
197          UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
198          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
199          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
200          UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
201          UI   64.47   64.47     0.0

202          KK   M1-Do
203          KO       0       0     0.0       0      22
204          DT    M1-D   170.0     0.0
             * Curve 1
205          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
206          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
207          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
208          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

209          KK   M1-M2   CNAME     M2R
210          KO       0       0     0.0       0      22
211          RS     -56    FLOW     0.0     0.0
212          RC    0.04    0.04   0.045 38719.0  0.0133     0.0
             * M1-M2
213          RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
214          RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

215          KK      M2
216          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
217          KM          L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
218          KM          S-GRAPH TYPE=DESERT RANGELAND
219          KO       0       0     0.0       1      22
220          BA  7.5274
221          LG   0.205   0.255   3.952   0.547  45.552
             * M2
222          UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
223          UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
224          UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
225          UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
226          UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
227          UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
228          UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
229          UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

230          KK   M2-Do
231          KO       0       0     0.0       0      22
232          DT    M2-D   585.0     0.0
             * Curve 1
233          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
234          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
235          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
236          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

237          KK       M   CNAME     MCP
238          KO       0       0     0.0       0      22
239          RC       2     0.0

240          KK     MCP   CNAME       M
241          KO       0       0     0.0       0      22
242          RN     MCP

243          KK      O1
244          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
245          KM          L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
246          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
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247        KO       0       0     0.0       1      22
248        BA  3.0883
249        LG   0.252   0.252   4.189   0.443   31.44
           * O1
250        UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
251        UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
252        UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
253        UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
254        UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
255        UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
256        UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
257        UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
258        UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
259        UI   19.93   19.93   19.93     0.0

260        KK   O1-Do
261        KO       0       0     0.0       0      22
262        DT    O1-D   150.0     0.0
           * Curve 1
263        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
264        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
265        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
266        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

267        KK     OCP    CNAME       O
268        KO       0       0     0.0       0      22
269        RN     OCP
```



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

270        KK      N1
271        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
272        KM          L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
273        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
274        KO       0       0     0.0       1      22
275        BA   1.524
276        LG   0.289   0.289   4.075   0.469  26.648
           * N1
277        UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
278        UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
279        UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
280        UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

281        KK   N1-Do
282        KO       0       0     0.0       0      22
283        DT    N1-D    65.0     0.0
           * Curve 1
284        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
285        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
286        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
287        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

288        KK   N1-N2    CNAME     N2R
289        KO       0       0     0.0       0      22
290        RS      47    FLOW     0.0     0.0
291        RC    0.05   0.047    0.05 26511.0  0.0115     0.0
           * N1-N2
292        RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
293        RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

294        KK      N2
295        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
296        KM          L=5.64     Lca=3.27     S=170.14     Kn=0.055     LAG=51.0
297        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
298        KO       0       0     0.0       1      22
299        BA  3.3254
300        LG   0.268   0.268   4.117   0.446  27.305
           * N2
301        UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
302        UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
303        UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
304        UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
305        UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
306        UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
307        UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
308        UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
309        UI   23.58   23.58   23.58   23.58   23.58
```



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

310        KK   N2-Do
311        KO       0       0     0.0       0      22
312        DT    N2-D   150.0     0.0
           * Curve 1
313        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
314        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
315        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
316        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

317        KK       N    CNAME     NCP
318        KO       0       0     0.0       0      22
319        HC       2     0.0

320        KK     NCP    CNAME       N
321        KO       0       0     0.0       0      22
322        RN     NCP

323        KK      P1
324        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
325        KM          L=6.39     Lca=2.62     S=200.13     Kn=0.055     LAG=85.0
326        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
327        KO       0       0     0.0       1      22
328        BA  2.4365
329        LG   0.312   0.312   4.193   0.424    18.0
           * P1
```

```
330          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
331          UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
332          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
333          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
334          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
335          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
336          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
337          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0

338          KK   P1-Do
339          KO       0       0     0.0       0      22
340          DT    P1-D    85.0     0.0
             * Curve 1
341          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
342          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
343          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
344          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

345          KK     PCP   CNAME       P
346          KO       0       0     0.0       0      22
347          RN     PCP
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

348          KK      Q1
349          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
350          KM         L=5.23     Lca=2.81     S=228.56     Kn=0.055     LAG=78.0
351          KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
352          KO       0       0     0.0       1      22
353          BA  2.2336
354          LG   0.338    0.34   4.203   0.396  15.896
             * Q1
355          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
356          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
357          UI  505.03  473.57  449.52  412.98  365.87  360.82  325.28  298.43  254.89  242.17
358          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
359          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
360          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
361          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
362          UI   18.48   18.48   18.48

363          KK    Q1-Do
364          KO       0       0     0.0       0      22
365          DT     Q1-D    71.5     0.0
             * Curve 1
366          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
367          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
368          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
369          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

370          KK     QCP   CNAME       Q
371          KO       0       0     0.0       0      22
372          RN     QCP
373          ZZ
```

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	R1	268.	12.25	39.	13.	4.	0.28		
+	DIVERSION TO	R1-D	268.	12.25	39.	12.	4.	0.28		
+	HYDROGRAPH AT	R1-Do	5.	18.58	4.	1.	0.	0.28		
+	ROUTED TO	RCP	5.	18.58	4.	1.	0.	0.28		
+	HYDROGRAPH AT	L1	1090.	12.75	255.	75.	25.	3.55		
+	ROUTED TO	L1-L2	830.	13.83	253.	75.	25.	3.55		
+	HYDROGRAPH AT	L2	1843.	13.25	684.	220.	74.	7.33		
+	DIVERSION TO	L2-D	1843.	13.25	684.	220.	74.	7.33		
+	HYDROGRAPH AT	L2-Do	0.	0.08	0.	0.	0.	7.33		
+	2 COMBINED AT	L3R	830.	13.83	253.	75.	25.	10.88		
+	ROUTED TO	L2-L3	598.	16.50	248.	74.	25.	10.88		
+	HYDROGRAPH AT	L3	1680.	13.33	650.	215.	72.	5.85		
+	DIVERSION TO	L3-D	1680.	13.33	650.	215.	72.	5.85		
+	HYDROGRAPH AT	L3-Do	0.	0.08	0.	0.	0.	5.85		
+	2 COMBINED AT	L	598.	16.50	248.	74.	25.	16.73		

+	ROUTED TO	LCP	582.	16.42	240.	71.	24.	16.73
+	HYDROGRAPH AT	Z1	410.	12.50	87.	29.	10.	0.66
+	DIVERSION TO	Z1-D	410.	12.50	87.	29.	10.	0.66
+	HYDROGRAPH AT	Z1-Do	3.	20.75	2.	1.	0.	0.66
+	ROUTED TO	ZCP	3.	20.75	2.	1.	0.	0.66
+	HYDROGRAPH AT	M1	1783.	12.75	397.	118.	40.	5.59
+	DIVERSION TO	M1-D	1783.	12.75	319.	86.	29.	5.59
+	HYDROGRAPH AT	M1-Do	563.	13.67	111.	33.	11.	5.59
+	ROUTED TO	M1-M2	84.	15.83	69.	31.	11.	5.59
+	HYDROGRAPH AT	M2	1900.	13.50	812.	272.	91.	7.53
+	DIVERSION TO	M2-D	1900.	13.50	812.	272.	91.	7.53
+	HYDROGRAPH AT	M2-Do	0.	0.08	0.	0.	0.	7.53
+	2 COMBINED AT	M	84.	15.83	69.	31.	11.	13.12
+	ROUTED TO	MCP	73.	16.08	60.	28.	10.	13.12
+	HYDROGRAPH AT	O1	772.	13.33	278.	90.	30.	3.09
+	DIVERSION TO	O1-D	772.	13.33	267.	76.	25.	3.09
+	HYDROGRAPH AT	O1-Do	105.	16.58	46.	15.	5.	3.09
+	ROUTED TO	OCP	105.	16.58	46.	15.	5.	3.09
+	HYDROGRAPH AT	N1	673.	12.50	127.	40.	13.	1.52
+	DIVERSION TO	N1-D	673.	12.50	119.	33.	11.	1.52
+	HYDROGRAPH AT	N1-Do	63.	14.17	21.	7.	2.	1.52
+	ROUTED TO	N1-N2	33.	17.00	18.	7.	2.	1.52
+	HYDROGRAPH AT	N2	834.	13.25	279.	89.	30.	3.33
+	DIVERSION TO	N2-D	834.	13.25	270.	76.	25.	3.33
+	HYDROGRAPH AT	N2-Do	98.	16.42	41.	14.	5.	3.33
+	2 COMBINED AT	N	110.	17.00	57.	20.	7.	4.85
+	ROUTED TO	NCP	110.	17.00	57.	20.	7.	4.85
+	HYDROGRAPH AT	P1	561.	13.17	170.	52.	17.	2.44
+	DIVERSION TO	P1-D	561.	13.17	157.	43.	14.	2.44
+	HYDROGRAPH AT	P1-Do	84.	15.58	29.	9.	3.	2.44
+	ROUTED TO	PCP	84.	15.58	29.	9.	3.	2.44
+	HYDROGRAPH AT	Q1	534.	13.00	149.	45.	15.	2.23
+	DIVERSION TO	Q1-D	534.	13.00	134.	36.	12.	2.23
+	HYDROGRAPH AT	Q1-Do	93.	15.00	29.	9.	3.	2.23
+	ROUTED TO	QCP	93.	15.00	29.	9.	3.	2.23

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

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1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*             MAY  1991             *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
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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

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                                        HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lezue & Wen Chen
  3           ID   10-year 24-hour
  4           ID   Future Conditions
  5           ID   FRS #2 (Sub-basins S-U)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    2.56    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   2.432    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 38           KK      S1
 39           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM         L=2.32    Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
 41           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0       0     0.0       1      22
 43           BA  1.4105
 44           LG   0.269   0.313   4.485   0.392  25.978
              * S1
 45           UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
 46           UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
 47           UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0
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                                        HEC-1 INPUT                                                    PAGE  2

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


 48           KK   S1-Do
 49           KO       0       0     0.0       0      22
 50           DT    S1-D    61.0     0.0
              * Curve 1
 51           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 52           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 53           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 54           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 55           KK     SCP   CNAME       S
 56           KO       0       0     0.0       0      22
 57           RN     SCP

 58           KK      U1
 59           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 60           KM         L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
 61           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
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```
 62          KO       0       0     0.0       1      22
 63          BA  1.3705
 64          LG   0.316   0.329   5.226   0.254  17.067
             * U1
 65          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
 66          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
 67          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
 68          UI    26.8     0.0

 69          KK   U1-Do
 70          KO       0       0     0.0       0      22
 71          DT    U1-D    47.0     0.0
             * Curve 1
 72          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 73          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 74          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 75          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 76          KK     UCP   CNAME       U
 77          KO       0       0     0.0       0      22
 78          RN     UCP

 79          KK      T1
 80          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 81          KM          L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
 82          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 83          KO       0       0     0.0       1      22
 84          BA  3.0415
 85          LG   0.327   0.327   4.641   0.316    18.7
             * T1
 86          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
 87          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
 88          UI  476.04  446.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 89          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 90          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49
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HEC-1 INPUT PAGE 3

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

 91          KK   T1-Do
 92          KO       0       0     0.0       0      22
 93          DT    T1-D   103.0     0.0
             * Curve 2
 94          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 95          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 96          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 97          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 98          KK     TCP   CNAME       T
 99          KO       0       0     0.0       0      22
100          RN     TCP
101          ZZ
```

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	S1	763.	12.33	115.	36.	12.	1.41		
+	DIVERSION TO	S1-D	763.	12.33	111.	31.	10.	1.41		
+	HYDROGRAPH AT	S1-Do	25.	13.50	14.	5.	2.	1.41		
+	ROUTED TO	SCP	25.	13.50	14.	5.	2.	1.41		
+	HYDROGRAPH AT	U1	683.	12.42	202.	30.	10.	1.37		
+	DIVERSION TO	U1-D	683.	12.42	89.	24.	8.	1.37		
+	HYDROGRAPH AT	U1-Do	114.	13.33	20.	6.	2.	1.37		
+	ROUTED TO	UCP	114.	13.33	20.	6.	2.	1.37		
+	HYDROGRAPH AT	T1	1062.	12.67	222.	66.	22.	3.04		
+	DIVERSION TO	T1-D	1062.	12.67	193.	52.	17.	3.04		
+	HYDROGRAPH AT	T1-Do	209.	13.92	47.	15.	5.	3.04		
+	ROUTED TO	TCP	209.	13.92	47.	15.	5.	3.04		

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

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1*************************************                    *************************************
*                                   *                    *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *   U.S. ARMY CORPS OF ENGINEERS    *
*             MAY  1991             *                    *   HYDROLOGIC ENGINEERING CENTER   *
*           VERSION 4.0.1E          *                    *         609 SECOND STREET         *
*                                   *                    *      DAVIS, CALIFORNIA 95616      *
* RUN DATE            TIME          *                    *         (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

                                        HEC-1 INPUT                                          PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   10-year 24-hour
  4           ID   Future Conditions
  5           ID   FRS #3 (Sub-basins V-Y)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)    Lca(mi)    S(ft/mi)    LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    2.58     0.01
              * 24-hour distribution
 16           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 17           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 18           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 19           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 20           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 21           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 22           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 23           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 24           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 25           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 26           IN      15 01JAN94       0
 27           JD   2.451     10.0
              * 24-hour distribution
 28           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 29           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 30           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 31           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 32           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 33           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 34           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 35           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 36           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 37           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0

 38           KK      V1
 39           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM         L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
 41           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO      0       0     0.0       1      22
 43           BA  0.6646
 44           LG   0.335    0.335    3.971    0.405   18.644
              * V1
 45           UI     0.0    52.04    54.19   166.27   256.03   338.03   396.86   496.51   578.99   373.13
 46           UI  313.66   281.75   250.64   220.87   193.81   162.52   133.66   122.94   111.92     90.9
 47           UI   74.78    66.34    56.99     53.4     39.9     39.9    30.81    25.47    25.47    25.47
 48           UI   16.36     9.97     9.97     9.97     9.97     9.97     9.97     9.97     9.97     9.97
 49           UI     0.0

                                        HEC-1 INPUT                                          PAGE  2

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


 50           KK   V1-Do
 51           KO      0       0     0.0       0      22
 52           DT    V1-D    23.0     0.0
              * Curve 3
 53           DI     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
 54           DI   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0
              * Curve 1
 55           DQ     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
 56           DQ   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0

 57           KK     VCP    CNAME       V
 58           KO       0       0     0.0       0      22
 59           RM     VCP

 60           KK      W1
 61           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
```

```
 62          KM         L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
 63          KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
 64          KO      0       0     0.0       1      22
 65          BA   3.894
 66          LG    0.35    0.35   3.975    0.41  15.228
             * W1
 67          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 68          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
 69          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
 70          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 71          UI   57.11     0.0

 72          KK   W1-W2   CNAME     W2R
 73          KO      0       0     0.0       0      22
 74          RS      6    FLOW     0.0     0.0
 75          RC  0.050    0.05    0.06 11249.0  0.0189     0.0
             * W1-W2
 76          RX    0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 77          RY   17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 78          KK      W2
 79          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 80          KM         L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
 81          KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
 82          KO      0       0     0.0       1      22
 83          BA  2.8478
 84          LG  0.321   0.321   4.063   0.409  12.128
             * W2
 85          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 86          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 87          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
 88          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 89          UI   41.77     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 90          KK   W2-Do
 91          KO      0       0     0.0       0      22
 92          DT    W2-D   130.0     0.0
             * Curve 1
 93          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 94          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 2
 95          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 96          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 97          KK       W   CNAME     WCP
 98          KO       0       0     0.0       0      22
 99          RC       2     0.0

100          KK     WCP   CNAME       W
101          KO       0       0     0.0       0      22
102          RN     WCP

103          KK      X1
104          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM         L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
106          KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
107          KO      0       0     0.0       1      22
108          BA  0.7867
109          LG    0.35    0.35   3.947   0.418  12.841
             * X1
110          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
111          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
112          UI   76.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
113          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

114          KK     XCP   CNAME       X
115          KO       0       0     0.0       0      22
116          RN     XCP

117          KK      Y1
118          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
119          KM         L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
120          KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
121          KO      0       0     0.0       1      22
122          BA  0.5808
123          LG    0.35    0.35   4.051   0.415  10.599
             * Y1
124          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
125          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

126          KK     YCP   CNAME       Y
127          KO       0       0     0.0       0      22
128          RN     YCP
129          ZZ
```

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	V1	254.	12.50	48.	14.	5.	0.66		
+	DIVERSION TO	V1-D	254.	12.50	43.	12.	4.	0.66		
+	HYDROGRAPH AT	V1-Do	31.	14.00	9.	3.	1.	0.66		
+	ROUTED TO	VCP	31.	14.00	9.	3.	1.	0.66		
+	HYDROGRAPH AT	W1	1343.	12.58	249.	74.	25.	3.89		

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          ROUTED TO
+                    W1-W2     1084.   13.00       248.        73.        25.      3.89
          HYDROGRAPH AT
+                      W2      980.   12.58       174.        50.        17.      2.85
          DIVERSION TO
+                     W2-D      980.   12.58       174.        50.        17.      2.85
          HYDROGRAPH AT
+                    W2-Do        0.    0.08         0.         0.         0.      2.85
          2 COMBINED AT
+                       W     1084.   13.00       248.        73.        25.      6.74
          ROUTED TO
+                     WCP     1074.   13.00       247.        73.        24.      6.74
          HYDROGRAPH AT
+                      X1      289.   12.50        48.        14.         5.      0.79
          ROUTED TO
+                     XCP      289.   12.50        48.        14.         5.      0.79
          HYDROGRAPH AT
+                      Y1      369.   12.17        34.        10.         3.      0.58
          ROUTED TO
+                     YCP      369.   12.17        34.        10.         3.      0.58

*** NORMAL END OF HEC-1 ***
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E.6.3 ..... HEC-1 Output File 100-Year 6-Hour

E.6.3.a HEC-1 Output File for 100-Year 6-Hour (Exisiting Conditions)

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1*************************************                    *************************************
*                                   *                    *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *   U.S. ARMY CORPS OF ENGINEERS    *
*             MAY  1991             *                    *   HYDROLOGIC ENGINEERING CENTER   *
*           VERSION 4.0.1E          *                    *        609 SECOND STREET          *
*                                   *                    *      DAVIS, CALIFORNIA 95616      *
*  RUN DATE            TIME         *                    *         (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

                                        HEC-1 INPUT                                          PAGE  1

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

   1          ID  Buckeye/Sun Valley ADMS - 01 March 2004
   2          ID  PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID  100-year 6-hour
   4          ID  Existing Conditions
   5          ID  Area 3 - Sub-basins A-C
   6          ID  Rainfall Loss Method - Green & Ampt
   7          ID  Unit Hydrograph Method - FCDMC S-Graph
   8          ID  Channel Routing Method - Normal Depth
   9          ID  Land Use - FCDMC GIS Data: mag_landuse (2000)
  10          ID  Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       3
  14          IN      15 01JAN94       0
  15          JD    3.22     0.01
              * 6-hour distribution, pattern 1.0
  16          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  17          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  18          PC   0.962   0.972   0.983   0.991     1.0
  19          IN      15 01JAN94       0
  20          JD   3.201     0.5
              * 6-hour distribution, pattern 1.0
  21          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  22          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  23          PC   0.962   0.972   0.983   0.991     1.0
  24          IN      15 01JAN94       0
  25          JD   3.178     1.0
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            * 6-hour distribution, pattern 1.4
 26         PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
 27         PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
 28         PC  0.9572  0.9684  0.9798  0.9898     1.0
 29         IN      15 01JAN94       0
 30         JD   3.091     5.0
            * 6-hour distribution, pattern 2.3
 31         PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
 32         PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
 33         PC  0.9487   0.962  0.9743  0.9877     1.0
 34         IN      15 01JAN94       0
 35         JD   3.027    10.0
            * 6-hour distribution, pattern 2.7
 36         PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
 37         PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
 38         PC  0.9471  0.9608  0.9735  0.9873     1.0
 39         IN      15 01JAN94       0
 40         JD    2.93    20.0
            * 6-hour distribution, pattern 3.1
 41         PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
 42         PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
 43         PC  0.9434   0.958  0.9718  0.9863     1.0
```

HEC-1 INPUT PAGE 2

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

 44         KK      C1
 45         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 46         KM   L=3.99      Lca=2.01      S=387.22      Kn=0.050      LAG=51.0
 47         KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 48         KO      0        0     0.0       1      22
 49         BA  3.5862
 50         LG   0.215    0.296   3.933   0.407  21.409
            * C1
 51         UI     0.0  236.76  236.76  527.08  911.83 1306.09 1576.15 1799.13  2131.6 2781.78
 52         UI  2038.2 1574.43 1396.84 1275.29 1154.27 1044.98  935.76  822.33  695.81  603.68
 53         UI  561.29  519.88  455.15  388.96  307.02  297.68   259.3   259.3  183.85  181.51
 54         UI  181.51  121.77  115.86  115.86  115.86  107.68   45.38   45.38   45.38   45.38
 55         UI   45.38   45.38   45.38   45.38   45.38   45.38   45.38   45.38

 56         KK   C1-C2   CNAME     C2R
 57         KO      0       0     0.0       0      22
 58         RS      6    FLOW     0.0     0.0
 59         RC   0.05   0.044    0.05 18437.0  0.0176     0.0
            * C1-C2
 60         RX     0.0    35.0    90.0   138.0   159.0   209.0   264.0   309.0
 61         RY    21.0    19.0    16.0    10.0    10.0    15.0    20.0    24.0

 62         KK      C2
 63         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 64         KM   L=3.69      Lca=1.53      S=105.29      Kn=0.055      LAG=63.0
 65         KM   S-GRAPH TYPE=DESERT RANGELAND
 66         KO      0       0     0.0       1      22
 67         BA  1.9204
 68         LG    0.35    0.35    3.92   0.436     0.0
            * C2
 69         UI     0.0  102.63  102.63  122.26  304.94  432.24  556.99  679.25  778.73  881.69
 70         UI   929.5  983.56  983.56  952.35  904.47  807.23  701.83  605.44  531.11  463.45
 71         UI  404.15  349.94  303.68  267.04  229.18  194.49  177.79  157.37  130.91  108.78
 72         UI  108.78   77.56   70.25   70.25   70.25   44.14   24.98   24.98   24.98   24.98
 73         UI   24.98   24.98   24.98   24.98   24.98   24.98   24.98     0.0

 74         KK     C3R   CNAME    C2-C3
 75         KO      0       0     0.0       0      22
 76         BC      2     0.0

 77         KK   C2-C3   CNAME     C3R
 78         KO      0       0     0.0       0      22
 79         RS      9    FLOW     0.0     0.0
 80         RC   0.046    0.05  0.0462 23418.0  0.0107     0.0
            * C2-C3
 81         RX     0.0    60.0   125.0   140.0   172.0   232.0   292.0   352.0
 82         RY    26.0    25.0    23.0    10.0    10.0    16.0    20.0    23.0

 83         KK      C3
 84         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 85         KM   L=4.44      Lca=2.51      S=56.33      Kn=0.050      LAG=84.0
 86         KM   S-GRAPH TYPE=DESERT RANGELAND
 87         KO      0       0     0.0       1      22
 88         BA  3.7859
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HEC-1 INPUT PAGE 3

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

 89         LG   0.345   0.345   4.357   0.372     0.0
            * C3
 90         UI     0.0  151.75  151.75  151.75  190.44  436.28  559.26  700.12  855.69  975.52
 91         UI  1073.3 1242.28 1321.31 1364.94 1436.99 1454.26 1454.26 1418.19 1372.63 1299.19
 92         UI  1161.9 1057.64   941.4  855.14  770.03  694.14  628.58  566.66   510.9  460.18
 93         UI   415.5   362.4  338.86  288.07  286.08  237.34  232.68  204.46  160.84  160.84
 94         UI  160.84  118.28  103.88  103.88  103.88  103.88   97.02   36.93   36.93   36.93
 95         UI   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93
 96         UI   36.93   36.93     0.0

 97         KK     C4R   CNAME    C3-C4
 98         KO      0       0     0.0       0      22
 99         BC      2     0.0

100         KK      C4
101         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
102         KM   L=2.18      Lca=0.88      S=44.31      Kn=0.045      LAG=40.0
103         KM   S-GRAPH TYPE=DESERT RANGELAND
104         KO      0       0     0.0       1      22
105         BA  1.4001
106         LG   0.327   0.327   4.737    0.29     0.0
            * C4
107         UI     0.0  117.85  153.21  406.59  642.02   848.8 1023.51 1108.81 1120.37 1044.08
108         UI  868.12  694.78   559.8  452.89  361.01  288.88  232.67  190.33  149.01  124.91
109         UI    88.1   80.67   73.19   28.68   28.68   28.68   28.68   28.68   28.68   28.68
110         UI     0.0
```

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111          KK       C   CNAME     CCP
112          KO       0       0     0.0       0      22
113          RC       2     0.0

114          KK     CCP   CNAME       C
115          KO       0       0     0.0       0      22
116          RN     CCP

117          KK      B1
118          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
119          KM   L=2.52     Lca=1.19     S=227.45     Kn=0.050     LAG=38.0
120          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
121          KO       0       0     0.0       1      22
122          BA  0.5559
123          LG    0.35    0.35   3.733    0.47   6.272
             * B1
124          UI     0.0   49.25   72.53  179.11  283.42  353.86  433.69  556.28  354.96  293.83
125          UI  258.29  226.62  196.88  163.69   131.5  117.02  105.83   83.39    66.1   58.84
126          UI   53.95   40.03   37.76   29.84    24.1    24.1   23.98    9.44    9.44    9.44
127          UI    9.44    9.44    9.44    9.44    9.44    9.44

128          KK   B1-B2   CNAME     B2R
129          KO       0       0     0.0       0      22
130          RS       7    FLOW     0.0     0.0
131          RC   0.055   0.042   0.055 11334.0  0.0137     0.0
             * B1-B2
132          RX     0.0    75.0   140.0   167.0   193.0   226.0   296.0   371.0
133          RY    20.0    17.0    14.0    10.0    10.0    13.0    17.0    22.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

134          KK      B2
135          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
136          KM   L=2.21     Lca=0.98     S=84.6     Kn=0.050     LAG=45.0
137          KM   S-GRAPH TYPE=DESERT RANGELAND
138          KO       0       0     0.0       1      22
139          BA  0.4888
140          LG    0.35    0.35   3.617   0.513     0.0
             * B2
141          UI     0.0   36.57   36.57   108.2  170.94  233.37  285.41   325.0  349.22  347.33
142          UI  325.56  278.29   231.3  188.32  156.44  128.94  105.91   86.03   71.02   59.44
143          UI   49.34   38.76   32.78   25.03   25.03   18.39     8.9     8.9     8.9     8.9
144          UI     8.9     8.9     8.9     8.9

145          KK     B3R   CNAME    B2-B3
146          KO       0       0     0.0       0      22
147          RC       2     0.0

148          KK   B2-B3   CNAME     B3R
149          KO       0       0     0.0       0      22
150          RS      23    FLOW     0.0     0.0
151          RC    0.05   0.028    0.05 19622.0  0.0121     0.0
             * B2-B3
152          RX     0.0   120.0   278.0   285.0   301.5   312.5   446.5   529.5
153          RY    13.5    10.0    11.6    10.1    10.1    11.5    10.8    12.6

154          KK      B3
155          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
156          KM   L=3.72     Lca=1.65     S=63.31     Kn=0.045     LAG=59.0
157          KM   S-GRAPH TYPE=DESERT RANGELAND
158          KO       0       0     0.0       1      22
159          BA   1.987
160          LG   0.331   0.331   4.284   0.389     0.0
             * B3
161          UI     0.0  113.39  113.39   174.2  365.68  513.62  667.08  787.09   935.3 1014.02
162          UI  1066.6 1086.67 1065.15 1007.46  902.78  777.14  664.54  576.28  502.42  427.51
163          UI  369.72  321.51  269.65  233.59  211.46  173.87  158.42  120.18  120.18   89.23
164          UI   77.62   77.62   77.62   39.48    27.6    27.6    27.6    27.6    27.6    27.6
165          UI    27.6    27.6    27.6    27.6     0.0

166          KK       B   CNAME     BCP
167          KO       0       0     0.0       0      22
168          RC       2     0.0

169          KK     BCP   CNAME       B
170          KO       0       0     0.0       0      22
171          RN     BCP

172          KK      A1
173          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
174          KM   L=2.20     Lca=0.86     S=322.08     Kn=0.050     LAG=30.0
175          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
176          KO       0       0     0.0       1      22
177          BA  1.1067
178          LG    0.35    0.35   4.058   0.417   9.677
             * A1
```



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

179          UI     0.0  124.21  285.26  628.48  880.99 1178.37 1187.81  769.89  652.53  550.24
180          UI  454.03  347.39  294.06  245.68   184.1  150.55  131.95   95.22   84.89   60.78
181          UI   60.78   43.03   23.81   23.81   23.81   23.81   23.81   23.81     0.0

182          KK   A1-A2   CNAME     A2R
183          KO       0       0     0.0       0      22
184          RS       7    FLOW     0.0     0.0
185          RC   0.045   0.045   0.045 15153.0  0.0134     0.0
             * A1-A2
186          RX     0.0    75.0   125.0   185.0   190.0   220.0   280.0   340.0
187          RY    27.0    23.0    19.0    10.0    10.0    20.0    26.0    32.0

188          KK      A2
189          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
190          KM   L=3.34     Lca=1.28     S=94.61     Kn=0.055     LAG=57.0
191          KM   S-GRAPH TYPE=DESERT RANGELAND
192          KO       0       0     0.0       1      22
193          BA  1.6622
194          LG    0.35    0.35   4.547   0.339     0.0
             * A2
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195        UI     0.0   98.18   98.18  167.77   329.1  468.89  598.13  713.32   831.1   883.8
196        UI  940.94  940.94  897.33  847.41  719.99  625.76  533.26  458.89  397.46   336.4
197        UI  288.45   247.3  210.36   185.1  155.06  143.14  104.07  104.07    78.8   67.21
198        UI   67.21   67.21   30.17    23.9    23.9    23.9    23.9    23.9    23.9    23.9
199        UI    23.9    23.9     0.0

200        KK     A3R   CNAME    A2-A3
201        KO       0       0     0.0       0      22
202        HC       2   2.769

203        KK   A2-A3   CNAME     A3R
204        KO       0       0     0.0       0      22
205        RS      10    FLOW     0.0     0.0
206        RC    0.05   0.043    0.05 18190.0  0.0116     0.0
           * A2-A3
207        RX     0.0    20.0    30.0   165.0   186.0   346.0   361.0   381.0
208        RY    20.0    19.0    18.0    10.0    10.0    20.0    21.0    22.0

209        KK      A3
210        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
211        KM   L=3.92      Lca=1.89      S=58.21      Kn=0.045      LAG=64.0
212        KM   S-GRAPH TYPE=DESERT RANGELAND
213        KO       0       0     0.0       1      22
214        BA  3.7294
215        LG    0.35    0.35    4.23   0.405     0.0
           * A3
216        UI     0.0   196.2   196.2   216.8  570.49  813.36 1043.19 1275.51 1464.32 1668.95
217        UI  1757.8 1876.99 1880.23 1841.12 1751.54 1592.99 1387.91 1202.84 1048.95  919.72
218        UI  805.43  710.05  606.86  538.24  447.15  397.83  367.89  300.84  290.73  207.95
219        UI  207.95  183.56   134.3   134.3   134.3  131.67   47.75   47.75   47.75   47.75
220        UI   47.75   47.75   47.75   47.75   47.75   47.75   47.75   47.75
```



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

221        KK       A   CNAME     ACP
222        KO       0       0     0.0       0      22
223        HC       2   6.498

224        KK     ACP   CNAME       A
225        KO       0       0     0.0       0      22
226        RN     ACP
227        ZZ
```

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	C1	2486.	4.67	583.	148.	49.	3.59		
+	ROUTED TO	C1-C2	2236.	5.08	580.	148.	49.	3.59		
+	HYDROGRAPH AT	C2	980.	4.92	218.	54.	18.	1.92		
+	2 COMBINED AT	C3R	2773.	5.08	730.	186.	62.	5.51		
+	ROUTED TO	C2-C3	2480.	5.83	724.	186.	62.	5.51		
+	HYDROGRAPH AT	C3	1398.	5.17	407.	102.	34.	3.79		
+	2 COMBINED AT	C4R	3033.	5.75	1003.	258.	86.	9.29		
+	HYDROGRAPH AT	C4	1301.	4.50	200.	50.	17.	1.40		
+	2 COMBINED AT	C	3033.	5.75	1131.	291.	97.	10.69		
+	ROUTED TO	CCP	3008.	5.75	1124.	289.	96.	10.69		
+	HYDROGRAPH AT	B1	568.	4.42	83.	21.	7.	0.56		
+	ROUTED TO	B1-B2	464.	4.92	82.	21.	7.	0.56		
+	HYDROGRAPH AT	B2	422.	4.58	66.	16.	5.	0.49		
+	2 COMBINED AT	B3R	652.	4.83	133.	33.	11.	1.04		
+	ROUTED TO	B2-B3	473.	6.67	131.	33.	11.	1.04		
+	HYDROGRAPH AT	B3	1137.	4.83	239.	60.	20.	1.99		
+	2 COMBINED AT	B	1044.	4.83	327.	83.	28.	3.03		
+	ROUTED TO	BCP	1044.	4.83	327.	83.	28.	3.03		
+	HYDROGRAPH AT	A1	1187.	4.33	162.	41.	14.	1.11		
+	ROUTED TO	A1-A2	964.	4.83	162.	41.	14.	1.11		
	HYDROGRAPH AT									

```
+                          A2      1037.   4.75        212.        53.        18.      1.66

        2 COMBINED AT
+                          A3R     1723.   4.83        338.        85.        28.      2.77

        ROUTED TO
+                         A2-A3    1472.   5.58        337.        85.        28.      2.77

        HYDROGRAPH AT
+                          A3      1661.   4.92        380.        95.        32.      3.73

        2 COMBINED AT
+                           A      1998.   5.42        629.       158.        53.      6.50

        ROUTED TO
+                          ACP     1998.   5.42        629.       158.        53.      6.50

 *** NORMAL END OF HEC-1 ***
1****************************************                                  ****************************************
*                                        *                                  *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *                                  *   U.S. ARMY CORPS OF ENGINEERS       *
*             MAY  1991                  *                                  *   HYDROLOGIC ENGINEERING CENTER      *
*           VERSION 4.0.1E               *                                  *         609 SECOND STREET            *
*                                        *                                  *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE            TIME              *                                  *         (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

                                                HEC-1 INPUT                                                PAGE  1

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

    1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
    2           ID   PB86J - Modeler: Jacob Lesue & Wan Chen
    3           ID   100-year 6-hour
    4           ID   Existing Conditions
    5           ID   FRS 81 (Sub-basins E-K)
    6           ID   Rainfall Loss Method - Green & Ampt
    7           ID   Unit Hydrograph Method - FCDMC S-Graph
    8           ID   Channel Routing Method - Normal Depth
    9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
   10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
   11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                *DIAGRAM
   12           IT       5  1JAN94       0    2000
   13           IO       3
   14           IN      15 01JAN94       0
   15           JD    3.23     0.01
                * 6-hour distribution, pattern 1.0
   16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
   17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
   18           PC   0.962   0.972   0.983   0.991     1.0
   19           IN      15 01JAN94       0
   20           JD   3.211     0.5
                * 6-hour distribution, pattern 1.0
   21           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
   22           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
   23           PC   0.962   0.972   0.983   0.991     1.0
   24           IN      15 01JAN94       0
   25           JD   3.188     1.0
                * 6-hour distribution, pattern 1.4
   26           PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
   27           PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
   28           PC  0.9572  0.9684  0.9798  0.9898     1.0
   29           IN      15 01JAN94       0
   30           JD   3.101     5.0
                * 6-hour distribution, pattern 2.3
   31           PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
   32           PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
   33           PC  0.9487   0.962  0.9743  0.9877     1.0
   34           IN      15 01JAN94       0
   35           JD   3.036    10.0
                * 6-hour distribution, pattern 2.7
   36           PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
   37           PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
   38           PC  0.9471  0.9608  0.9735  0.9873     1.0
   39           IN      15 01JAN94       0
   40           JD   2.939    20.0
                * 6-hour distribution, pattern 3.1
   41           PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
   42           PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
   43           PC  0.9434   0.958  0.9718  0.9863     1.0
   44           IN      15 01JAN94       0
   45           JD   2.875    30.0
                * 6-hour distribution, pattern 3.4
   46           PC     0.0  0.0172  0.0256  0.0378  0.0565  0.0719  0.0868   0.103  0.1191  0.1342
   47           PC  0.1513  0.1702  0.1961  0.2439  0.3263  0.4824  0.6655  0.7875   0.858  0.9031
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                                    HEC-1 INPUT                                                                    PAGE  2

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

  48          PC   0.939  0.9544  0.9697  0.9851     1.0
  49          IN      15 01JAN94       0
  50          JD    2.81    40.0
              * 6-hour distribution, pattern 3.5
  51          PC     0.0  0.0182  0.0261  0.0413  0.0604  0.0759  0.0916  0.1088  0.1254   0.141
  52          PC  0.1586  0.1783  0.2056  0.2537  0.3362   0.487  0.6636  0.7836  0.8535  0.8991
  53          PC  0.9358  0.9519  0.9682  0.9843     1.0
  54          IN      15 01JAN94       0
  55          JD   2.584   100.0
              * 6-hour distribution, pattern 4.1
  56          PC     0.0  0.0212  0.0355  0.0515  0.0715  0.0877   0.106  0.1261  0.1443  0.1618
  57          PC  0.1812  0.2036  0.2347  0.2837   0.367   0.501  0.6559  0.7704  0.8392  0.8864
  58          PC  0.9256   0.944  0.9633  0.9817     1.0

  59          KK      G1
  60          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  61          KM   L=2.38      Lca=1.08      S=33.76      Kn=0.045      LAG=47.0
  62          KM   S-GRAPH TYPE=DESERT RANGELAND
  63          KO       0        0     0.0        1       22
  64          BA  1.1192
  65          LG    0.35     0.35   4.688   0.298      0.0
              * G1
  66          UI     0.0    80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
  67          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
  68          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
  69          UI   19.51   19.51   19.51   19.51   19.51     0.0

  70          KK     GCP    CNAME       G
  71          KO       0        0     0.0        0       22
  72          RM     GCP

  73          KK      J1
  74          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  75          KM   L=4.09      Lca=1.78      S=70.82      Kn=0.055      LAG=75.0
  76          KM   S-GRAPH TYPE=DESERT RANGELAND
  77          KO       0        0     0.0        1       22
  78          BA  1.7341
  79          LG    0.35     0.35    3.25   0.652      0.0
              * J1
  80          UI     0.0    77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
  81          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
  82          UI  466.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
  83          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
  84          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
  85          UI   18.95   18.95   18.95   18.95   18.95   18.95

  86          KK   J1-J2    CNAME     J2R
  87          KO       0        0     0.0        0       22
  88          RS      28     FLOW     0.0      0.0
  89          RC   0.055     0.04   0.055 24090.0  0.0086     0.0
              * J1-J2
  90          RX     0.0    161.0   247.0   254.0   271.0   279.0   393.0   660.0
  91          RY    17.0     12.5    12.2    10.8    10.0    12.1    12.9    17.0

                                    HEC-1 INPUT                                                                    PAGE  3

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

  92          KK      J2
  93          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  94          KM   L=5.18      Lca=2.51      S=45.01      Kn=0.050      LAG=93.0
  95          KM   S-GRAPH TYPE=DESERT RANGELAND
  96          KO       0        0     0.0        1       22
  97          BA  3.6379
  98          LG   0.349    0.348   3.623   0.495   0.281
              * J2
  99          UI     0.0   131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
 100          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
 101          UI  1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
 102          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
 103          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
 104          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
 105          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

 106          KK    K3RB    CNAME   J2-K3
 107          KO       0        0     0.0        0       22
 108          HC       2    5.372

 109          KK   J2-K3    CNAME    K3RB
 110          KO       0        0     0.0        0       22
 111          RS       4     FLOW     0.0      0.0
 112          RC    0.05    0.048    0.05   4072.0  0.0059     0.0
              * J2-K3
 113          RX     0.0    390.0   490.0   502.0   520.0   532.0   632.0  1022.0
 114          RY    20.0     14.5    11.5    10.0    10.0    11.5    14.5    20.0

 115          KK      K1
 116          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 117          KM   L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
 118          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 119          KO       0        0     0.0        1       22
 120          BA   1.543
 121          LG   0.112    0.255   4.382   0.365   21.06
              * K1
 122          UI     0.0   129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
 123          UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
 124          UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
 125          UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0

 126          KK   K1-K2    CNAME     K2R
 127          KO       0        0     0.0        0       22
 128          RS      17     FLOW     0.0      0.0
 129          RC   0.048    0.05   0.048 30021.0   0.015     0.0
              * K1-K2
 130          RX     0.0     20.0    55.0    85.0   235.0   259.0   289.0   309.0
 131          RY    22.0     21.0    20.0    10.0    10.0    20.0    21.0    22.0

                                    HEC-1 INPUT                                                                    PAGE  4
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 132          KK      K2
 133          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 134          KM   L=7.3      Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
 135          KM   S-GRAPH TYPE=DESERT RANGELAND
 136          KO       0        0     0.0        1       22
 137          BA   2.365
 138          LG   0.341    0.346   4.471    0.348    1.018
              * K2
 139          UI     0.0    66.91    66.91    66.91    66.91    66.91   132.91   192.38   234.97   273.87
 140          UI  324.09   369.36   410.96   453.67   472.54   532.28   558.99    587.9   605.63   610.31
 141          UI  641.26   641.26   641.26   641.26   620.87   601.29   597.45   565.84   516.46   476.06
 142          UI  460.97   411.12   386.21   359.14   335.65   312.63   290.38   266.75   251.32   236.77
 143          UI  209.97    203.8   183.22   181.03   149.42   149.42   135.15   126.15   126.15   109.44
 144          UI   102.6    102.6    98.17    70.92    70.92    70.92    70.92    70.92    46.43     45.8
 145          UI    45.8     45.8     45.8     45.8     45.8     45.8    16.92    16.29    16.29    16.29
 146          UI   16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29
 147          UI   16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29      0.0

 148          KK    K3RA    CNAME    K2-K3
 149          KO       0        0     0.0        0       22
 150          RC       2    3.908

 151          KK   K2-K3    CNAME     K3RA
 152          KO       0        0     0.0        0       22
 153          RS      19     FLOW      0.0      0.0
 154          RC    0.05    0.048     0.05  25950.0   0.0084      0.0
              * K2-K3
 155          RX     0.0    390.0    490.0    502.0    520.0    532.0    632.0   1022.0
 156          RY    20.0     14.5     11.5     10.0     10.0     11.5     14.5     20.0

 157          KK      F1
 158          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 159          KM   L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
 160          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 161          KO       0        0     0.0        1       22
 162          BA  2.7854
 163          LG   0.299     0.33   4.322    0.361   14.271
              * F1
 164          UI     0.0   203.88   203.88   570.72   906.57  1255.03  1478.42  1724.35  2318.93  1830.17
 165          UI  1348.3  1190.57  1067.92   966.08   849.55   752.02    639.8   527.23   486.03   447.26
 166          UI  380.98   319.46   260.51   239.96   223.29   181.76    156.3    156.3   107.68    99.77
 167          UI   99.77    99.77    67.24    39.08    39.08    39.08    39.08    39.08    39.08    39.08
 168          UI   39.08    39.08    39.08      0.0

 169          KK   F1-F2    CNAME     F2R
 170          KO       0        0     0.0        0       22
 171          RS       3     FLOW      0.0      0.0
 172          RC   0.053    0.045    0.055   8635.0    0.012      0.0
              * F1-F2
 173          RX     0.0     60.0    120.0    146.0    178.0    208.0    268.0    328.0
 174          RY    27.0     26.0     25.0     10.0     10.0     24.0     26.0     28.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 175          KK      F2
 176          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 177          KM   L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=37.0
 178          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 179          KO       0        0     0.0        1       22
 180          BA  2.5261
 181          LG    0.35     0.35   4.311    0.375    3.026
              * F2
 182          UI     0.0   149.21   149.21   254.97   495.63   697.83   908.32  1043.12  1160.83  1374.76
 183          UI  1770.7  1344.86  1025.23   904.53   840.52   763.84   704.22   635.65   584.61   511.95
 184          UI  443.72   385.73   360.15   340.51   311.99   256.37   232.28   190.66   185.65   163.43
 185          UI  163.43   124.69    114.4    114.4    99.09    73.02    73.02    73.02    73.02    72.49
 186          UI    28.6     28.6     28.6     28.6     28.6     28.6     28.6     28.6     28.6     28.6
 187          UI    28.6     28.6     28.6      0.0

 188          KK     F3R    CNAME    F2-F3
 189          KO       0        0     0.0        0       22
 190          RC       2    5.312

 191          KK   F2-F3    CNAME     F3R
 192          KO       0        0     0.0        0       22
 193          RS       3     FLOW      0.0      0.0
 194          RC    0.05    0.047    0.048   7059.0     0.01      0.0
              * F2-F3
 195          RX     0.0    350.0    425.0    455.0    472.0    499.0    569.0    900.0
 196          RY    20.0     15.0     13.0     10.0     10.0     12.0     14.0     20.0

 197          KK      F3
 198          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 199          KM   L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
 200          KM   S-GRAPH TYPE=DESERT RANGELAND
 201          KO       0        0     0.0        1       22
 202          BA  0.7363
 203          LG    0.35     0.35   3.266    0.647      0.0
              * F3
 204          UI     0.0    45.91    45.91    90.33   163.23   236.71   300.13   352.45   401.74   427.37
 205          UI  439.96   431.69   405.94   355.21    304.4   256.17   219.35   187.61   158.44   134.39
 206          UI  113.72    96.06    85.15    70.39    60.25    48.66    46.54    31.43    31.43    31.43
 207          UI   21.41    11.17    11.17    11.17    11.17    11.17    11.17    11.17    11.17    11.17
 208          UI     0.0

 209          KK    E4RB    CNAME    F3-E4
 210          KO       0        0     0.0        0       22
 211          RC       2    6.048

 212          KK   F3-E4    CNAME    E4RB
 213          KO       0        0     0.0        0       22
 214          RS      19     FLOW      0.0      0.0
 215          RC    0.05    0.044     0.05  27656.0   0.0072      0.0
              * F3-E4
 216          RX     0.0    570.0    650.0    690.0    705.0    735.0    810.0   1200.0
 217          RY    20.0     14.0     13.0     10.0     10.0     12.5     14.5     20.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 218          KK      H1
 219          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 220          KM   L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
 221          KM   S-GRAPH TYPE-DESERT RANGELAND
 222          KO       0        0      0.0        1       22
 223          BA  1.0659
 224          LG    0.35     0.35    2.733    0.945      0.0
              * H1
 225          UI     0.0    70.37    70.37   156.66    277.5   386.06   480.97   578.94   629.54   674.37
 226          UI  672.89    639.6   573.43   484.81   406.97   343.94   290.29    244.6   205.26   171.38
 227          UI  143.71   125.13    107.9    82.11    74.58    59.77    48.17    48.17    44.02    17.13
 228          UI   17.13    17.13    17.13    17.13    17.13    17.13    17.13    17.13      0.0

 229          KK   H1-H2   CNAME     H2R
 230          KO       0        0      0.0        0       22
 231          RS      19     FLOW      0.0      0.0
 232          RC   0.053     0.05    0.053 21738.0   0.0082      0.0
              * H1-H2
 233          RX     0.0    330.0    430.0    465.0    495.0    530.0    630.0    960.0
 234          RY    17.0     14.0     12.0     10.0     10.0     12.0     14.0     17.0

 235          KK      E1
 236          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 237          KM   L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
 238          KM   S-GRAPH TYPE-PHOENIX MOUNTAIN
 239          KO       0        0      0.0        1       22
 240          BA  0.9558
 241          LG    0.35    0.378    5.377    0.222     0.69
              * E1
 242          UI     0.0    74.84    77.93   239.12   368.21   486.14   570.74   714.05   832.68   536.61
 243          UI  451.09    405.2   360.47   317.65   278.73   233.73   192.22   176.81   160.96   130.73
 244          UI  107.54    95.41    81.97     76.8    57.38    57.38     44.3    36.62    36.62    36.62
 245          UI   23.52    14.34    14.34    14.34    14.34    14.34    14.34    14.34    14.34    14.34
 246          UI     0.0

 247          KK   E1-E2   CNAME     E2R
 248          KO       0        0      0.0        0       22
 249          RS       5     FLOW      0.0      0.0
 250          RC    0.05    0.047    0.046 11365.0    0.016      0.0
              * E1-E2
 251          RX     0.0     65.0    140.0    170.0    185.0    200.0    270.0    340.0
 252          RY    24.0     21.0     17.0     10.0     10.0     14.0     18.0     22.0

 253          KK      E2
 254          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 255          KM   L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
 256          KM   S-GRAPH TYPE-DESERT RANGELAND
 257          KO       0        0      0.0        1       22
 258          BA  1.9794
 259          LG    0.35     0.36    5.043    0.256      0.0
              * E2
 260          UI     0.0    148.1    148.1   438.18   692.22   945.05  1155.78  1316.09  1414.16  1406.52
 261          UI  1318.3   1126.95   936.66    762.6    633.5   522.15   428.87   348.36    287.6   240.69
 262          UI  199.81    156.97   132.73   101.38   101.38    74.46    36.05    36.05    36.05    36.05
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 263          UI   36.05    36.05    36.05    36.05

 264          KK     E3R   CNAME    E2-E3
 265          KO       0        0      0.0        0       22
 266          RC       2    2.935

 267          KK   E2-E3   CNAME     E3R
 268          KO       0        0      0.0        0       22
 269          RS       9     FLOW      0.0      0.0
 270          RC   0.052    0.046    0.052 19626.0   0.0088      0.0
              * E2-E3
 271          RX     0.0    133.0    173.0    213.0    223.0    263.0    303.0    403.0
 272          RY    22.0     17.0     14.0     10.0     10.0     15.0     18.0     22.0

 273          KK      E3
 274          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 275          KM   L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
 276          KM   S-GRAPH TYPE-DESERT RANGELAND
 277          KO       0        0      0.0        1       22
 278          BA  2.4882
 279          LG    0.35     0.35    4.358    0.347      0.0
              * E3
 280          UI     0.0    111.7    111.7    111.7   226.89   361.15   481.85   599.61   709.05   795.97
 281          UI  924.52    981.6  1023.16  1070.47  1070.47  1054.42  1012.24   958.91   843.22   765.06
 282          UI  671.88   595.79    537.6   476.41   423.39   378.12   335.21   305.85   252.82   234.09
 283          UI  210.58   188.38   171.28   154.62   118.39   118.39   115.88    76.46    76.46    76.46
 284          UI   76.46    75.48    27.19    27.19    27.19    27.19    27.19    27.19    27.19    27.19
 285          UI   27.19    27.19    27.19    27.19    27.19    27.19

 286          KK    E4RA   CNAME    E3-E4
 287          KO       0        0      0.0        0       22
 288          RC       2    5.423

 289          KK   E3-E4   CNAME    E4RA
 290          KO       0        0      0.0        0       22
 291          RS      14     FLOW      0.0      0.0
 292          RC   0.056    0.049    0.056 13855.0   0.0048      0.0
              * E3-E4
 293          RX     0.0    570.0    650.0    690.0    705.0    735.0    810.0   1200.0
 294          RY    21.0     14.0     13.0     10.0     10.0     12.5     14.5     21.0

 295          KK      H2
 296          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 297          KM   L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
 298          KM   S-GRAPH TYPE-DESERT RANGELAND
 299          KO       0        0      0.0        1       22
 300          BA  1.4003
 301          LG    0.35     0.35    3.222    0.664      0.0
              * H2
 302          UI     0.0    52.97    52.97    52.97    52.97   142.96   178.43   226.95   274.77   319.65
 303          UI  365.43   394.29   441.22   466.81   479.41   507.67   507.67   507.67   494.57   478.69
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304        UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
305        UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
306        UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
307        UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
                                        HEC-1 INPUT                                          PAGE  8

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

308        UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

309        KK      E4
310        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
311        KM   L=5.36     Lca=2.81     S=38.26     Kn=0.050     LAG=102.0
312        KM   S-GRAPH TYPE=DESERT RANGELAND
313        KO       0       0     0.0       1      22
314        BA  3.0419
315        LG    0.35    0.35   3.816   0.439     0.0
           * E4
316        UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
317        UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
318        UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
319        UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
320        UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
321        UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
322        UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
323        UI   24.44   24.44   24.44   24.44   24.44   24.44

324        KK     E5R   CNAME  E4R2E5
325        KO       0       0     0.0       0      22
326        RC       5  16.979

327        KK  E4R2E5   CNAME     E5R
328        KO       0       0     0.0       0      22
329        RS      16    FLOW     0.0     0.0
330        RC    0.06    0.05    0.06 15206.0  0.0051     0.0
           * E4R2-E5
331        RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
332        RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

333        KK      K3
334        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
335        KM   L=4.92     Lca=2.65     S=44.16     Kn=0.050     LAG=94.0
336        KM   S-GRAPH TYPE=DESERT RANGELAND
337        KO       0       0     0.0       1      22
338        BA  1.6364
339        LG    0.35    0.35   3.421   0.582     0.0
           * K3
340        UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
341        UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
342        UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
343        UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
344        UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
345        UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
346        UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

347        KK      E5
348        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
349        KM   L=3.01     Lca=1.41     S=28.56     Kn=0.050     LAG=66.0
350        KM   S-GRAPH TYPE=DESERT RANGELAND
351        KO       0       0     0.0       1      22
352        BA  1.3075
353        LG   0.347   0.344    3.94   0.429   0.968
           * E5
                                        HEC-1 INPUT                                          PAGE  9

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

354        UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
355        UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
356        UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
357        UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
358        UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

359        KK     E6R   CNAME  E5K2E6
360        KO       0       0     0.0       0      22
361        RC       5  29.203

362        KK  E5K2E6   CNAME     E6R
363        KO       0       0     0.0       0      22
364        RS       6    FLOW     0.0     0.0
365        RC   0.063   0.051   0.063  5083.0  0.0037     0.0
           * E5K3-E6
366        RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
367        RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

368        KK      E6
369        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
370        KM   L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
371        KM   S-GRAPH TYPE=DESERT RANGELAND
372        KO       0       0     0.0       1      22
373        BA  2.0375
374        LG   0.343   0.336   4.356   0.367   0.711
           * E6
375        UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
376        UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
377        UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
378        UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
379        UI   29.29   29.29     0.0

380        KK       E   CNAME     ECP
381        KO       0       0     0.0       0      22
382        RC       2  31.241

383        KK     ECP   CNAME       E
384        KO       0       0     0.0       0      22
385        RM     ECP
386        ZZ
```

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	G1	928.	4.67	160.	40.	13.	1.12		
+	ROUTED TO	GCP	928.	4.67	160.	40.	13.	1.12		
+	HYDROGRAPH AT	J1	626.	5.08	160.	40.	13.	1.73		
+	ROUTED TO	J1-J2	488.	7.33	158.	40.	13.	1.73		
+	HYDROGRAPH AT	J2	1095.	5.33	349.	87.	29.	3.64		
+	2 COMBINED AT	K3RB	999.	5.33	435.	110.	37.	5.37		
+	ROUTED TO	J2-K3	981.	5.58	433.	110.	37.	5.37		
+	HYDROGRAPH AT	K1	1363.	4.50	290.	73.	24.	1.54		
+	ROUTED TO	K1-K2	1004.	5.83	287.	73.	24.	1.54		
+	HYDROGRAPH AT	K2	721.	5.67	288.	73.	24.	2.37		
+	2 COMBINED AT	K3RA	1502.	5.92	526.	135.	45.	3.91		
+	ROUTED TO	K2-K3	1257.	7.42	517.	135.	45.	3.91		
+	HYDROGRAPH AT	F1	2048.	4.58	420.	106.	35.	2.79		
+	ROUTED TO	F1-F2	1944.	4.75	419.	106.	35.	2.79		
+	HYDROGRAPH AT	F2	1426.	4.75	307.	77.	26.	2.53		
+	2 COMBINED AT	F3R	2872.	4.75	657.	166.	55.	5.31		
+	ROUTED TO	F2-F3	2720.	5.08	656.	166.	55.	5.31		
+	HYDROGRAPH AT	F3	452.	4.75	84.	21.	7.	0.74		
+	2 COMBINED AT	E4RB	2848.	5.08	693.	175.	58.	6.05		
+	ROUTED TO	F3-E4	2296.	6.58	687.	175.	58.	6.05		
+	HYDROGRAPH AT	H1	497.	4.75	86.	22.	7.	1.07		
+	ROUTED TO	H1-H2	323.	6.33	85.	22.	7.	1.07		
+	HYDROGRAPH AT	E1	894.	4.50	148.	37.	12.	0.96		
+	ROUTED TO	E1-E2	785.	4.83	148.	37.	12.	0.96		
+	HYDROGRAPH AT	E2	1587.	4.58	272.	68.	23.	1.98		
+	2 COMBINED AT	E3R	1964.	4.75	388.	97.	32.	2.93		
+	ROUTED TO	E2-E3	1690.	5.42	386.	97.	32.	2.93		
+	HYDROGRAPH AT	E3	1147.	5.08	301.	75.	25.	2.49		
+	2 COMBINED AT	E4RA	2320.	5.42	614.	155.	52.	5.42		
+	ROUTED TO	E3-E4	2011.	6.42	608.	155.	52.	5.42		
+	HYDROGRAPH AT	H2	446.	5.25	134.	33.	11.	1.40		
+	HYDROGRAPH AT	E4	923.	5.42	319.	80.	27.	3.04		
+	5 COMBINED AT	E5R	3693.	6.50	1312.	342.	114.	16.98		
+	ROUTED TO	E4R2E5	3376.	7.75	1306.	342.	114.	16.98		
+	HYDROGRAPH AT	K3	520.	5.33	165.	41.	14.	1.64		
+	HYDROGRAPH AT	E5	713.	4.92	165.	41.	14.	1.31		
+	5 COMBINED AT	E6R	3846.	7.75	1793.	488.	163.	29.20		

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        ROUTED TO
+                    E5K2E6     3753.   8.17      1785.      486.      163.     29.20

        HYDROGRAPH AT
+                       E6     1227.   4.75       253.       63.       21.      2.04

        2 COMBINED AT
+                        E     3755.   8.17      1859.      524.      175.     31.24

        ROUTED TO
+                      ECP     3651.   8.17      1811.      512.      171.     31.24


 *** NORMAL END OF HEC-1 ***
1*************************************                                    *************************************
 *                                   *                                    *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                                    *   U.S. ARMY CORPS OF ENGINEERS    *
 *             MAY   1991            *                                    *   HYDROLOGIC ENGINEERING CENTER   *
 *          VERSION 4.0.1E           *                                    *         609 SECOND STREET         *
 *                                   *                                    *      DAVIS, CALIFORNIA 95616      *
 *  RUN DATE            TIME         *                                    *          (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

                                        HEC-1 INPUT                                                    PAGE  1

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

   1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
   2           ID   PB56J - Modelers: Jacob Lesue & Wen Chen
   3           ID   100-year 6-hour
   4           ID   Existing Conditions
   5           ID   FRS #1 (Sub-basins L-R)
   6           ID   Rainfall Loss Method - Green & Ampt
   7           ID   Unit Hydrograph Method - FCDMC S-Graph
   8           ID   Channel Routing Method - Normal Depth
   9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
  10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
               *DIAGRAM
  12           IT       5  1JAN94       0    2000
  13           IO       3
  14           IN      15 01JAN94       0
  15           JD    3.23    0.01
               * 6-hour distribution, pattern 1.0
  16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  18           PC   0.962   0.972   0.983   0.991     1.0
  19           IN      15 01JAN94       0
  20           JD   3.211     0.5
               * 6-hour distribution, pattern 1.0
  21           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  22           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  23           PC   0.962   0.972   0.983   0.991     1.0
  24           IN      15 01JAN94       0
  25           JD   3.188     1.0
               * 6-hour distribution, pattern 1.4
  26           PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
  27           PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
  28           PC  0.9572  0.9684  0.9798  0.9898     1.0
  29           IN      15 01JAN94       0
  30           JD   3.101     5.0
               * 6-hour distribution, pattern 2.3
  31           PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
  32           PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8693  0.9293
  33           PC  0.9487   0.962  0.9743  0.9877     1.0
  34           IN      15 01JAN94       0
  35           JD   3.036    10.0
               * 6-hour distribution, pattern 2.7
  36           PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
  37           PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
  38           PC  0.9471  0.9608  0.9735  0.9873     1.0
  39           IN      15 01JAN94       0
  40           JD   2.939    20.0
               * 6-hour distribution, pattern 3.1
  41           PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
  42           PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
  43           PC  0.9434   0.958  0.9718  0.9863     1.0
  44           IN      15 01JAN94       0
  45           JD   2.875    30.0
               * 6-hour distribution, pattern 3.4
  46           PC     0.0  0.0172  0.0256  0.0378  0.0565  0.0719  0.0868   0.103  0.1191  0.1342
  47           PC  0.1513  0.1702  0.1961  0.2439  0.3263  0.4824  0.6655  0.7875   0.858  0.9031

                                        HEC-1 INPUT                                                    PAGE  2

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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48          PC   0.939  0.9544  0.9697  0.9851     1.0
49          IN      15 01JAN94       0
50          JD    2.81    40.0
            * 6-hour distribution, pattern 3.5
51          PC     0.0  0.0182  0.0281  0.0413  0.0604  0.0759  0.0916  0.1088  0.1254   0.141
52          PC  0.1586  0.1763  0.2056  0.2537  0.3362   0.487  0.6636  0.7836  0.8535  0.8991
53          PC  0.9358  0.9519  0.9682  0.9843     1.0
54          IN      15 01JAN94       0
55          JD   2.584   100.0
            * 6-hour distribution, pattern 4.1
56          PC     0.0  0.0212  0.0355  0.0515  0.0715  0.0877   0.106  0.1261  0.1443  0.1618
57          PC  0.1812  0.2036  0.2347  0.2837   0.367   0.501  0.6559  0.7704  0.8392  0.8864
58          PC  0.9256   0.944  0.9633  0.9817     1.0

59          KK      R1
60          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
61          KM   L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
62          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
63          KO       0       0     0.0       1      22
64          BA  0.2836
65          LG    0.35    0.35   4.358   0.374   8.387
            * R1
66          UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
67          UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

68          KK     RCP    CNAME       R
69          KO       0       0     0.0       0      22
70          RN     RCP

71          KK      L1
72          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
73          KM   L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
74          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
75          KO       0       0     0.0       1      22
76          BA  3.5462
77          LG   0.271   0.318   4.357   0.352  16.317
            * L1
78          UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
79          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
80          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
81          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
82          UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
83          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

84          KK   L1-L2    CNAME     L2R
85          KO       0       0     0.0       0      22
86          RS      11    FLOW     0.0     0.0
87          RC   0.046   0.045   0.046 28949.0  0.0147     0.0
            * L1-L2
88          RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
89          RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

90          KK      L2
91          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
92          KM   L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
93          KM   S-GRAPH TYPE=DESERT RANGELAND
94          KO       0       0     0.0       1      22
95          BA  7.3294
96          LG    0.35    0.35   4.202   0.399     0.0
            * L2
97          UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
98          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
99          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
100         UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
101         UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
102         UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
103         UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

104         KK     L3R    CNAME   L2-L3
105         KO       0       0     0.0       0      22
106         RC       2     0.0

107         KK   L2-L3    CNAME     L3R
108         KO       0       0     0.0       0      22
109         RS      19    FLOW     0.0     0.0
110         RC    0.05   0.045    0.06 20567.0  0.0084     0.0
            * L2-L3
111         RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
112         RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

113         KK      L3
114         KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
115         KM   L=4.75      Lca=2.00      S=44.27      Kn=0.055      LAG=91.0
116         KM   S-GRAPH TYPE=DESERT RANGELAND
117         KO       0       0     0.0       1      22
118         BA  5.8518
119         LG   0.341   0.328   3.98   0.419    1.05
            * L3
120         UI     0.0   216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
121         UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
122         UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
123         UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
124         UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
125         UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
126         UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

127         KK       L    CNAME     LCP
128         KO       0       0     0.0       0      22
129         RC       2     0.0

130         KK     LCP    CNAME       L
131         KO       0       0     0.0       0      22
132         RN     LCP
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
133          KK      Z1
134          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
135          KM   L=1.70      Lca=0.66      S=47.00      Kn=0.055      LAG=39.0
136          KM   S-GRAPH TYPE=DESERT RANGELAND
137          KO       0        0      0.0        1       22
138          BA  0.6646
139          LG   0.321    0.292    4.004    0.43    2.909
             * Z1
140          UI     0.0    57.36    79.51   205.31   321.74   423.99   504.02   545.15    540.9   493.68
141          UI   399.44   319.16   256.25   205.08   164.89   127.64   104.63    87.85     60.8    54.09
142          UI    39.26    39.26    21.79    13.96    13.96    13.96    13.96    13.96    13.96      0.0

143          KK     ZCP    CNAME        Z
144          KO       0        0      0.0        0       22
145          RN     ZCP

146          KK      M1
147          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
148          KM   L=4.99      Lca=1.81      S=302.46      Kn=0.050      LAG=56.0
149          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
150          KO       0        0      0.0        1       22
151          BA  5.5949
152          LG    0.35     0.35    4.306    0.347   17.122
             * M1
153          UI     0.0   336.39   336.39   603.82  1137.33  1624.75  2070.76  2388.19  2652.37  3233.29
154          UI  4005.2  2791.27  2249.2  1997.59  1849.54  1685.71  1552.54  1393.19  1268.31  1104.08
155          UI   546.29   845.54   793.05   739.37   664.77   552.64   468.14   429.83   388.56   368.42
156          UI   333.06    257.9    257.9    257.9   168.35   164.62   164.62   164.62   164.62    94.92
157          UI    64.47    64.47    64.47    64.47    64.47    64.47    64.47    64.47    64.47    64.47
158          UI    64.47    64.47      0.0

159          KK    M1-M2    CNAME      M2R
160          KO       0        0      0.0        0       22
161          RS      26     FLOW      0.0      0.0
162          RC    0.04     0.04    0.045  38719.0   0.0133      0.0
             * M1-M2
163          RX     0.0    961.0   1028.0   1051.0   1136.0   1153.0   1193.0   1900.0
164          RY    15.5     12.0     11.8     10.3     10.0     11.0     11.2     15.5

165          KK      M2
166          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
167          KM   L=7.60      Lca=3.07      S=88.36      Kn=0.050      LAG=103.0
168          KM   S-GRAPH TYPE=DESERT RANGELAND
169          KO       0        0      0.0        1       22
170          BA  7.5274
171          LG    0.35     0.35    3.952    0.446   0.287
             * M2
172          UI     0.0   246.06   246.06   246.06   246.06   366.94   707.43   862.03  1046.84  1248.07
173          UI  1424.7  1592.75  1748.11  1929.89  2062.25  2176.05  2221.53  2334.54  2358.09  2358.09
174          UI  2358.0  2271.78  2217.13  2123.85  1976.02  1771.84  1691.54   1501.0   1393.0  1284.99
175          UI  1178.7   1088.8   595.34    919.2   857.56   754.59   708.67   673.74   569.64   549.46
176          UI  488.21   463.89   446.34   377.29   377.29   364.18    260.8    260.8    260.8    260.8
177          UI  201.47   168.43   168.43   168.43   168.43   168.43   168.43    90.19    59.89    59.89
178          UI   59.89    59.89    59.89    59.89    59.89    59.89    59.89    59.89    59.89    59.89
```



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

179          UI   59.89    59.89    59.89    59.89    59.89    59.89      0.0

180          KK       M    CNAME      MCP
181          KO       0        0      0.0        0       22
182          RC       2      0.0

183          KK     MCP    CNAME        M
184          KO       0        0      0.0        0       22
185          RN     MCP

186          KK      O1
187          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
188          KM   L=5.20      Lca=2.79      S=64.07      Kn=0.055      LAG=100.0
189          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
190          KO       0        0      0.0        1       22
191          BA  3.0883
192          LG    0.35     0.35    4.189    0.393   2.105
             * O1
193          UI     0.0   103.98   103.98   103.98   103.98   181.97   298.95   378.66   446.43   550.06
194          UI  624.46   676.83   731.54   781.25   824.52   905.38  1042.04  1204.77   1242.7   887.05
195          UI   765.3    690.9   643.35   614.88   590.49   558.55   530.78   506.48   485.09   454.93
196          UI  429.36   410.34    388.6   356.95   326.56    302.9   274.89   260.97   254.42   242.21
197          UI  239.16   221.76   217.42   189.46   170.83   170.83   140.46   132.86   132.86   129.07
198          UI  113.88   113.88   113.88   113.88    79.72    79.72    79.72    79.72    79.72    79.72
199          UI   50.88    50.88    50.88    50.88    50.88    50.88    50.88    50.88    50.88    32.31
200          UI   19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93
201          UI   19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93    19.93
202          UI   19.93    19.93    19.93      0.0

203          KK     OCP    CNAME        O
204          KO       0        0      0.0        0       22
205          RN     OCP

206          KK      N1
207          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
208          KM   L=2.79      Lca=1.44      S=340.38      Kn=0.050      LAG=40.0
209          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
210          KO       0        0      0.0        1       22
211          BA   1.524
212          LG    0.35     0.35    4.075    0.419    8.38
             * N1
213          UI     0.0   128.28   166.76   436.67   697.62   885.35  1048.84  1439.82  1097.57    811.0
214          UI  717.87   633.22   554.39   482.33    398.7   327.21   300.32   268.07   210.75   167.66
215          UI  152.67    140.5   106.78    98.35    84.12    62.78    62.78    62.78    38.33    24.59
216          UI   24.59    24.59    24.59    24.59    24.59    24.59    24.59      0.0

217          KK   N1-N2    CNAME      N2R
218          KO       0        0      0.0        0       22
219          RS      21     FLOW      0.0      0.0
220          RC    0.05    0.047     0.05  26511.0   0.0115      0.0
             * N1-N2
221          RX     0.0    280.0    350.0    358.0    367.0    381.0    451.0    730.0
222          RY    17.0     13.0     11.5     10.0     10.0     11.5     13.0     17.0
```

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

 223          KK      N2
 224          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 225          KM   L=5.64     Lca=3.27     S=170.14     Kn=0.055     LAG=91.0
 226          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 227          KO       0        0     0.0        1       22
 228          BA  3.3254
 229          LG    0.35     0.35   4.117    0.405     2.67
              * N2
 230          UI     0.0   123.04  123.04   123.04   123.04   310.82   395.95   496.74   616.34   730.85
 231          UI  796.44   869.05  928.55   990.24  1125.95  1316.06  1517.94  1186.36   925.57   834.34
 232          UI  764.31   726.51  694.11   654.42    619.9   586.86   557.14   517.77   491.74    466.8
 233          UI  422.37   387.25   352.0   325.27   302.29   296.75   282.99   272.23   257.26   234.33
 234          UI  202.13   202.13  163.14   157.21   157.21   143.92   134.76   134.76   134.76   103.63
 235          UI   94.33    94.33   94.33    94.33    83.75    60.21    60.21    60.21    60.21    60.21
 236          UI   60.21    60.21   60.21    32.52    23.58    23.58    23.58    23.58    23.58    23.58
 237          UI   23.58    23.58   23.58    23.58    23.58    23.58    23.58    23.58    23.58    23.58
 238          UI   23.58    23.58   23.58    23.58    23.58

 239          KK       N    CNAME     NCP
 240          KO       0        0     0.0        0       22
 241          BC       2      0.0

 242          KK     NCP    CNAME       N
 243          KO       0        0     0.0        0       22
 244          RN     NCP

 245          KK      P1
 246          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 247          KM   L=6.39     Lca=2.62     S=200.13     Kn=0.055     LAG=85.0
 248          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 249          KO       0        0     0.0        1       22
 250          BA  2.4365
 251          LG    0.35     0.35   4.193    0.396     6.712
              * P1
 252          UI     0.0    96.51   96.51    96.51    112.8   277.47   344.99    422.5   544.66   601.48
 253          UI  664.09    718.1  766.78   866.24  1024.06  1185.36   901.23   714.77   637.57   587.86
 254          UI  562.05   530.68  496.62   470.96   448.38    414.0   389.12   369.81   331.31    304.2
 255          UI  272.76   252.72  236.15   228.64   221.98   205.23    201.8   160.29   158.86   138.12
 256          UI  123.32   123.32  114.16    105.7    105.7    105.7    75.58    73.99    73.99    73.99
 257          UI   73.99    51.24   47.23    47.23    47.23    47.23    47.23    47.23    47.23    22.52
 258          UI    18.5     18.5    18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5
 259          UI    18.5     18.5    18.5     18.5     18.5     18.5     18.5     18.5     18.5      0.0

 260          KK     PCP    CNAME       P
 261          KO       0        0     0.0        0       22
 262          RN     PCP

 263          KK      Q1
 264          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 265          KM   L=5.23     Lca=2.81     S=228.56     Kn=0.055     LAG=78.0
 266          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 267          KO       0        0     0.0        1       22
 268          BA  2.2336
 269          LG    0.35     0.35   4.203     0.39   12.313
              * Q1
```



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

 270          UI     0.0    96.42   96.42    96.42    170.9   292.35   386.45   493.18   585.93   645.92
 271          UI  711.02   763.18  869.42  1043.58  1161.91   814.93   681.34   610.73   571.35   541.64
 272          UI  505.03   473.57  449.52   412.98   385.87   360.82   325.28   298.43   254.89   242.17
 273          UI  233.02   221.76  208.77    201.6   161.51    158.4   132.21    123.2    123.2   106.72
 274          UI   105.6    105.6   84.69    73.92    73.92    73.92    73.92    47.72    47.18    47.18
 275          UI   47.18    47.18   47.18    47.18    28.58    18.48    18.48    18.48    18.48    18.48
 276          UI   18.48    18.48   18.48    18.48    18.48    18.48    18.48    18.48    18.48    18.48
 277          UI   18.48    18.48   18.48

 278          KK     QCP    CNAME       Q
 279          KO       0        0     0.0        0       22
 280          RN     QCP
 281          ZZ
```

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	R1	506.	4.25	47.	12.	4.	0.28		
+	ROUTED TO	RCP	506.	4.25	47.	12.	4.	0.28		
+	HYDROGRAPH AT	L1	2127.	4.75	543.	138.	46.	3.55		
+	ROUTED TO	L1-L2	1851.	5.58	541.	138.	46.	3.55		
+	HYDROGRAPH AT	L2	2135.	5.25	666.	166.	55.	7.33		
+	2 COMBINED AT	L3R	3288.	5.50	1075.	273.	91.	10.88		
+	ROUTED TO	L2-L3	2798.	7.00	1058.	273.	91.	10.88		
+	HYDROGRAPH AT	L3	1832.	5.25	581.	146.	49.	5.85		
+	2 COMBINED AT	L	2776.	7.00	1354.	368.	123.	16.73		

+	ROUTED TO LCP	2729.	7.08	1334.	362.	121.	16.73
+	HYDROGRAPH AT Z1	694.	4.50	100.	25.	8.	0.66
+	ROUTED TO ZCP	694.	4.50	100.	25.	8.	0.66
+	HYDROGRAPH AT M1	3143.	4.75	793.	202.	67.	5.59
+	ROUTED TO M1-M2	2407.	6.83	785.	202.	67.	5.59
+	HYDROGRAPH AT M2	1812.	5.50	637.	160.	53.	7.53
+	2 COMBINED AT M	2659.	6.67	1225.	319.	106.	13.12
+	ROUTED TO MCP	2659.	6.67	1225.	319.	106.	13.12
+	HYDROGRAPH AT O1	1057.	5.33	343.	68.	29.	3.09
+	ROUTED TO OCP	1057.	5.33	343.	68.	29.	3.09
+	HYDROGRAPH AT N1	1253.	4.50	210.	53.	18.	1.52
+	ROUTED TO N1-N2	828.	6.17	209.	53.	18.	1.52
+	HYDROGRAPH AT N2	1193.	5.17	366.	93.	31.	3.33
+	2 COMBINED AT N	1171.	6.08	514.	131.	44.	4.85
+	ROUTED TO NCP	1171.	6.08	514.	131.	44.	4.85
+	HYDROGRAPH AT P1	1041.	5.08	306.	78.	26.	2.44
+	ROUTED TO PCP	1041.	5.08	306.	78.	26.	2.44
+	HYDROGRAPH AT Q1	1107.	5.00	312.	80.	27.	2.23
+	ROUTED TO QCP	1107.	5.00	312.	80.	27.	2.23

```
*** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY  1991              *
*          VERSION 4.0.1E           *
*                                   *
*  RUN DATE          TIME           *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*         (916) 551-1748            *
*                                   *
*************************************
```

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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

HEC-1 INPUT PAGE 1

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

  1           ID   Buckeye/Sun Valley ADMS - 1 March 2004
  2           ID   PB56J - Modeler: Jacob Lesue & Wen Chen
  3           ID   100-year 6-hour
  4           ID   Existing Conditions
  5           ID   FRS #2 (Sub-basins S-U)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
```

```
15          JD    3.28    0.01
            * 6-hour distribution, pattern 1.0
16          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
17          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
18          PC   0.962   0.972   0.983   0.991     1.0
19          IN      15 01JAN94       0
20          JD    3.26     0.5
            * 6-hour distribution, pattern 1.0
21          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
22          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
23          PC   0.962   0.972   0.983   0.991     1.0
24          IN      15 01JAN94       0
25          JD   3.237     1.0
            * 6-hour distribution, pattern 1.4
26          PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
27          PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
28          PC  0.9572  0.9684  0.9798  0.9898     1.0
29          IN      15 01JAN94       0
30          JD   3.149     5.0
            * 6-hour distribution, pattern 2.3
31          PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
32          PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
33          PC  0.9487   0.962  0.9743  0.9877     1.0
34          IN      15 01JAN94       0
35          JD   3.083    10.0
            * 6-hour distribution, pattern 2.7
36          PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
37          PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
38          PC  0.9471  0.9608  0.9735  0.9873     1.0

39          KK      S1
40          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
41          KM   L=2.32     Lca=0.52      S=143.99      Kn=0.050      LAG=29.0
42          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
43          KO       0        0     0.0       1      22
44          BA  1.4105
45          LG    0.35     0.35   4.484   0.352   6.918
            * S1
46          UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
47          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

48          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

49          KK     SCP   CNAME       S
50          KO       0       0     0.0       0      22
51          RN     SCP

52          KK      U1
53          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
54          KM   L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
55          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
56          KO       0       0     0.0       1      22
57          BA  1.3705
58          LG    0.35     0.37   5.298   0.233   6.449
            * U1
59          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
60          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
61          UI   66.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
62          UI    26.8     0.0

63          KK     UCP   CNAME       U
64          KO       0       0     0.0       0      22
65          RN     UCP

66          KK      T1
67          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
68          KM   L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
69          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
70          KO       0       0     0.0       1      22
71          BA  3.0415
72          LG    0.35     0.35   4.644   0.299  11.497
            * T1
73          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
74          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
75          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
76          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
77          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

78          KK     TCP   CNAME       T
79          KO       0       0     0.0       0      22
80          RN     TCP
81          ZZ
```

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	S1	1542.	4.33	209.	52.	17.	1.41		
+	ROUTED TO	SCP	1542.	4.33	209.	52.	17.	1.41		
+	HYDROGRAPH AT	U1	1496.	4.42	223.	56.	19.	1.37		
+	ROUTED TO	UCP	1496.	4.42	223.	56.	19.	1.37		
+	HYDROGRAPH AT	T1	2111.	4.67	461.	116.	39.	3.04		
+	ROUTED TO	TCP	2111.	4.67	461.	116.	39.	3.04		

```
 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY  1991            *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
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*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
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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

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                                    HEC-1 INPUT                                          PAGE  1

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

   1          ID   Buckeye/Sun Valley ADMS - 01 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesus & Wen Chen
   3          ID   100-year 6-hour
   4          ID   Existing Conditions
   5          ID   FRS #3 (Sub-basins V-Y)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       3
  14          IN      15 01JAN94       0
  15          JD    3.26     0.01
              * 6-hour distribution, pattern 1.0
  16          PC     0.0    0.008    0.016    0.025    0.033    0.041     0.05    0.058    0.066    0.074
  17          PC   0.087    0.099    0.118    0.138    0.216    0.377    0.834    0.911    0.931     0.95
  18          PC   0.962    0.972    0.983    0.991      1.0
  19          IN      15 01JAN94       0
  20          JD    3.24      0.5
              * 6-hour distribution, pattern 1.0
  21          PC     0.0    0.008    0.016    0.025    0.033    0.041     0.05    0.058    0.066    0.074
  22          PC   0.087    0.099    0.118    0.138    0.216    0.377    0.834    0.911    0.931     0.95
  23          PC   0.962    0.972    0.983    0.991      1.0
  24          IN      15 01JAN94       0
  25          JD   3.218      1.0
              * 6-hour distribution, pattern 1.4
  26          PC     0.0   0.0084    0.016    0.025   0.0334   0.0414   0.0504   0.0584   0.0664   0.0748
  27          PC   0.087   0.0994   0.1188    0.148   0.2304   0.4067   0.7778   0.8813   0.9186   0.9452
  28          PC  0.9572   0.9684   0.9798   0.9898      1.0
  29          IN      15 01JAN94       0
  30          JD    3.13      5.0
              * 6-hour distribution, pattern 2.3
  31          PC     0.0    0.011   0.0173   0.0267   0.0387    0.049   0.0593   0.0693   0.0797   0.0903
  32          PC   0.103   0.1173   0.1383   0.1827   0.2693    0.458    0.686   0.8233   0.8893   0.9293
  33          PC  0.9487    0.962   0.9743   0.9877      1.0
  34          IN      15 01JAN94       0
  35          JD   3.064     10.0
              * 6-hour distribution, pattern 2.7
  36          PC     0.0   0.0134   0.0189   0.0287   0.0443   0.0574   0.0694   0.0818   0.0949   0.1076
  37          PC  0.1223   0.1382   0.1604   0.2063   0.2902   0.4664   0.6764   0.8069   0.8765   0.9189
  38          PC  0.9471   0.9608   0.9735   0.9873      1.0

  39          KK      V1
  40          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  41          KM   L=2.86      Lca=1.75      S=344.82      Kn=0.050      LAG=43.0
  42          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
  43          KO       0        0      0.0        1       22
  44          BA  0.6646
  45          LG    0.35     0.35    3.972    0.405   13.864
              * V1
  46          UI     0.0    52.04    54.19   166.27   256.03   338.03   396.86   496.51   578.98   373.13
  47          UI  313.66   281.75   250.64   220.87   193.81   162.52   133.66   122.94   111.92     90.9
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                                    HEC-1 INPUT                                          PAGE  2

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

  48          UI   74.78    66.34    56.99     53.4     39.9     39.9    30.81    25.47    25.47    25.47
  49          UI   16.36     9.97     9.97     9.97     9.97     9.97     9.97     9.97     9.97     9.97
  50          UI     0.0

  51          KK     VCP    CNAME        V
  52          KO       0        0      0.0        0       22
  53          RM     VCP

  54          KK      W1
  55          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  56          KM   L=3.46      Lca=1.78      S=486.28      Kn=0.050      LAG=44.0
  57          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
  58          KO       0        0      0.0        1       22
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 59          BA   3.894
 60          LG    0.35    0.35   3.976    0.41  15.199
             * W1
 61          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 62          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
 63          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
 64          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 65          UI   57.11     0.0

 66          KK   W1-W2   CNAME     W2R
 67          KO       0       0     0.0       0      22
 68          RS       6    FLOW     0.0     0.0
 69          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
             * W1-W2
 70          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 71          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 72          KK      W2
 73          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 74          KM   L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
 75          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 76          KO       0       0     0.0       1      22
 77          BA  2.8478
 78          LG    0.35    0.35   4.081   0.402   3.547
             * W2
 79          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 80          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 81          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
 82          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 83          UI   41.77     0.0

 84          KK       W   CNAME     WCP
 85          KO       0       0     0.0       0      22
 86          RC       2     0.0

 87          KK     WCP   CNAME       W
 88          KO       0       0     0.0       0      22
 89          RN     WCP
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HEC-1 INPUT PAGE 3

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

 90          KK      X1
 91          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 92          KM   L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
 93          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 94          KO       0       0     0.0       1      22
 95          BA  0.7867
 96          LG    0.35    0.35   3.955   0.417  12.555
             * X1
 97          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
 98          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
 99          UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
100          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

101          KK     XCP   CNAME       X
102          KO       0       0     0.0       0      22
103          RN     XCP

104          KK      Y1
105          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
106          KM   L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
107          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
108          KO       0       0     0.0       1      22
109          BA  0.5808
110          LG    0.35    0.35   4.044   0.415  10.947
             * Y1
111          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
112          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

113          KK     YCP   CNAME       Y
114          KO       0       0     0.0       0      22
115          RN     YCP
116          ZZ
```

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	V1	664.	4.50	113.	28.	9.	0.66		
+	ROUTED TO	VCP	664.	4.50	113.	28.	9.	0.66		
+	HYDROGRAPH AT	W1	2623.	4.58	544.	137.	46.	3.89		
+	ROUTED TO	W1-W2	2383.	4.92	542.	137.	46.	3.89		
+	HYDROGRAPH AT	W2	1878.	4.58	342.	86.	29.	2.85		
+	2 COMBINED AT	W	3219.	4.83	796.	202.	67.	6.74		
+	ROUTED TO	WCP	3219.	4.83	796.	202.	67.	6.74		
+	HYDROGRAPH AT	X1	787.	4.50	128.	32.	11.	0.79		
+	ROUTED TO	XCP	787.	4.50	128.	32.	11.	0.79		
	HYDROGRAPH AT									

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+                          Y1      1077.    4.17          96.         24.         8.       0.58
          ROUTED TO
+                          YCP     1077.    4.17          96.         24.         8.       0.58

*** NORMAL END OF HEC-1 ***
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E.6.3.bHEC-1 Output File for 100-Year 6-Hour (Future Conditions)

```
1*************************************                    *************************************
*                                   *                    *                                   *
*  FLOOD HYDROGRAPH PACKAGE (HEC-1) *                    *   U.S. ARMY CORPS OF ENGINEERS    *
*            MAY  1991              *                    *   HYDROLOGIC ENGINEERING CENTER   *
*          VERSION 4.0.1E           *                    *         609 SECOND STREET         *
*                                   *                    *      DAVIS, CALIFORNIA 95616      *
*  RUN DATE          TIME           *                    *        (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

                                        HEC-1 INPUT                                          PAGE  1

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

   1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
   2           ID   PBS&J - Modelers: Jacob Lesue & Wan Chen
   3           ID   100-year 6-hour
   4           ID   Future Conditions
   5           ID   FRE #1 (Sub-basins E-H)
   6           ID   Rainfall Loss Method - Green & Ampt
   7           ID   Unit Hydrograph Method - FCDMC S-Graph
   8           ID   Channel Routing Method - Normal Depth
   9           ID   Land Use - Town of Buckeye LU District (2003)
  10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
               *DIAGRAM
  12           IT       5  1JAN94       0    2600
  13           IO       0
  14           IN      15 01JAN94       0
  15           JD    3.23    0.01
               * 6-hour distribution, pattern 1.0
  16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  18           PC   0.962   0.972   0.983   0.991     1.0
  19           IN      15 01JAN94       0
  20           JD   3.211     0.5
               * 6-hour distribution, pattern 1.0
  21           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
  22           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
  23           PC   0.962   0.972   0.983   0.991     1.0
  24           IN      15 01JAN94       0
  25           JD   3.188     1.0
               * 6-hour distribution, pattern 1.4
  26           PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
  27           PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9482
  28           PC  0.9572  0.9684  0.9798  0.9898     1.0
  29           IN      15 01JAN94       0
  30           JD   3.101     5.0
               * 6-hour distribution, pattern 2.3
  31           PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
  32           PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
  33           PC  0.9487   0.962  0.9743  0.9877     1.0
  34           IN      15 01JAN94       0
  35           JD   3.036    10.0
               * 6-hour distribution, pattern 2.7
  36           PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
  37           PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
  38           PC  0.9471  0.9608  0.9735  0.9873     1.0
  39           IN      15 01JAN94       0
  40           JD   2.939    20.0
               * 6-hour distribution, pattern 3.1
  41           PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
  42           PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
  43           PC  0.9434   0.958  0.9718  0.9863     1.0
  44           IN      15 01JAN94       0
  45           JD   2.875    30.0
               * 6-hour distribution, pattern 3.4
  46           PC     0.0  0.0172  0.0256  0.0378  0.0565  0.0719  0.0868   0.103  0.1191  0.1342
  47           PC  0.1513  0.1702  0.1961  0.2439  0.3263  0.4824  0.6655  0.7875   0.858  0.9031

                                        HEC-1 INPUT                                          PAGE  2

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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48          PC   0.939  0.9544  0.9697  0.9851     1.0
49          IN      15 01JAN94       0
50          JD    2.81    40.0
            * 6-hour distribution, pattern 3.5
51          PC     0.0  0.0102  0.0261  0.0413  0.0604  0.0759  0.0916  0.1088  0.1254   0.141
52          PC  0.1586  0.1783  0.2056  0.2537  0.3362   0.487  0.6636  0.7836  0.8535  0.8991
53          PC  0.9358  0.9519  0.9682  0.9843     1.0
54          IN      15 01JAN94       0
55          JD   2.584   100.0
            * 6-hour distribution, pattern 4.1
56          PC     0.0  0.0212  0.0355  0.0515  0.0715  0.0877   0.106  0.1261  0.1443  0.1618
57          PC  0.1812  0.2036  0.2347  0.2837   0.367   0.501  0.6559  0.7704  0.8392  0.8864
58          PC  0.9256   0.944  0.9633  0.9817     1.0

59          KK     G1
60          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
61          KM         L=2.38     Lca=1.08     S=33.76     Kn=0.045     LAG=47.0
62          KM         S-GRAPH TYPE=DESERT RANGELAND
63          KO       0       0     0.0       1      22
64          BA  1.1192
65          LG   0.297   0.297   4.688   0.326  15.814
            * G1
66          UI     0.0   80.18   80.18  233.21  355.01  484.39  602.77  698.96  750.35  768.35
67          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
68          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
69          UI   19.51   19.51   19.51   19.51   19.51     0.0

70          KK   G1-Do
71          KO       0       0     0.0       0      22
72          DT    G1-D    47.0     0.0
            * Curve 1
73          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
74          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
75          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
76          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

77          KK     GCP    CNAME       G
78          KO       0       0     0.0       0      22
79          RN     GCP

80          KK      J1
81          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
82          KM         L=4.09     Lca=1.78     S=70.82     Kn=0.055     LAG=75.0
83          KM         S-GRAPH TYPE=DESERT RANGELAND
84          KO       0       0     0.0       1      22
85          BA  1.7341
86          LG    0.25    0.27    3.25   0.657    30.0
            * J1
87          UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
88          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
89          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
90          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
91          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
92          UI   18.95   18.95   18.95   18.95   18.95   18.95
```



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

93          KK   J1-Do
94          KO       0       0     0.0       0      22
95          DT    J1-D   102.0     0.0
            * Curve 1
96          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
97          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
98          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
99          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

100         KK   J1-J2    CNAME     J2R
101         KO       0       0     0.0       0      22
102         RS      38    FLOW     0.0     0.0
103         RC   0.055    0.04   0.055 24090.0  0.0086     0.0
            * J1-J2
104         RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
105         RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

106         KK      J2
107         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
108         KM         L=5.18     Lca=2.51     S=45.01     Kn=0.050     LAG=93.0
109         KM         S-GRAPH TYPE=DESERT RANGELAND
110         KO       0       0     0.0       1      22
111         BA  3.6379
112         LG    0.25    0.26   3.623   0.499    30.0
            * J2
113         UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
114         UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
115         UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
116         UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
117         UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
118         UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
119         UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

120         KK   J2-Do
121         KO       0       0     0.0       0      22
122         DT    J2-D   224.0     0.0
            * Curve 1
123         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
124         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
125         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
126         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

127         KK    K3RB    CNAME   J2-K3
128         KO       0       0     0.0       0      22
129         RC       2     0.0

130         KK   J2-K3    CNAME    K3RB
131         KO       0       0     0.0       0      22
132         RS       6    FLOW     0.0     0.0
133         RC    0.05   0.048    0.05  4072.0  0.0059     0.0
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                * J2-K3
 134            RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
                                          HEC-1 INPUT                                          PAGE  4
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 135            RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

 136            KK      K1
 137            KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 138            KM         L=3.23     Lca=1.84     S=681.00     Kn=0.050     LAG=40.0
 139            KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 140            KO       0       0     0.0       1      22
 141            BA   1.543
 142            LG   0.112   0.255   4.382   0.365   21.06
                * K1
 143            UI     0.0  129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
 144            UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
 145            UI  154.56  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
 146            UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0

 147            KK   K1-K2   CNAME     K2R
 148            KO       0       0     0.0       0      22
 149            RS      17    FLOW     0.0     0.0
 150            RC   0.048    0.05   0.048 30021.0   0.015     0.0
                * K1-K2
 151            RX     0.0    20.0    55.0    85.0   235.0   259.0   289.0   309.0
 152            RY    22.0    21.0    20.0    10.0    10.0    20.0    21.0    22.0

 153            KK      K2
 154            KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 155            KM         L=7.3      Lca=4.04     S=108.84     Kn=0.055     LAG=119.0
 156            KM         S-GRAPH TYPE=DESERT RANGELAND
 157            KO       0       0     0.0       1      22
 158            BA   2.365
 159            LG   0.272   0.277   4.471   0.382   21.86
                * K2
 160            UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
 161            UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99  587.9  605.63  610.31
 162            UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
 163            UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
 164            UI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
 165            UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
 166            UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
 167            UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
 168            UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

 169            KK   K2-Do
 170            KO       0       0     0.0       0      22
 171            DT    K2-D   128.0     0.0
                * Curve 1
 172            DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 173            DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
                * Curve 1
 174            DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 175            DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
                                          HEC-1 INPUT                                          PAGE  5
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 176            KK    K3RA   CNAME   K2-K3
 177            KO       0       0     0.0       0      22
 178            RC       2   1.543

 179            KK   K2-K3   CNAME    K3RA
 180            KO       0       0     0.0       0      22
 181            RS      21    FLOW     0.0     0.0
 182            RC    0.05   0.048    0.05 25950.0  0.0084     0.0
                * K2-K3
 183            RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
 184            RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

 185            KK      F1
 186            KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 187            KM         L=4.07     Lca=1.63     S=441.98     Kn=0.050     LAG=46.0
 188            KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 189            KO       0       0     0.0       1      22
 190            BA   2.7854
 191            LG    0.24    0.27   4.322   0.364   32.052
                * F1
 192            UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
 193            UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
 194            UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
 195            UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
 196            UI   39.08   39.08   39.08     0.0

 197            KK   F1-Do
 198            KO       0       0     0.0       0      22
 199            DT    F1-D   133.0     0.0
                * Curve 1
 200            DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 201            DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
                * Curve 1
 202            DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 203            DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 204            KK   F1-F2   CNAME     F2R
 205            KO       0       0     0.0       0      22
 206            RS       8    FLOW     0.0     0.0
 207            RC   0.053   0.045   0.055  8635.0   0.012     0.0
                * F1-F2
 208            RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
 209            RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

 210            KK      F2
 211            KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 212            KM         L=3.88     Lca=1.76     S=161.6     Kn=0.050     LAG=57.0
 213            KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 214            KO       0       0     0.0       1      22
 215            BA   2.5261
 216            LG    0.25    0.25   4.311   0.436   33.026
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            * F2
217         UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
218         UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
                                          HEC-1 INPUT                                          PAGE  6

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

219         UI  463.22  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
220         UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
221         UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
222         UI    28.6    28.6    28.6     0.0

223         KK    F2-D
224         KO       0       0     0.0       0      22
225         DT    F2-D   130.0     0.0
            * Curve 1
226         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
227         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
228         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
229         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

230         KK     F3R   CNAME   F2-F3
231         KO       0       0     0.0       0      22
232         HC       2     0.0

233         KK   F2-F3   CNAME     F3R
234         KO       0       0     0.0       0      22
235         RS       6    FLOW     0.0     0.0
236         RC    0.05   0.047   0.048  7059.0    0.01     0.0
            * F2-F3
237         RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
238         RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

239         KK      F3
240         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
241         KM          L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
242         KM          S-GRAPH TYPE=DESERT RANGELAND
243         KO       0       0     0.0       1      22
244         BA  0.7363
245         LG    0.25    0.27   3.266   0.656    30.0
            * F3
246         UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
247         UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
248         UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
249         UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
250         UI     0.0

251         KK   F3-Do
252         KO       0       0     0.0       0      22
253         DT    F3-D    45.0     0.0
            * Curve 1
254         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
255         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
256         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
257         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
                                          HEC-1 INPUT                                          PAGE  7

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

258         KK    E4RB   CNAME   F3-E4
259         KO       0       0     0.0       0      22
260         HC       2     0.0

261         KK   F3-E4   CNAME    E4RB
262         KO       0       0     0.0       0      22
263         RS      21    FLOW     0.0     0.0
264         RC    0.05   0.044    0.05 27656.0  0.0072     0.0
            * F3-E4
265         RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
266         RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

267         KK      H1
268         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
269         KM          L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
270         KM          S-GRAPH TYPE=DESERT RANGELAND
271         KO       0       0     0.0       1      22
272         BA  1.0659
273         LG    0.25    0.29   2.733   0.945    30.0
            * H1
274         UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
275         UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
276         UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
277         UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

278         KK   H1-Do
279         KO       0       0     0.0       0      22
280         DT    H1-D    60.0     0.0
            * Curve 1
281         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
282         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
283         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
284         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

285         KK   H1-H2   CNAME     H2R
286         KO       0       0     0.0       0      22
287         RS      31    FLOW     0.0     0.0
288         RC   0.053    0.05   0.053 21738.0  0.0082     0.0
            * H1-H2
289         RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
290         RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

291         KK      E1
292         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
293         KM          L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
294         KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
295         KO       0       0     0.0       1      22
296         BA  0.9558
297         LG    0.25    0.25   5.377   0.273    30.69
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            * E1
298         UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
299         UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
300         UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62

                                        HEC-1 INPUT                                          PAGE  8

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

301         UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
302         UI     0.0

303         KK   E1-Do
304         KO       0       0     0.0       0      22
305         DT    E1-D    53.0     0.0
            * Curve 1
306         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
307         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
308         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
309         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

310         KK   E1-E2   CNAME     E2R
311         KO       0       0     0.0       0      22
312         RS      10    FLOW     0.0     0.0
313         RC    0.05   0.047   0.046 11365.0   0.016     0.0
            * E1-E2
314         RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
315         RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

316         KK      E2
317         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
318         KM          L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
319         KM          S-GRAPH TYPE=DESERT RANGELAND
320         KO       0       0     0.0       1      22
321         BA  1.9794
322         LG    0.25    0.25   5.043   0.306    30.0
            * E2
323         UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
324         UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
325         UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
326         UI   36.05   36.05   36.05   36.05

327         KK   E2-Do
328         KO       0       0     0.0       0      22
329         DT    E2-D   118.0     0.0
            * Curve 1
330         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
331         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
332         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
333         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

334         KK     E3R   CNAME   E2-E3
335         KO       0       0     0.0       0      22
336         RC       2     0.0

337         KK   E2-E3   CNAME     E3R
338         KO       0       0     0.0       0      22
339         RS      15    FLOW     0.0     0.0
340         RC   0.052   0.046   0.052 19626.0  0.0088     0.0
            * E2-E3
341         RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
342         RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

                                        HEC-1 INPUT                                          PAGE  9

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

343         KK      E3
344         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
345         KM          L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
346         KM          S-GRAPH TYPE=DESERT RANGELAND
347         KO       0       0     0.0       1      22
348         BA  2.4882
349         LG    0.25    0.25   4.358   0.377    30.0
            * E3
350         UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
351         UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
352         UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
353         UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
354         UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
355         UI   27.19   27.19   27.19   27.19   27.19   27.19

356         KK   E3-Do
357         KO       0       0     0.0       0      22
358         DT    E3-D   152.0     0.0
            * Curve 1
359         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
360         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
361         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
362         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

363         KK    E4RA   CNAME   E3-E4
364         KO       0       0     0.0       0      22
365         RC       2     0.0

366         KK   E3-E4   CNAME    E4RA
367         KO       0       0     0.0       0      22
368         RS      14    FLOW     0.0     0.0
369         RC   0.056   0.049   0.056 13855.0  0.0048     0.0
            * E3-E4
370         RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
371         RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

372         KK      N2
373         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
374         KM          L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
375         KM          S-GRAPH TYPE=DESERT RANGELAND
376         KO       0       0     0.0       1      22
377         BA  1.4003
378         LG    0.25    0.27   3.222   0.664    30.0
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          * H2
379       UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
380       UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
381       UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
382       UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
383       UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
384       UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
385       UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

386       KK   H2-Do
387       KO      0       0     0.0       0      22
388       DT    H2-D    88.0     0.0
          * Curve 1
389       DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
390       DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
          * Curve 1
391       DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
392       DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

393       KK      E4
394       KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
395       KM         L=5.36     Lca=2.81     S=38.26     Kn=0.050     LAG=102.0
396       KM         S-GRAPH TYPE=DESERT RANGELAND
397       KO      0       0     0.0       1      22
398       BA  3.0419
399       LG    0.25    0.25   3.816   0.441    30.0
          * E4
400       UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
401       UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
402       UI  558.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
403       UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
404       UI   185.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
405       UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
406       UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
407       UI   24.44   24.44   24.44   24.44   24.44   24.44

408       KK   E4-Do
409       KO      0       0     0.0       0      22
410       DT    E4-D   190.0     0.0
          * Curve 1
411       DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
412       DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
          * Curve 1
413       DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
414       DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

415       KK     E5R   CNAME  E4H2E5
416       KO       0       0     0.0       0      22
417       RC       5     0.0

418       KK  E4H2E5   CNAME     E5R
419       KO       0       0     0.0       0      22
420       RS      17    FLOW     0.0     0.0
421       RC    0.06    0.05    0.06 15206.0  0.0051     0.0
          * E4H2-E5
422       RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
423       RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

424       KK      K3
425       KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
426       KM         L=4.92     Lca=2.65     S=44.16     Kn=0.050     LAG=94.0
427       KM         S-GRAPH TYPE=DESERT RANGELAND
428       KO      0       0     0.0       1      22
429       BA  1.6364
430       LG    0.25    0.27   3.421     0.6    30.0
          * K3
431       UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
432       UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
433       UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
434       UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
435       UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
436       UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
437       UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

438       KK   K3-Do
439       KO      0       0     0.0       0      22
440       DT    K3-D   101.0     0.0
          * Curve 1
441       DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
442       DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
          * Curve 1
443       DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
444       DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

445       KK      E5
446       KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
447       KM         L=3.01     Lca=1.41     S=28.56     Kn=0.050     LAG=66.0
448       KM         S-GRAPH TYPE=DESERT RANGELAND
449       KO      0       0     0.0       1      22
450       BA  1.3075
451       LG    0.25    0.25   3.94   0.473    30.0
          * E5
452       UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
453       UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
454       UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
455       UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
456       UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

457       KK   E5-Do
458       KO      0       0     0.0       0      22
459       DT    E5-D    79.0     0.0
          * Curve 1
460       DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
461       DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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                 * Curve 1
462              DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
463              DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE             ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

464              KK     E6R   CNAME  E5K2E6
465              KO       0       0     0.0       0      22
466              HC       5   1.543

467              KK  E5K2E6   CNAME     E6R
468              KO       0       0     0.0       0      22
469              RS       6    FLOW     0.0     0.0
470              RC   0.063   0.051   0.063  5083.0  0.0037     0.0
                 * E5K3-E6
471              RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
472              RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

473              KK      E6
474              KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
475              KM          L=3.04     Lca=1.06     S=34.17     Km=0.050     LAG=57.0
476              KM          S-GRAPH TYPE=DESERT RANGELAND
477              KO       0       0     0.0       1      22
478              BA  2.0378
479              LG   0.289   0.289   4.356   0.392  18.293
                 * E6
480              UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
481              UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
482              UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
483              UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
484              UI   29.29   29.29     0.0

485              KK   E6-Do
486              KO       0       0     0.0       0      22
487              DT    E6-D   100.0     0.0
                 * Curve 1
488              DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
489              DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
                 * Curve 1
490              DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
491              DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

492              KK       E   CNAME     ECP
493              KO       0       0     0.0       0      22
494              HC       2   1.543

495              KK     ECP   CNAME       E
496              KO       0       0     0.0       0      22
497              KM     ECP
498              ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	G1	1040.	4.67	198.	50.	17.	1.12		
+	DIVERSION TO	G1-D	1039.	4.58	95.	24.	8.	1.12		
+	HYDROGRAPH AT	G1-Do	943.	4.75	104.	26.	9.	1.12		
+	ROUTED TO	GCP	943.	4.75	104.	26.	9.	1.12		
+	HYDROGRAPH AT	J1	1009.	5.00	301.	77.	26.	1.73		
+	DIVERSION TO	J1-D	1009.	5.00	206.	51.	17.	1.73		
+	HYDROGRAPH AT	J1-Do	528.	5.50	102.	26.	9.	1.73		
+	ROUTED TO	J1-J2	380.	8.08	101.	26.	9.	1.73		
+	HYDROGRAPH AT	J2	1745.	5.33	628.	162.	54.	3.64		
+	DIVERSION TO	J2-D	1745.	5.33	452.	113.	38.	3.64		
+	HYDROGRAPH AT	J2-Do	1006.	6.17	196.	49.	16.	3.64		
+	2 COMBINED AT	K3RB	877.	6.17	240.	61.	20.	5.37		
+	ROUTED TO	J2-K3	791.	6.58	239.	61.	20.	5.37		
+	HYDROGRAPH AT	K1	1563.	4.50	290.	73.	24.	1.54		
+	ROUTED TO	K1-K2	1004.	5.83	287.	73.	24.	1.54		
+	HYDROGRAPH AT	K2	935.	5.67	394.	103.	34.	2.37		
+	DIVERSION TO	K2-D	935.	5.67	258.	65.	22.	2.37		

+ HYDROGRAPH AT	K2-Do	642.	6.50	153.	38.	13.	2.37
+ 2 COMBINED AT	K3RA	1480.	6.17	456.	115.	38.	1.54
+ ROUTED TO	K2-K3	1166.	7.83	448.	115.	38.	1.54
+ HYDROGRAPH AT	F1	2361.	4.58	535.	136.	45.	2.79
+ DIVERSION TO	F1-D	2361.	4.58	268.	67.	22.	2.79
+ HYDROGRAPH AT	F1-Do	1895.	4.83	275.	69.	23.	2.79
+ ROUTED TO	F1-F2	1682.	5.17	275.	69.	23.	2.79
+ HYDROGRAPH AT	F2	1869.	4.75	478.	123.	41.	2.53
+ DIVERSION TO	F2-D	1869.	4.75	262.	66.	22.	2.53
+ HYDROGRAPH AT	F2-D	1379.	5.08	228.	57.	19.	2.53
+ 2 COMBINED AT	F3R	2628.	5.17	446.	111.	37.	5.31
+ ROUTED TO	F2-F3	2291.	5.58	445.	111.	37.	5.31
+ HYDROGRAPH AT	F3	638.	4.75	140.	35.	12.	0.74
+ DIVERSION TO	F3-D	638.	4.75	91.	23.	8.	0.74
+ HYDROGRAPH AT	F3-Do	415.	5.08	51.	13.	4.	0.74
+ 2 COMBINED AT	E4RB	2376.	5.58	459.	115.	38.	6.05
+ ROUTED TO	F3-E4	1651.	7.25	449.	115.	38.	6.05
+ HYDROGRAPH AT	H1	803.	4.67	175.	44.	15.	1.07
+ DIVERSION TO	H1-D	803.	4.67	121.	30.	10.	1.07
+ HYDROGRAPH AT	H1-Do	518.	5.08	56.	14.	5.	1.07
+ ROUTED TO	H1-H2	212.	7.17	55.	14.	5.	1.07
+ HYDROGRAPH AT	E1	1061.	4.50	206.	52.	17.	0.96
+ DIVERSION TO	E1-D	1061.	4.50	107.	27.	9.	0.96
+ HYDROGRAPH AT	E1-Do	815.	4.75	101.	25.	8.	0.96
+ ROUTED TO	E1-E2	658.	5.25	101.	25.	8.	0.96
+ HYDROGRAPH AT	E2	1953.	4.58	400.	101.	34.	1.98
+ DIVERSION TO	E2-D	1953.	4.58	238.	59.	20.	1.98
+ HYDROGRAPH AT	E2-Do	1443.	4.92	165.	41.	14.	1.98
+ 2 COMBINED AT	E3R	1373.	4.92	241.	60.	20.	2.94
+ ROUTED TO	E2-E3	1029.	6.08	239.	60.	20.	2.94
+ HYDROGRAPH AT	E3	1583.	5.08	474.	121.	40.	2.49
+ DIVERSION TO	E3-D	1583.	5.08	307.	77.	26.	2.49
+ HYDROGRAPH AT	E3-Do	1106.	5.58	178.	45.	15.	2.49
+ 2 COMBINED AT	E4RA	1515.	6.08	362.	91.	30.	5.42
+ ROUTED TO	E3-E4	1267.	7.17	356.	91.	30.	5.42
+ HYDROGRAPH AT	H2	730.	5.25	245.	63.	21.	1.40
+ DIVERSION TO	H2-D	730.	5.25	177.	44.	15.	1.40
+ HYDROGRAPH AT	H2-Do	386.	5.92	75.	19.	6.	1.40

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+          HYDROGRAPH AT
                          E4      1438.   5.42      548.      143.      48.     3.04
+          DIVERSION TO
                          E4-D    1438.   5.42      383.       96.      32.     3.04
+          HYDROGRAPH AT
                          E4-Do    514.   6.25      181.       47.      16.     3.04
+          5 COMBINED AT
                          E5R     2324.   7.42      689.      177.      59.    16.98
+          ROUTED TO
                          E4R2E5  2026.   8.75      678.      177.      59.    16.98
+          HYDROGRAPH AT
                          K3       817.   5.33      288.       75.      25.     1.64
+          DIVERSION TO
                          K3-D     817.   5.33      204.       51.      17.     1.64
+          HYDROGRAPH AT
                          K3-Do    429.   5.92       95.       24.       8.     1.64
+          HYDROGRAPH AT
                          E5       957.   4.92      253.       64.      21.     1.31
+          DIVERSION TO
                          E5-D     957.   4.92      159.       40.      13.     1.31
+          HYDROGRAPH AT
                          E5-Do    667.   5.25       98.       24.       8.     1.31
+          5 COMBINED AT
                          E6R     5642.   8.08     2277.      600.     200.     1.54
+          ROUTED TO
                          E5R2E6  5490.   8.50     2268.      600.     200.     1.54
+          HYDROGRAPH AT
                          E6      1456.   4.75      335.       85.      28.     2.04
+          DIVERSION TO
                          E6-D    1456.   4.75      202.       50.      17.     2.04
+          HYDROGRAPH AT
                          E6-Do    940.   5.17      137.       34.      11.     2.04
+          2 COMBINED AT
                          E       5491.   8.50     2327.      637.     212.     1.54
+          ROUTED TO
                          ECP     5491.   8.50     2327.      637.     212.     1.54

 *** NORMAL END OF HEC-1 ***
1****************************************                    ****************************************
*                                        *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*             MAY  1991                  *                    *   HYDROLOGIC ENGINEERING CENTER      *
*          VERSION 4.0.1E                *                    *         609 SECOND STREET            *
*                                        *                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE            TIME              *                    *        (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

                                        HEC-1 INPUT                                          PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wan Chen
  3           ID   100-year 6-hour
  4           ID   Future Conditions
  5           ID   IRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    3.23    0.01
              * 6-hour distribution, pattern 1.0
 16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
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18          PC   0.962   0.972   0.983   0.991     1.0
19          IN      15 01JAN94       0
20          JD   3.211     0.5
            * 6-hour distribution, pattern 1.0
21          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
22          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
23          PC   0.962   0.972   0.983   0.991     1.0
24          IN      15 01JAN94       0
25          JD   3.188     1.0
            * 6-hour distribution, pattern 1.4
26          PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
27          PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
28          PC  0.9572  0.9684  0.9798  0.9898     1.0
29          IN      15 01JAN94       0
30          JD   3.101     5.0
            * 6-hour distribution, pattern 2.3
31          PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
32          PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8693  0.9293
33          PC  0.9487   0.962  0.9743  0.9877     1.0
34          IN      15 01JAN94       0
35          JD   3.036    10.0
            * 6-hour distribution, pattern 2.7
36          PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
37          PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
38          PC  0.9471  0.9608  0.9735  0.9873     1.0
39          IN      15 01JAN94       0
40          JD   2.939    20.0
            * 6-hour distribution, pattern 3.1
41          PC     0.0  0.0158   0.022  0.0329  0.0511  0.0663  0.0799  0.0948  0.1102  0.1246
42          PC   0.141  0.1587  0.1828    0.23  0.3122  0.4758  0.6684  0.7929  0.8643  0.9087
43          PC  0.9434   0.958  0.9718  0.9863     1.0
44          IN      15 01JAN94       0
45          JD   2.875    30.0
            * 6-hour distribution, pattern 3.4
46          PC     0.0  0.0172  0.0256  0.0378  0.0565  0.0719  0.0868   0.103  0.1191  0.1342
47          PC  0.1513  0.1702  0.1961  0.2439  0.3263  0.4824  0.6655  0.7875   0.858  0.9031
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

48          PC   0.939  0.9544  0.9697  0.9851     1.0
49          IN      15 01JAN94       0
50          JD    2.81    40.0
            * 6-hour distribution, pattern 3.5
51          PC     0.0  0.0182  0.0281  0.0413  0.0604  0.0759  0.0916  0.1088  0.1254   0.141
52          PC  0.1586  0.1783  0.2056  0.2537  0.3362   0.487  0.6636  0.7836  0.8535  0.8991
53          PC  0.9358  0.9519  0.9682  0.9843     1.0
54          IN      15 01JAN94       0
55          JD   2.584   100.0
            * 6-hour distribution, pattern 4.1
56          PC     0.0  0.0212  0.0355  0.0515  0.0715  0.0877   0.106  0.1261  0.1443  0.1618
57          PC  0.1812  0.2036  0.2347  0.2837   0.367   0.501  0.6559  0.7704  0.8392  0.8864
58          PC  0.9256   0.944  0.9633  0.9817     1.0

59          KK      R1
60          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
61          KM          L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
62          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
63          KO       0       0     0.0       1      22
64          BA  0.2836
65          LG   0.181   0.282   4.358   0.474  62.581
            * R1
66          UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
67          UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

68          KK   R1-Do
69          KO       0       0     0.0       0      22
70          DT    R1-D    24.0     0.0
            * Curve 1
71          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
72          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
73          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
74          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

75          KK     RCP    CNAME       R
76          KO       0       0     0.0       0      22
77          RN     RCP

78          KK      L1
79          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
80          KM          L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
81          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
82          KO       0       0     0.0       1      22
83          BA  3.5462
84          LG   0.271   0.318   4.357   0.352  16.317
            * L1
85          UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
86          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
87          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
88          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
89          UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
90          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

91          KK   L1-L2    CNAME     L2R
92          KO       0       0     0.0       0      22
93          RS      11    FLOW     0.0     0.0
94          RC   0.046   0.045   0.046 28949.0  0.0147     0.0
            * L1-L2
95          RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
96          RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

97          KK      L2
98          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
99          KM          L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
100         KM          S-GRAPH TYPE=DESERT RANGELAND
101         KO       0       0     0.0       1      22
102         BA  7.3294
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103          LG    0.24   0.257   4.202   0.462  33.542
             * L2
104          UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
105          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
106          UI  2404.5 2210.07 1962.85 1830.06 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
107          UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
108          UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
109          UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
110          UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

111          KK   L2-Do
112          KO       0       0     0.0       0      22
113          DT    L2-D   475.0     0.0
             * Curve 1
114          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
115          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
116          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
117          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

118          KK     L3R   CNAME   L2-L3
119          KO       0       0     0.0       0      22
120          RC       2     0.0

121          KK   L2-L3   CNAME     L3R
122          KO       0       0     0.0       0      22
123          RS      22    FLOW     0.0     0.0
124          RC    0.05   0.045    0.06 20567.0  0.0084     0.0
             * L2-L3
125          RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
126          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

127          KK      L3
128          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
129          KM         L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
130          KM         S-GRAPH TYPE=DESERT RANGELAND
131          KO       0       0     0.0       1      22
132          BA  5.8518
133          LG   0.208   0.257    3.98   0.449  45.272
             * L3
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

134          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
135          UI  1460.0 1557.79  1786.1 1886.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
136          UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
137          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
138          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
139          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
140          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

141          KK   L3-Do
142          KO       0       0     0.0       0      22
143          DT    L3-D   456.9     0.0
             * Curve 2
144          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
145          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
146          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
147          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

148          KK       L   CNAME     LCP
149          KO       0       0     0.0       0      22
150          RC       2     0.0

151          KK     LCP   CNAME       L
152          KO       0       0     0.0       0      22
153          RN     LCP

154          KK      Z1
155          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
156          KM         L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
157          KM         S-GRAPH TYPE=DESERT RANGELAND
158          KO       0       0     0.0       1      22
159          BA  0.6644
160          LG   0.168   0.277   4.004   0.499  58.182
             * Z1
161          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
162          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
163          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

164          KK   Z1-Do
165          KO       0       0     0.0       0      22
166          DT    Z1-D    58.0     0.0
             * Curve 1
167          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
168          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
169          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
170          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

171          KK     ZCP   CNAME       Z
172          KO       0       0     0.0       0      22
173          RN     ZCP
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

174          KK      M1
175          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
176          KM         L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
177          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
178          KO       0       0     0.0       1      22
179          BA  5.5949
180          LG   0.349   0.349   4.306   0.348  17.433
             * M1
181          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
182          UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
183          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
184          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
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185        UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
186        UI   64.47   64.47     0.0

187        KK   M1-Do
188        KO       0       0     0.0       0      22
189        DT    M1-D   170.0     0.0
           * Curve 1
190        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
191        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
192        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
193        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

194        KK   M1-M2   CNAME     M2R
195        KO       0       0     0.0       0      22
196        RS      30    FLOW     0.0     0.0
197        RC    0.04    0.04   0.045 38719.0  0.0133     0.0
           * M1-M2
198        RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
199        RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

200        KK      M2
201        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
202        KM          L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
203        KM          S-GRAPH TYPE=DESERT RANGELAND
204        KO       0       0     0.0       1      22
205        BA  7.5274
206        LG   0.205   0.255   3.952   0.547  45.552
           * M2
207        UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
208        UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
209        UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
210        UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
211        UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
212        UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
213        UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
214        UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

215        KK   M2-Do
216        KO       0       0     0.0       0      22
217        DT    M2-D   585.0     0.0
           * Curve 1
218        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
219        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
220        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
221        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

222        KK       M    CNAME     MCP
223        KO       0       0     0.0       0      22
224        RC       2     0.0

225        KK     MCP   CNAME       M
226        KO       0       0     0.0       0      22
227        RN     MCP

228        KK      O1
229        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
230        KM          L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
231        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
232        KO       0       0     0.0       1      22
233        BA  3.0883
234        LG   0.252   0.252   4.189   0.443  31.44
           * O1
235        UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
236        UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
237        UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
238        UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
239        UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
240        UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
241        UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
242        UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
243        UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
244        UI   19.93   19.93   19.93     0.0

245        KK   O1-Do
246        KO       0       0     0.0       0      22
247        DT    O1-D   150.0     0.0
           * Curve 1
248        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
249        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
250        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
251        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

252        KK     OCP   CNAME       O
253        KO       0       0     0.0       0      22
254        RN     OCP
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

255        KK      N1
256        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
257        KM          L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
258        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
259        KO       0       0     0.0       1      22
260        BA   1.524
261        LG   0.289   0.289   4.075   0.469  26.648
           * N1
262        UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
263        UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
264        UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
265        UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

266        KK   N1-Do
267        KO       0       0     0.0       0      22
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268          DT    N1-D     65.0      0.0
             * Curve 1
269          DI      0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
270          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
271          DQ      0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
272          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

273          KK   N1-N2    CNAME     N2R
274          KO       0        0     0.0       0      22
275          RS      26     FLOW     0.0     0.0
276          RC    0.05    0.047    0.05 26511.0  0.0115     0.0
             * N1-N2
277          RX     0.0    280.0    350.0    358.0    367.0    381.0    451.0    730.0
278          RY    17.0     13.0     11.5     10.0     10.0     11.5     13.0     17.0

279          KK      N2
280          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
281          KM          L=5.64      Lca=3.27      S=170.14      Kn=0.055      LAG=91.0
282          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
283          KO       0        0     0.0       1      22
284          BA  3.3254
285          LG   0.268    0.268    4.117    0.446   27.305
             * N2
286          UI      0.0   123.04   123.04   123.04   123.04   310.82   395.95   496.74   616.34   730.85
287          UI   796.44   869.05   928.55   990.24  1125.95  1316.06  1517.94  1186.36   928.57   834.34
288          UI   764.31   726.51   694.11   654.42    619.9   586.86   557.14   517.77   491.74    466.8
289          UI   422.37   387.25    352.0   325.27   302.29   296.75   282.99   272.23   257.26   234.33
290          UI   202.13   202.13   163.14   157.21   157.21   143.92   134.76   134.76   134.76   103.63
291          UI    94.33    94.33    94.33    94.33    83.75    60.21    60.21    60.21    60.21    60.21
292          UI    60.21    60.21    60.21    32.52    23.58    23.58    23.58    23.58    23.58    23.58
293          UI    23.58    23.58    23.58    23.58    23.58    23.58    23.58    23.58    23.58    23.58
294          UI    23.58    23.58    23.58    23.58    23.58
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

295          KK   N2-Do
296          KO       0        0     0.0       0      22
297          DT    N2-D    150.0     0.0
             * Curve 1
298          DI      0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
299          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
300          DQ      0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
301          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

302          KK       N    CNAME     NCP
303          KO       0        0     0.0       0      22
304          NC       2      0.0

305          KK     NCP    CNAME       N
306          KO       0        0     0.0       0      22
307          RN     NCP

308          KK      P1
309          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
310          KM          L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
311          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
312          KO       0        0     0.0       1      22
313          BA  2.4365
314          LG   0.312    0.312    4.193    0.424    16.0
             * P1
315          UI      0.0    96.51    96.51    96.51    112.8   277.47   344.99    422.5   544.66   601.48
316          UI   664.09    718.1   766.78   866.24  1024.06  1185.36   901.23   714.77   637.57   587.86
317          UI   562.05   530.68   496.62   470.96   448.38    414.0   389.12   369.81   331.31    304.2
318          UI   272.76   252.72   236.15   228.64   221.98   205.23    201.8   160.29   158.56   138.12
319          UI   123.32   123.32   114.16    105.7    105.7    105.7    75.58    73.99    73.99    73.99
320          UI    73.99    51.24    47.23    47.23    47.23    47.23    47.23    47.23    47.23    22.52
321          UI     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5
322          UI     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5     18.5      0.0

323          KK   P1-Do
324          KO       0        0     0.0       0      22
325          DT    P1-D     85.0     0.0
             * Curve 1
326          DI      0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
327          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
328          DQ      0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
329          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

330          KK     PCP    CNAME       P
331          KO       0        0     0.0       0      22
332          RN     PCP
```



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

333          KK      Q1
334          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
335          KM          L=5.23      Lca=2.81      S=228.56      Kn=0.055      LAG=78.0
336          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
337          KO       0        0     0.0       1      22
338          BA  2.2336
339          LG   0.338     0.34    4.203    0.396   15.896
             * Q1
340          UI      0.0    96.42    96.42    96.42    170.9   292.35   386.45   493.18   585.93   645.92
341          UI   711.02   763.18   869.42  1043.58  1161.91   814.93   681.34   610.73   571.35   541.64
342          UI   505.03   473.57   449.52   412.98   385.87   360.82   325.28   298.43   254.89   242.17
343          UI   233.02   221.76   208.77    201.6   161.51    158.4   132.21    123.2    123.2   106.72
344          UI    105.6    105.6    84.69    73.92    73.92    73.92    73.92    47.72    47.18    47.18
345          UI    47.18    47.18    47.18    47.18    28.58    18.48    18.48    18.48    18.48    18.48
346          UI    18.48    18.48    18.48    18.48    18.48    18.48    18.48    18.48    18.48    18.48
347          UI    18.48    18.48    18.48

348          KK   Q1-Do
349          KO       0        0     0.0       0      22
350          DT    Q1-D     71.5     0.0
             * Curve 1
```

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351        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
352        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
353        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
354        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

355        KK     QCP   CNAME      Q
356        KO       0       0    0.0       0      22
357        RN     QCP
358        ZZ
```

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	R1	613.	4.25	77.	19.	6.	0.28		
+	DIVERSION TO	R1-D	613.	4.25	46.	12.	4.	0.28		
+	HYDROGRAPH AT	R1-Do	393.	4.42	29.	7.	2.	0.28		
+	ROUTED TO	RCP	393.	4.42	29.	7.	2.	0.28		
+	HYDROGRAPH AT	L1	2127.	4.75	543.	138.	46.	3.55		
+	ROUTED TO	L1-L2	1851.	5.58	541.	138.	46.	3.55		
+	HYDROGRAPH AT	L2	3405.	5.25	1237.	322.	107.	7.33		
+	DIVERSION TO	L2-D	3405.	5.25	958.	239.	80.	7.33		
+	HYDROGRAPH AT	L2-Do	1774.	6.25	328.	82.	27.	7.33		
+	2 COMBINED AT	L3R	2624.	6.25	747.	191.	64.	10.88		
+	ROUTED TO	L2-L3	1886.	8.00	738.	191.	64.	10.88		
+	HYDROGRAPH AT	L3	3146.	5.25	1174.	306.	102.	5.85		
+	DIVERSION TO	L3-D	3146.	5.25	921.	230.	77.	5.85		
+	HYDROGRAPH AT	L3-Do	1581.	6.33	303.	76.	25.	5.85		
+	2 COMBINED AT	L	1856.	7.92	897.	231.	77.	16.73		
+	ROUTED TO	LCP	1654.	8.00	838.	216.	72.	16.73		
+	HYDROGRAPH AT	Z1	919.	4.50	172.	43.	14.	0.66		
+	DIVERSION TO	Z1-D	919.	4.50	117.	29.	10.	0.66		
+	HYDROGRAPH AT	Z1-Do	571.	4.83	56.	14.	5.	0.66		
+	ROUTED TO	ZCP	571.	4.83	56.	14.	5.	0.66		
+	HYDROGRAPH AT	M1	3151.	4.75	797.	203.	68.	5.59		
+	DIVERSION TO	M1-D	3132.	4.67	343.	86.	29.	5.59		
+	HYDROGRAPH AT	M1-Do	2848.	4.83	470.	117.	39.	5.59		
+	ROUTED TO	M1-M2	1667.	7.25	454.	117.	39.	5.59		
+	HYDROGRAPH AT	M2	3413.	5.50	1412.	372.	124.	7.53		
+	DIVERSION TO	M2-D	3413.	5.50	1179.	295.	98.	7.53		
+	HYDROGRAPH AT	M2-Do	1553.	6.75	310.	78.	26.	7.53		
+	2 COMBINED AT	M	2295.	7.17	605.	155.	52.	13.12		
+	ROUTED TO	MCP	2295.	7.17	605.	155.	52.	13.12		
+	HYDROGRAPH AT	O1	1479.	5.33	544.	145.	48.	3.09		
+	DIVERSION TO	O1-D	1479.	5.33	303.	76.	25.	3.09		
	HYDROGRAPH AT									

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+                    O1-Do    1022.   5.83      274.      69.      23.    3.09
        ROUTED TO
+                     OCP     1022.   5.83      274.      69.      23.    3.09
        HYDROGRAPH AT
+                      N1     1441.   4.50      273.      69.      23.    1.52
        DIVERSION TO
+                    N1-D     1441.   4.50      131.      33.      11.    1.52
        HYDROGRAPH AT
+                   N1-Do     1056.   4.75      145.      36.      12.    1.52
        ROUTED TO
+                   N1-N2      612.   6.58      143.      36.      12.    1.52
        HYDROGRAPH AT
+                      N2     1605.   5.17      553.     145.      48.    3.33
        DIVERSION TO
+                    N2-D     1605.   5.17      302.      76.      25.    3.33
        HYDROGRAPH AT
+                   N2-Do     1131.   5.67      279.      70.      23.    3.33
        2 COMBINED AT
+                       N     1093.   5.67      371.      93.      31.    4.85
        ROUTED TO
+                     NCP     1093.   5.67      371.      93.      31.    4.85
        HYDROGRAPH AT
+                      P1     1175.   5.08      365.      95.      32.    2.44
        DIVERSION TO
+                    P1-D     1175.   5.08      171.      43.      14.    2.44
        HYDROGRAPH AT
+                   P1-Do      908.   5.42      207.      52.      17.    2.44
        ROUTED TO
+                     PCP      908.   5.42      207.      52.      17.    2.44
        HYDROGRAPH AT
+                      Q1     1148.   5.00      329.      85.      28.    2.23
        DIVERSION TO
+                    Q1-D     1096.   4.92      144.      36.      12.    2.23
        HYDROGRAPH AT
+                   Q1-Do      930.   5.25      196.      49.      16.    2.23
        ROUTED TO
+                     QCP      930.   5.25      196.      49.      16.    2.23

 *** NORMAL END OF HEC-1 ***
1*************************************                    *************************************
*                                   *                    *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                 *   U.S. ARMY CORPS OF ENGINEERS    *
*            MAY   1991             *                    *   HYDROLOGIC ENGINEERING CENTER   *
*          VERSION 4.0.1E           *                    *        609 SECOND STREET          *
*                                   *                    *      DAVIS, CALIFORNIA 95616      *
*  RUN DATE            TIME         *                    *         (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

                                        HEC-1 INPUT                                        PAGE  1

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

   1          ID   Buckeye/Sun Valley ADMS - 23 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID   100-year 6-hour
   4          ID   Future Conditions
   5          ID   FRS #2 (Sub-basins S-U)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - Town of Buckeye LU Districts (2003)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       0
  14          IN      15 01JAN94       0
  15          JD    3.28     0.01
              * 6-hour distribution, pattern 1.0
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16          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
17          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
18          PC   0.962   0.972   0.983   0.991     1.0
19          IN      15 01JAN94       0
20          JD    3.26     0.5
            * 6-hour distribution, pattern 1.0
21          PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
22          PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
23          PC   0.962   0.972   0.983   0.991     1.0
24          IN      15 01JAN94       0
25          JD   3.237     1.0
            * 6-hour distribution, pattern 1.4
26          PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
27          PC   0.087  0.0994   0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
28          PC  0.9572  0.9684   0.9798  0.9898     1.0
29          IN      15 01JAN94       0
30          JD   3.148     5.0
            * 6-hour distribution, pattern 2.3
31          PC     0.0   0.011   0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
32          PC   0.103  0.1173   0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
33          PC  0.9487   0.962   0.9743  0.9877     1.0
34          IN      15 01JAN94       0
35          JD   3.083    10.0
            * 6-hour distribution, pattern 2.7
36          PC     0.0  0.0134   0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
37          PC  0.1223  0.1382   0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
38          PC  0.9471  0.9608   0.9735  0.9873     1.0

39          KK      S1
40          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
41          KM          L=2.32     Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
42          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
43          KO       0        0      0.0        1       22
44          BA  1.4105
45          LG   0.289    0.313    4.485    0.392   25.978
            * S1
46          UI     0.0   163.76   399.96   863.78 1191.38 1674.04 1389.89   974.39   824.12   687.96
47          UI  554.64   420.01   366.82   290.75   215.71    183.9   145.46   125.55    85.13    80.14
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

48          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

49          KK   S1-Do
50          KO       0        0      0.0        0       22
51          DT    S1-D    61.0      0.0
            * Curve 1
52          DI     0.0   2500.0   5000.0   7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
53          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
54          DQ     0.0   2500.0   5000.0   7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
55          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

56          KK     SCP    CNAME       S
57          KO       0        0      0.0        0       22
58          KM     SCP

59          KK      U1
60          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
61          KM          L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
62          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
63          KO       0        0      0.0        1       22
64          BA  1.3705
65          LG   0.316    0.329    5.226    0.254   17.067
            * U1
66          UI     0.0   139.83   266.2   626.33   919.49 1139.88 1569.26 1014.69   819.13   707.21
67          UI  603.81   505.84   395.99   334.05   299.65   225.43   178.67    155.8   129.72    107.2
68          UI   86.65    68.43    68.43    50.61     26.8     26.8     26.8     26.8     26.8     26.8
69          UI    26.8      0.0

70          KK   U1-Do
71          KO       0        0      0.0        0       22
72          DT    U1-D    47.0      0.0
            * Curve 1
73          DI     0.0   2500.0   5000.0   7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
74          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
75          DQ     0.0   2500.0   5000.0   7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
76          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

77          KK     UCP    CNAME       U
78          KO       0        0      0.0        0       22
79          KM     UCP

80          KK      T1
81          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
82          KM          L=4.34     Lca=1.88     S=274.89     Kn=0.050     LAG=51.0
83          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
84          KO       0        0      0.0        1       22
85          BA  3.0415
86          LG   0.327    0.327    4.641    0.316    18.7
            * T1
87          UI     0.0     200.8    200.8   447.02   773.33 1107.71 1336.75 1525.87 1807.83 2359.26
88          UI  1728.6 1335.29 1184.68 1081.59   978.95   886.26   793.63   697.43   590.13   511.99
89          UI  476.04   440.92   386.02   329.88   260.38   252.47   219.92   219.92   155.92   153.94
90          UI  153.94   103.27    98.26    98.26    98.26    91.33    38.49    38.49    38.49    38.49
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

91          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

92          KK   T1-Do
93          KO       0        0      0.0        0       22
94          DT    T1-D   103.0      0.0
            * Curve 2
95          DI     0.0   2500.0   5000.0   7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
96          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
97          DQ     0.0   2500.0   5000.0   7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
98          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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  99        KK     TCP   CNAME      T
 100        KO       0       0    0.0       0      22
 101        RM     TCP
 102        ZZ
```

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	S1	1714.	4.33	265.	67.	22.	1.41		
+	DIVERSION TO	S1-D	1714.	4.33	123.	31.	10.	1.41		
+	HYDROGRAPH AT	S1-Do	1412.	4.50	144.	36.	12.	1.41		
+	ROUTED TO	SCP	1412.	4.50	144.	36.	12.	1.41		
+	HYDROGRAPH AT	U1	1581.	4.42	253.	64.	21.	1.37		
+	DIVERSION TO	U1-D	1467.	4.33	95.	24.	8.	1.37		
+	HYDROGRAPH AT	U1-Do	1504.	4.50	159.	40.	13.	1.37		
+	ROUTED TO	UCP	1504.	4.50	159.	40.	13.	1.37		
+	HYDROGRAPH AT	T1	2222.	4.67	506.	128.	43.	3.04		
+	DIVERSION TO	T1-D	2122.	4.58	208.	52.	17.	3.04		
+	HYDROGRAPH AT	T1-Do	2091.	4.75	306.	76.	25.	3.04		
+	ROUTED TO	TCP	2091.	4.75	306.	76.	25.	3.04		

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 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY   1991             *
*          VERSION 4.0.1E           *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
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*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*          (916) 551-1748           *
*                                   *
*************************************
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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

HEC-1 INPUT PAGE 1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   100-year 6-hour
  4           ID   Future Conditions
  5           ID   FRS #3 (Sub-basins V-Y)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    3.26    0.01
              * 6-hour distribution, pattern 1.0
 16           PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 17           PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 18           PC   0.962   0.972   0.983   0.991     1.0
 19           IN      15 01JAN94       0
 20           JD    3.24     0.5
```

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            * 6-hour distribution, pattern 1.0
 21         PC     0.0   0.008   0.016   0.025   0.033   0.041    0.05   0.058   0.066   0.074
 22         PC   0.087   0.099   0.118   0.138   0.216   0.377   0.834   0.911   0.931    0.95
 23         PC   0.962   0.972   0.983   0.991     1.0
 24         IN      15 01JAN94       0
 25         JD   3.218     1.0
            * 6-hour distribution, pattern 1.4
 26         PC     0.0  0.0084   0.016   0.025  0.0334  0.0414  0.0504  0.0584  0.0664  0.0748
 27         PC   0.087  0.0994  0.1188   0.148  0.2304  0.4067  0.7778  0.8813  0.9186  0.9452
 28         PC  0.9572  0.9684  0.9798  0.9898     1.0
 29         IN      15 01JAN94       0
 30         JD    3.13     5.0
            * 6-hour distribution, pattern 2.3
 31         PC     0.0   0.011  0.0173  0.0267  0.0387   0.049  0.0593  0.0693  0.0797  0.0903
 32         PC   0.103  0.1173  0.1383  0.1827  0.2693   0.458   0.686  0.8233  0.8893  0.9293
 33         PC  0.9487   0.962  0.9743  0.9877     1.0
 34         IN      15 01JAN94       0
 35         JD   3.064    10.0
            * 6-hour distribution, pattern 2.7
 36         PC     0.0  0.0134  0.0189  0.0287  0.0443  0.0574  0.0694  0.0818  0.0949  0.1076
 37         PC  0.1223  0.1382  0.1604  0.2063  0.2902  0.4664  0.6764  0.8069  0.8765  0.9189
 38         PC  0.9471  0.9608  0.9735  0.9873     1.0

 39         KK      V1
 40         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 41         KM         L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
 42         KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 43         KO       0       0     0.0       1      22
 44         BA  0.6646
 45         LG   0.335   0.335   3.971   0.405  18.644
            * V1
 46         UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
 47         UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 48         UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
 49         UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
 50         UI     0.0

 51         KK   V1-Do
 52         KO       0       0     0.0       0      22
 53         DT    V1-D    23.0     0.0
            * Curve 3
 54         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 55         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
 56         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 57         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 58         KK     VCP   CNAME       V
 59         KO       0       0     0.0       0      22
 60         RN     VCP

 61         KK      W1
 62         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 63         KM         L=3.46     Lca=1.76     S=486.28     Kn=0.050     LAG=44.0
 64         KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 65         KO       0       0     0.0       1      22
 66         BA   3.694
 67         LG    0.35    0.35   3.975    0.41  15.228
            * W1
 68         UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 69         UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
 70         UI  477.35  380.74  352.03  326.35  299.78  228.45  225.14  145.82  145.82  145.82
 71         UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 72         UI   57.11     0.0

 73         KK   W1-W2   CNAME     W2R
 74         KO       0       0     0.0       0      22
 75         RS       6    FLOW     0.0     0.0
 76         RC   0.050    0.05    0.06 11249.0  0.0189     0.0
            * W1-W2
 77         RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 78         RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 79         KK      W2
 80         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 81         KM         L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
 82         KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 83         KO       0       0     0.0       1      22
 84         BA  2.8478
 85         LG   0.321   0.321   4.063   0.409  12.128
            * W2
 86         UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26 2534.6 1636.25
 87         UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 88         UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
 89         UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 90         UI   41.77     0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 91         KK   W2-Do
 92         KO       0       0     0.0       0      22
 93         DT    W2-D   130.0     0.0
            * Curve 1
 94         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 95         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 2
 96         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 97         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 98         KK       W   CNAME     WCP
 99         KO       0       0     0.0       0      22
100         RC       2     0.0

101         KK     WCP   CNAME       W
102         KO       0       0     0.0       0      22
103         RN     WCP
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104          KK      X1
105          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
106          KM         L=2.60      Lca=1.44      S=288.69      Kn=0.050      LAG=40.0
107          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
108          KO       0        0      0.0        1       22
109          BA   0.7867
110          LG     0.35     0.35    3.947    0.418   12.841
             * X1
111          UI      0.0    66.22    86.09   225.41   360.12   457.02   541.42   743.25   566.57   418.64
112          UI   370.57   326.87   286.18   248.98   205.81   168.91   155.03   136.38   108.79    86.55
113          UI    78.81    72.53    55.12    50.77    43.42    32.41    32.41    32.41    19.79    12.69
114          UI    12.69    12.69    12.69    12.69    12.69    12.69    12.69      0.0

115          KK     XCP    CNAME        X
116          KO       0        0      0.0        0       22
117          KM     XCP

118          KK      Y1
119          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
120          KM         L=1.37      Lca=0.53      S=771.84      Kn=0.050      LAG=17.0
121          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
122          KO       0        0      0.0        1       22
123          BA   0.5808
124          LG     0.35     0.35    4.051    0.415   10.599
             * Y1
125          UI      0.0   162.05   614.46  1087.12   811.3   562.72   397.42   272.87   186.43    132.2
126          UI    88.57    57.25    43.55    22.05    22.05    22.05      0.0

127          KK     YCP    CNAME        Y
128          KO       0        0      0.0        0       22
129          KM     YCP
130          ZZ
```

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	V1	690.	4.50	121.	30.	10.	0.66		
+	DIVERSION TO	V1-D	618.	4.42	46.	12.	4.	0.66		
+	HYDROGRAPH AT	V1-Do	676.	4.58	75.	19.	6.	0.66		
+	ROUTED TO	VCP	676.	4.58	75.	19.	6.	0.66		
+	HYDROGRAPH AT	W1	2624.	4.58	544.	137.	46.	3.89		
+	ROUTED TO	W1-W2	2384.	4.92	542.	137.	46.	3.89		
+	HYDROGRAPH AT	W2	2067.	4.58	407.	102.	34.	2.85		
+	DIVERSION TO	W2-D	2067.	4.58	262.	66.	22.	2.85		
+	HYDROGRAPH AT	W2-Do	1068.	5.08	148.	37.	12.	2.85		
+	2 COMBINED AT	W	2642.	5.08	605.	153.	51.	6.74		
+	ROUTED TO	WCP	2642.	5.08	605.	153.	51.	6.74		
+	HYDROGRAPH AT	X1	788.	4.50	129.	32.	11.	0.79		
+	ROUTED TO	XCP	788.	4.50	129.	32.	11.	0.79		
+	HYDROGRAPH AT	Y1	1075.	4.17	95.	24.	8.	0.58		
+	ROUTED TO	YCP	1075.	4.17	95.	24.	8.	0.58		

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

E.6.4 ..... HEC-1 Output File 100-Year 24-Hour

E.6.4.a HEC-1 Output File for 100-Year 24-Hour (Existing Conditions)

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY  1991              *
*          VERSION 4.0.1E           *
*                                   *
* RUN DATE          TIME            *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
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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

                                    HEC-1 INPUT                                          PAGE  1

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

  1           ID  Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID  PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID  100-year 24-hour
  4           ID  Existing Conditions
  5           ID  Area 3 - Sub-basins A-C
  6           ID  Rainfall Loss Method - Green & Ampt
  7           ID  Unit Hydrograph Method - FCDMC S-Graph
  8           ID  Channel Routing Method - Normal Depth
  9           ID  Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID  Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    4.16    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   3.952    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   3.819    20.0
              * 24-hour distribution
 40           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

                                    HEC-1 INPUT                                          PAGE  2

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

 50           KK      C1
 51           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
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 52          KM   L=3.99      Lca=2.01      S=387.22      Kn=0.050      LAG=51.0
 53          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 54          KO       0        0      0.0        1       22
 55          BA  3.5862
 56          LG   0.215    0.296    3.933    0.407   21.409
             * C1
 57          UI     0.0   236.76   236.76   527.08   911.83  1306.09  1576.15  1799.13   2131.6  2781.78
 58          UI  2038.2  1574.43  1396.84  1275.29  1154.27  1044.98   935.76   822.33   695.81   603.68
 59          UI  561.29   519.88   455.15   388.96   307.02   297.68    259.3    259.3   183.85   181.51
 60          UI  181.51   121.77   115.86   115.86   115.86   107.68    45.38    45.38    45.38    45.38
 61          UI   45.38    45.38    45.38    45.38    45.38    45.38    45.38    45.38

 62          KK   C1-C2    CNAME     C2R
 63          KO       0        0      0.0        0       22
 64          RS       6     FLOW      0.0      0.0
 65          RC    0.05    0.044     0.05 18437.0   0.0176      0.0
             * C1-C2
 66          RX     0.0     35.0     90.0    138.0    159.0    209.0    264.0    309.0
 67          RY    21.0     19.0     16.0     10.0     10.0     15.0     20.0     24.0

 68          KK      C2
 69          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 70          KM   L=3.69      Lca=1.53      S=105.29      Kn=0.055      LAG=63.0
 71          KM   S-GRAPH TYPE=DESERT RANGELAND
 72          KO       0        0      0.0        1       22
 73          BA  1.9204
 74          LG    0.35     0.35     3.92    0.436      0.0
             * C2
 75          UI     0.0   102.63   102.63   122.26   304.94   432.24   556.99   679.25   778.73   881.69
 76          UI   929.5   983.56   983.56   952.35   904.47   807.23   701.83   605.44   531.11   463.45
 77          UI  404.15   349.94   303.68   267.04   229.18   194.49   177.79   157.37   130.91   108.78
 78          UI  108.78    77.56    70.25    70.25    70.25    44.14    24.98    24.98    24.98    24.98
 79          UI   24.98    24.98    24.98    24.98    24.98    24.98    24.98      0.0

 80          KK     C3R    CNAME    C2-C3
 81          KO       0        0      0.0        0       22
 82          HC       2      0.0

 83          KK   C2-C3    CNAME     C3R
 84          KO       0        0      0.0        0       22
 85          RS      10     FLOW      0.0      0.0
 86          RC   0.046     0.05   0.0462  23418.0   0.0107      0.0
             * C2-C3
 87          RX     0.0     60.0    125.0    140.0    172.0    232.0    292.0    352.0
 88          RY    26.0     25.0     23.0     10.0     10.0     16.0     20.0     23.0

 89          KK      C3
 90          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM   L=4.44      Lca=2.51      S=56.33      Kn=0.050      LAG=84.0
 92          KM   S-GRAPH TYPE=DESERT RANGELAND
 93          KO       0        0      0.0        1       22
 94          BA  3.7859
```



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

 95          LG   0.345    0.345    4.357    0.372      0.0
             * C3
 96          UI     0.0   151.75   151.75   151.75   190.44   436.28   559.26   700.12   855.69   975.52
 97          UI  1073.3  1242.28  1321.31  1364.94  1436.99  1454.26  1454.26  1418.19  1372.63  1299.19
 98          UI  1161.9  1057.64    941.4   855.14   770.03   694.14   628.58   566.66    510.9   460.18
 99          UI   415.5    362.4   338.86   288.07   286.08   237.34   232.68   204.46   160.84   160.84
100          UI  160.84   118.28   103.88   103.88   103.88   103.88    97.02    36.93    36.93    36.93
101          UI   36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93
102          UI   36.93    36.93      0.0

103          KK     C4R    CNAME    C3-C4
104          KO       0        0      0.0        0       22
105          HC       2      0.0

106          KK      C4
107          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
108          KM   L=2.18      Lca=0.88      S=44.31      Kn=0.045      LAG=40.0
109          KM   S-GRAPH TYPE=DESERT RANGELAND
110          KO       0        0      0.0        1       22
111          BA  1.4001
112          LG   0.327    0.327    4.737     0.29      0.0
             * C4
113          UI     0.0   117.85   153.21   406.59   642.02    848.8  1023.51  1108.81  1120.37  1044.08
114          UI  868.12   694.78    559.8   452.89   361.01   288.88   232.67   190.33   149.01   124.91
115          UI    88.1    80.67    73.19    28.68    28.68    28.68    28.68    28.68    28.68    28.68
116          UI     0.0

117          KK       C    CNAME      CCP
118          KO       0        0      0.0        0       22
119          HC       2      0.0

120          KK     CCP    CNAME        C
121          KO       0        0      0.0        0       22
122          RN     CCP

123          KK      B1
124          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
125          KM   L=2.52      Lca=1.19      S=227.45      Kn=0.050      LAG=38.0
126          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
127          KO       0        0      0.0        1       22
128          BA  0.5559
129          LG    0.35     0.35    3.733     0.47    6.272
             * B1
130          UI     0.0    49.28    72.53   179.11   283.42   353.86   433.69   556.28   354.96   293.83
131          UI  258.29   226.62   196.88   163.69    131.5   117.02   105.83    83.39     66.1    58.84
132          UI   53.95    40.03    37.76    29.84     24.1     24.1    23.99     9.44     9.44     9.44
133          UI    9.44     9.44     9.44     9.44     9.44     9.44

134          KK   B1-B2    CNAME     B2R
135          KO       0        0      0.0        0       22
136          RS       6     FLOW      0.0      0.0
137          RC   0.055    0.042    0.055 11334.0   0.0137      0.0
             * B1-B2
138          RX     0.0     75.0    140.0    167.0    193.0    226.0    296.0    371.0
139          RY    20.0     17.0     14.0     10.0     10.0     13.0     17.0     22.0
```

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

 140        KK      B2
 141        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 142        KM   L=2.21      Lca=0.98      S=84.6      Kn=0.050      LAG=45.0
 143        KM   S-GRAPH TYPE=DESERT RANGELAND
 144        KO       0        0     0.0        1       22
 145        BA  0.4888
 146        LG    0.35     0.35   3.617    0.519      0.0
            * B2
 147        UI     0.0    36.57   36.57    108.2   170.94   233.37   285.41    325.0   349.22   347.33
 148        UI  325.56   278.29   231.3   188.32   156.44   128.94   105.91    86.03    71.02    59.44
 149        UI   49.34    38.76   32.78    25.03    25.03    18.39      8.9      8.9      8.9      8.9
 150        UI     8.9      8.9     8.9      8.9

 151        KK     B3R    CNAME    B2-B3
 152        KO       0        0     0.0        0       22
 153        RC       2      0.0

 154        KK   B2-B3    CNAME      B3R
 155        KO       0        0     0.0        0       22
 156        RS      23     FLOW     0.0      0.0
 157        RC    0.05    0.025    0.05 19622.0   0.0121      0.0
            * B2-B3
 158        RX     0.0    120.0   278.0    285.0    301.5    312.5    446.5    529.5
 159        RY    13.5     10.0    11.6     10.1     10.1     11.5     10.8     12.6

 160        KK      B3
 161        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 162        KM   L=3.72      Lca=1.65      S=63.31      Kn=0.045      LAG=59.0
 163        KM   S-GRAPH TYPE=DESERT RANGELAND
 164        KO       0        0     0.0        1       22
 165        BA   1.987
 166        LG   0.331    0.331   4.284    0.389      0.0
            * B3
 167        UI     0.0   113.39  113.39    174.2   365.68   513.62   667.08   787.09    935.3  1014.02
 168        UI  1066.6  1086.67 1065.15  1007.46   902.78   777.14   664.54   576.28   502.42   427.51
 169        UI  369.72   321.51  269.65   233.59   211.46   173.87   158.42   120.18   120.18    89.23
 170        UI   77.62    77.62   77.62    39.48     27.6     27.6     27.6     27.6     27.6     27.6
 171        UI    27.6     27.6    27.6     27.6      0.0

 172        KK       B    CNAME      BCP
 173        KO       0        0     0.0        0       22
 174        RC       2      0.0

 175        KK     BCP    CNAME        B
 176        KO       0        0     0.0        0       22
 177        RM     BCP

 178        KK      A1
 179        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 180        KM   L=2.20      Lca=0.86      S=322.08      Kn=0.050      LAG=30.0
 181        KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 182        KO       0        0     0.0        1       22
 183        BA  1.1067
 184        LG    0.35     0.35   4.058    0.417    9.677
            * A1
```



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

 185        UI     0.0   124.21  285.26   628.48   880.99  1178.37  1187.81   769.89   652.53   550.24
 186        UI  454.03   347.39  294.06   245.68    184.1   150.55   131.95    95.22    84.89    60.78
 187        UI   60.78    43.03   23.81    23.81    23.81    23.81    23.81    23.81      0.0

 188        KK   A1-A2    CNAME     A2R
 189        KO       0        0     0.0        0       22
 190        RS       7     FLOW     0.0      0.0
 191        RC   0.045    0.045   0.045  15153.0   0.0134      0.0
            * A1-A2
 192        RX     0.0     75.0   125.0    185.0    190.0    220.0    280.0    340.0
 193        RY    27.0     23.0    19.0     10.0     10.0     20.0     26.0     32.0

 194        KK      A2
 195        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 196        KM   L=3.34      Lca=1.28      S=94.61      Kn=0.055      LAG=57.0
 197        KM   S-GRAPH TYPE=DESERT RANGELAND
 198        KO       0        0     0.0        1       22
 199        BA  1.6622
 200        LG    0.35     0.35   4.547    0.339      0.0
            * A2
 201        UI     0.0    98.18   98.18   167.77    329.1   468.89   598.13   713.32    831.1    883.8
 202        UI  940.94   940.94  897.33   847.41   719.99   625.76   533.26   458.89   397.46   336.4
 203        UI  288.45    247.3  210.36    185.1   155.06   143.14   104.07   104.07     78.8    67.21
 204        UI   67.21    67.21   30.17     23.9     23.9     23.9     23.9     23.9     23.9     23.9
 205        UI    23.9     23.9     0.0

 206        KK     A3R    CNAME   A2-A3
 207        KO       0        0     0.0        0       22
 208        RC       2    2.769

 209        KK   A2-A3    CNAME     A3R
 210        KO       0        0     0.0        0       22
 211        RS       9     FLOW     0.0      0.0
 212        RC    0.05    0.043    0.05  18190.0   0.0116      0.0
            * A2-A3
 213        RX     0.0     20.0    30.0    165.0    186.0    346.0    361.0    381.0
 214        RY    20.0     19.0    18.0     10.0     10.0     20.0     21.0     22.0

 215        KK      A3
 216        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 217        KM   L=3.92      Lca=1.89      S=58.21      Kn=0.045      LAG=64.0
 218        KM   S-GRAPH TYPE=DESERT RANGELAND
 219        KO       0        0     0.0        1       22
 220        BA  3.7294
 221        LG    0.35     0.35    4.23    0.405      0.0
            * A3
 222        UI     0.0    196.2   196.2    216.8   570.49   813.36  1043.19  1275.51  1464.32  1668.95
 223        UI  1757.8  1876.99 1880.23  1841.12  1751.54  1592.99  1387.91  1202.84  1048.95   919.72
 224        UI  805.43   710.05  606.86   538.24   447.15   397.83   367.89   300.84   290.73   207.95
 225        UI  207.95   183.56   134.3    134.3    134.3   131.67    47.75    47.75    47.75    47.75
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 226        UI   47.75   47.75   47.75   47.75   47.75   47.75   47.75   47.75
                                          HEC-1 INPUT                                          PAGE  6
 LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 227        KK       A   CHANE     ACP
 228        KO       0       0     0.0       0      22
 229        HC       2   6.498
 230        KK     ACP   CHANE       A
 231        KO       0       0     0.0       0      22
 232        RN     ACP
 233        ZZ
```

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	C1	2659.	12.67	565.	165.	55.	3.59		
+	ROUTED TO	C1-C2	2273.	13.08	563.	165.	55.	3.59		
+	HYDROGRAPH AT	C2	966.	12.83	209.	52.	17.	1.92		
+	2 COMBINED AT	C3R	3117.	13.00	767.	215.	72.	5.51		
+	ROUTED TO	C2-C3	2747.	13.75	761.	215.	72.	5.51		
+	HYDROGRAPH AT	C3	1506.	13.17	427.	107.	36.	3.79		
+	2 COMBINED AT	C4R	3741.	13.67	1170.	319.	107.	9.29		
+	HYDROGRAPH AT	C4	1211.	12.50	176.	44.	15.	1.40		
+	2 COMBINED AT	C	3797.	13.67	1332.	360.	120.	10.69		
+	ROUTED TO	CCP	3797.	13.67	1332.	360.	120.	10.69		
+	HYDROGRAPH AT	B1	448.	12.42	67.	18.	6.	0.56		
+	ROUTED TO	B1-B2	363.	13.00	67.	18.	6.	0.56		
+	HYDROGRAPH AT	B2	325.	12.58	51.	13.	4.	0.49		
+	2 COMBINED AT	B3R	575.	12.83	117.	30.	10.	1.04		
+	ROUTED TO	B2-B3	413.	14.67	116.	30.	10.	1.04		
+	HYDROGRAPH AT	B3	1105.	12.75	226.	56.	19.	1.99		
+	2 COMBINED AT	B	1101.	12.75	335.	86.	29.	3.03		
+	ROUTED TO	BCP	1101.	12.75	335.	86.	29.	3.03		
+	HYDROGRAPH AT	A1	1104.	12.33	143.	39.	13.	1.11		
+	ROUTED TO	A1-A2	846.	12.83	143.	39.	13.	1.11		
+	HYDROGRAPH AT	A2	980.	12.75	193.	48.	16.	1.66		
+	2 COMBINED AT	A3R	1798.	12.83	334.	87.	29.	2.77		
+	ROUTED TO	A2-A3	1486.	13.50	333.	87.	29.	2.77		
+	HYDROGRAPH AT	A3	1855.	12.92	407.	102.	34.	3.73		
+	2 COMBINED AT	A	2414.	13.42	731.	187.	62.	6.50		
+	ROUTED TO	ACP	2414.	13.42	731.	187.	62.	6.50		

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

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1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*          MAY  1991                *
*        VERSION 4.0.1E             *
*                                   *
*  RUN DATE          TIME           *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*         (916) 551-1748            *
*                                   *
*************************************
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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

HEC-1 INPUT PAGE 1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   100-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94        0    2000
 13           IO       3
 14           IN      15 01JAN94        0
 15           JD    4.16     0.01
              * 24-hour distribution
 16           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 17           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 18           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 19           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 20           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 21           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 22           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 23           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 24           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 25           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 26           IN      15 01JAN94        0
 27           JD   3.952     10.0
              * 24-hour distribution
 28           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 29           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 30           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 31           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 32           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 33           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 34           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 35           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 36           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 37           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 38           IN      15 01JAN94        0
 39           JD   3.819     20.0
              * 24-hour distribution
 40           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 41           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 42           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 43           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 44           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 45           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 46           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 47           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 48           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 49           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 50           IN      15 01JAN94        0
 51           JD    3.69     40.0
              * 24-hour distribution
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HEC-1 INPUT PAGE 2

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

 52           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 53           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 54           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 55           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 56           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 57           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 58           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 59           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 60           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 61           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 62           IN      15 01JAN94        0
 63           JD   3.565     80.0
              * 24-hour distribution
 64           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 65           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
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 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      G1
 75          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM   L=2.38      Lca=1.08      S=33.76      Kn=0.045      LAG=47.0
 77          KM   S-GRAPH TYPE=DESERT RANGELAND
 78          KO       0        0     0.0        1       22
 79          BA  1.1192
 80          LG    0.35     0.35   4.688   0.298      0.0
             * G1
 81          UI     0.0    80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 82          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 83          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 84          UI   19.51   19.51   19.51   19.51   19.51     0.0

 85          KK     GCP    CNAME       G
 86          KO       0        0     0.0        0       22
 87          RM     GCP

 88          KK      J1
 89          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 90          KM   L=4.09      Lca=1.78      S=70.82      Kn=0.055      LAG=75.0
 91          KM   S-GRAPH TYPE=DESERT RANGELAND
 92          KO       0        0     0.0        1       22
 93          BA  1.7341
 94          LG    0.35     0.35    3.25   0.652      0.0
             * J1
 95          UI     0.0    77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
 96          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
 97          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
 98          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
 99          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
100          UI   18.95   18.95   18.95   18.95   18.95   18.95
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

101          KK   J1-J2    CNAME     J2R
102          KO       0        0     0.0        0       22
103          RS      26     FLOW     0.0      0.0
104          RC   0.055     0.04   0.055 24090.0  0.0086      0.0
             * J1-J2
105          RX     0.0    161.0   247.0   254.0   271.0   279.0   393.0   660.0
106          RY    17.0     12.5    12.2    10.8    10.0    12.1    12.9    17.0

107          KK      J2
108          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
109          KM   L=5.18      Lca=2.51      S=45.01      Kn=0.050      LAG=93.0
110          KM   S-GRAPH TYPE=DESERT RANGELAND
111          KO       0        0     0.0        1       22
112          BA  3.6379
113          LG   0.349    0.348   3.623   0.495   0.281
             * J2
114          UI     0.0   131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
115          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18 1238.5
116          UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
117          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
118          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
119          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
120          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

121          KK    K3RB    CNAME   J2-K3
122          KO       0        0     0.0        0       22
123          HC       2    5.372

124          KK   J2-K3    CNAME    K3RB
125          KO       0        0     0.0        0       22
126          RS       4     FLOW     0.0      0.0
127          RC    0.05    0.048    0.05   4072.0  0.0059      0.0
             * J2-K3
128          RX     0.0    390.0   490.0   502.0   520.0   532.0   632.0  1022.0
129          RY    20.0     14.5    11.5    10.0    10.0    11.5    14.5    20.0

130          KK      K1
131          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
132          KM   L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
133          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
134          KO       0        0     0.0        1       22
135          BA   1.543
136          LG   0.112    0.255   4.382   0.368   21.06
             * K1
137          UI     0.0   129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
138          UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
139          UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
140          UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

141          KK   K1-K2    CNAME    K2R
142          KO       0        0     0.0        0       22
143          RS      17     FLOW     0.0      0.0
144          RC   0.048    0.05   0.048 30021.0   0.015      0.0
             * K1-K2
145          RX     0.0     20.0    55.0    85.0   235.0   259.0   289.0   309.0
146          RY    22.0     21.0    20.0    10.0    10.0    20.0    21.0    22.0

147          KK      K2
148          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
149          KM   L=7.3       Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
150          KM   S-GRAPH TYPE=DESERT RANGELAND
151          KO       0        0     0.0        1       22
152          BA   2.365
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153          LG   0.341   0.346   4.471   0.348   1.018
             * K2
154          UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
155          UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
156          UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
157          UI  460.97  411.12  386.21  359.14  335.63  312.63  290.38  266.75  251.32  236.77
158          UI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
159          UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
160          UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
161          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
162          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

163          KK    K3RA    CNAME    K2-K3
164          KO       0        0     0.0       0      22
165          BC       2    3.908

166          KK   K2-K3    CNAME     K3RA
167          KO       0        0     0.0       0      22
168          RS      18     FLOW     0.0     0.0
169          RC    0.05    0.048    0.05 25950.0  0.0084     0.0
             * K2-K3
170          RX     0.0    390.0    490.0    502.0    520.0    532.0    632.0   1022.0
171          RY    20.0     14.5     11.5     10.0     10.0     11.5     14.5     20.0

172          KK      F1
173          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
174          KM   L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
175          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
176          KO       0        0     0.0       1      22
177          BA   2.7854
178          LG   0.299     0.33   4.322   0.361  14.271
             * F1
179          UI     0.0   203.88   203.88   570.72   906.57  1255.03  1478.42  1724.35  2318.93  1830.17
180          UI  1348.3  1190.57  1067.92   966.08   849.55   752.02    639.8   527.23   486.03   447.26
181          UI  380.98   319.46   260.51   239.96   223.29   181.76    156.3    156.3   107.68    99.77
182          UI   99.77    99.77    67.24    39.08    39.08    39.08    39.08    39.08    39.08    39.08
183          UI   39.08    39.08    39.08      0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

184          KK   F1-F2    CNAME     F2R
185          KO       0        0     0.0       0      22
186          RS       3     FLOW     0.0     0.0
187          RC   0.053    0.045   0.055  8635.0   0.012     0.0
             * F1-F2
188          RX     0.0     60.0    120.0    146.0    178.0    208.0    268.0    328.0
189          RY    27.0     26.0     25.0     10.0     10.0     24.0     26.0     28.0

190          KK      F2
191          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
192          KM   L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
193          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
194          KO       0        0     0.0       1      22
195          BA   2.5261
196          LG    0.35     0.35   4.311   0.375   3.026
             * F2
197          UI     0.0   149.21   149.21   254.97   495.63   697.83   908.32  1043.12  1160.83  1374.76
198          UI  1770.7  1344.86  1025.23   904.53   840.52   763.84   704.22   635.65   584.61   511.95
199          UI  443.72   385.73   360.15   340.51   311.99   256.37   232.28   190.66   185.65   163.43
200          UI  163.43   124.69    114.4    114.4    99.09    73.02    73.02    73.02    73.02    72.49
201          UI   28.6     28.6     28.6     28.6     28.6     28.6     28.6     28.6     28.6     28.6
202          UI   28.6     28.6     28.6      0.0

203          KK     F3R    CNAME    F2-F3
204          KO       0        0     0.0       0      22
205          BC       2    5.312

206          KK   F2-F3    CNAME     F3R
207          KO       0        0     0.0       0      22
208          RS       4     FLOW     0.0     0.0
209          RC    0.05    0.047   0.048  7059.0    0.01     0.0
             * F2-F3
210          RX     0.0    350.0    425.0    455.0    472.0    499.0    569.0    900.0
211          RY    20.0     15.0     13.0     10.0     10.0     12.0     14.0     20.0

212          KK      F3
213          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
214          KM   L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
215          KM   S-GRAPH TYPE=DESERT RANGELAND
216          KO       0        0     0.0       1      22
217          BA   0.7363
218          LG    0.35     0.35   3.266   0.647     0.0
             * F3
219          UI     0.0    45.91    45.91    90.33   163.23   236.71   300.13   352.45   401.74   427.37
220          UI  439.96   431.69   405.94   355.21    304.4   256.17   219.35   187.61   158.44   134.39
221          UI  113.72    96.06    85.15    70.39    60.25    48.66    46.54    31.43    31.43    31.43
222          UI   21.41    11.17    11.17    11.17    11.17    11.17    11.17    11.17    11.17    11.17
223          UI     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

224          KK    E4RB    CNAME    F3-E4
225          KO       0        0     0.0       0      22
226          BC       2    6.048

227          KK   F3-E4    CNAME     E4RB
228          KO       0        0     0.0       0      22
229          RS      19     FLOW     0.0     0.0
230          RC    0.05    0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
231          RX     0.0    570.0    650.0    690.0    705.0    735.0    810.0   1200.0
232          RY    20.0     14.0     13.0     10.0     10.0     12.5     14.5     20.0

233          KK      H1
234          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
235          KM   L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
236          KM   S-GRAPH TYPE=DESERT RANGELAND
237          KO       0        0     0.0       1      22
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238          BA  1.0659
239          LG    0.35    0.35   2.733   0.945     0.0
             * H1
240          UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
241          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
242          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   37.13
243          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

244          KK   H1-H2   CNAME     H2R
245          KO       0       0     0.0       0      22
246          RS      19    FLOW     0.0     0.0
247          RC   0.053    0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
248          RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
249          RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

250          KK      E1
251          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
252          KM   L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
253          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
254          KO       0       0     0.0       1      22
255          BA  0.9558
256          LG    0.35   0.378   5.377   0.222    0.69
             * E1
257          UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
258          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
259          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
260          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
261          UI     0.0

262          KK   E1-E2   CNAME     E2R
263          KO       0       0     0.0       0      22
264          RS       5    FLOW     0.0     0.0
265          RC    0.05   0.047   0.046 11365.0   0.016     0.0
             * E1-E2
266          RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
267          RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

268          KK      E2
269          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
270          KM   L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
271          KM   S-GRAPH TYPE=DESERT RANGELAND
272          KO       0       0     0.0       1      22
273          BA  1.9794
274          LG    0.35    0.36   5.043   0.256     0.0
             * E2
275          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
276          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
277          UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
278          UI   36.05   36.05   36.05   36.05

279          KK     E3R   CNAME    E2-E3
280          KO       0       0     0.0       0      22
281          RC       2   2.935

282          KK   E2-E3   CNAME     E3R
283          KO       0       0     0.0       0      22
284          RS       9    FLOW     0.0     0.0
285          RC   0.052   0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
286          RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
287          RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

288          KK      E3
289          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
290          KM   L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
291          KM   S-GRAPH TYPE=DESERT RANGELAND
292          KO       0       0     0.0       1      22
293          BA  2.4882
294          LG    0.35    0.35   4.358   0.347     0.0
             * E3
295          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
296          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
297          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
298          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
299          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
300          UI   27.19   27.19   27.19   27.19   27.19   27.19

301          KK    E4RA   CNAME    E3-E4
302          KO       0       0     0.0       0      22
303          RC       2   5.423

304          KK   E3-E4   CNAME    E4RA
305          KO       0       0     0.0       0      22
306          RS      13    FLOW     0.0     0.0
307          RC   0.056   0.049   0.056 13855.0  0.0048     0.0
             * E3-E4
308          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
309          RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

310          KK      H2
311          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
312          KM   L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
313          KM   S-GRAPH TYPE=DESERT RANGELAND
314          KO       0       0     0.0       1      22
315          BA  1.4003
316          LG    0.35    0.35   3.222   0.664     0.0
             * H2
317          UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
318          UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
319          UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
320          UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
321          UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
322          UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
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323          UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

324          KK      E4
325          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
326          KM   L=5.36     Lca=2.81     S=38.26     Kn=0.050     LAG=102.0
327          KM   S-GRAPH TYPE=DESERT RANGELAND
328          KO       0       0     0.0       1      22
329          BA  3.0419
330          LG    0.35    0.35   3.816   0.439     0.0
             * E4
331          UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
332          UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
333          UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
334          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
335          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
336          UI   68.73   68.73   68.73   68.73   68.73   68.73     56.9   24.44   24.44   24.44
337          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
338          UI   24.44   24.44   24.44   24.44   24.44   24.44

339          KK     E5R   CNAME  E4H2E5
340          KO       0       0     0.0       0      22
341          HC       5  16.979

342          KK  E4H2E5   CNAME     E5R
343          KO       0       0     0.0       0      22
344          RS      14    FLOW     0.0     0.0
345          RC    0.06    0.05    0.06 15206.0  0.0051     0.0
             * E4H2-E5
346          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
347          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

348          KK      K3
349          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
350          KM   L=4.92     Lca=2.65     S=44.16     Kn=0.050     LAG=94.0
351          KM   S-GRAPH TYPE=DESERT RANGELAND
352          KO       0       0     0.0       1      22
353          BA  1.6364
354          LG    0.35    0.35   3.421   0.582     0.0
             * K3
355          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
```



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

356          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
357          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
358          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
359          UI   89.07   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
360          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
361          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

362          KK      E5
363          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
364          KM   L=3.01     Lca=1.41     S=28.56     Kn=0.050     LAG=66.0
365          KM   S-GRAPH TYPE=DESERT RANGELAND
366          KO       0       0     0.0       1      22
367          BA  1.3075
368          LG   0.347   0.344    3.94   0.429   0.968
             * E5
369          UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
370          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
371          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
372          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
373          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

374          KK     E6R   CNAME  E5K2E6
375          KO       0       0     0.0       0      22
376          HC       5  29.203

377          KK  E5K2E6   CNAME     E6R
378          KO       0       0     0.0       0      22
379          RS       5    FLOW     0.0     0.0
380          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
             * E5K3-E6
381          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
382          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

383          KK      E6
384          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
385          KM   L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
386          KM   S-GRAPH TYPE=DESERT RANGELAND
387          KO       0       0     0.0       1      22
388          BA  2.0375
389          LG   0.343   0.336   4.356   0.367   0.711
             * E6
390          UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
391          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
392          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.55   82.38
393          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
394          UI   29.29   29.29     0.0

395          KK       E   CNAME     ECP
396          KO       0       0     0.0       0      22
397          HC       2  31.241
```



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

398          KK     ECP   CNAME       E
399          KO       0       0     0.0       0      22
400          RN     ECP
401          ZZ
```

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	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE

```
+                                                  6-HOUR    24-HOUR    72-HOUR
      HYDROGRAPH AT
+                  G1      820.  12.58     136.       34.       11.      1.12
      ROUTED TO
+                 GCP      820.  12.58     136.       34.       11.      1.12
      HYDROGRAPH AT
+                  J1      633.  13.08     160.       40.       13.      1.73
      ROUTED TO
+                J1-J2      488.  15.33     158.       40.       13.      1.73
      HYDROGRAPH AT
+                  J2     1213.  13.33     380.       95.       32.      3.64
      2 COMBINED AT
+                K3RB     1207.  13.33     529.      134.       45.      5.37
      ROUTED TO
+                J2-K3     1186.  13.58     527.      134.       45.      5.37
      HYDROGRAPH AT
+                  K1     1432.  12.50     254.       74.       25.      1.54
      ROUTED TO
+                K1-K2      813.  14.00     253.       73.       25.      1.54
      HYDROGRAPH AT
+                  K2      694.  13.67     274.       70.       23.      2.37
      2 COMBINED AT
+                K3RA     1456.  13.92     518.      143.       48.      3.91
      ROUTED TO
+                K2-K3     1216.  15.42     512.      142.       48.      3.91
      HYDROGRAPH AT
+                  F1     2147.  12.58     400.      112.       37.      2.79
      ROUTED TO
+                F1-F2     2005.  12.75     399.      112.       37.      2.79
      HYDROGRAPH AT
+                  F2     1506.  12.75     299.       77.       26.      2.53
      2 COMBINED AT
+                F3R     3484.  12.75     693.      188.       63.      5.31
      ROUTED TO
+                F2-F3     3110.  13.00     692.      188.       63.      5.31
      HYDROGRAPH AT
+                  F3      374.  12.75      69.       17.        6.      0.74
      2 COMBINED AT
+                E4RB     3398.  13.00     758.      204.       68.      6.05
      ROUTED TO
+                F3-E4     2583.  14.58     754.      204.       68.      6.05
      HYDROGRAPH AT
+                  H1      472.  12.75      82.       20.        7.      1.07
      ROUTED TO
+                H1-H2      305.  14.42      80.       20.        7.      1.07
      HYDROGRAPH AT
+                  E1      790.  12.50     125.       32.       11.      0.96
      ROUTED TO
+                E1-E2      679.  12.83     125.       32.       11.      0.96
      HYDROGRAPH AT
+                  E2     1548.  12.58     249.       62.       21.      1.98
      2 COMBINED AT
+                E3R     2008.  12.67     371.       93.       31.      2.93
      ROUTED TO
+                E2-E3     1684.  13.42     368.       93.       31.      2.93
      HYDROGRAPH AT
+                  E3     1129.  13.00     288.       72.       24.      2.49
      2 COMBINED AT
+                E4RA     2619.  13.33     648.      164.       55.      5.42
      ROUTED TO
+                E3-E4     2191.  14.33     642.      164.       55.      5.42
      HYDROGRAPH AT
+                  H2      432.  13.25     128.       32.       11.      1.40
      HYDROGRAPH AT
+                  E4      966.  13.42     328.       83.       28.      3.04
      5 COMBINED AT
+                E5R     5270.  14.42    1798.      475.      159.     16.98
      ROUTED TO
+                E4H2E5     4752.  15.58    1792.      475.      159.     16.98
      HYDROGRAPH AT
+                  K3      507.  13.33     160.       40.       13.      1.64
      HYDROGRAPH AT
+                  K5      645.  12.92     147.       37.       12.      1.31
      5 COMBINED AT
+                K6R     6229.  15.58    2836.      770.      257.     29.20
      ROUTED TO
```

```
+                    E5K2E6     6068.   15.92       2822.       770.       257.     29.20

        HYDROGRAPH AT
+                       E6     1194.   12.75        237.        60.        20.      2.04

        2 COMBINED AT
+                        E     6068.   15.92       2960.       824.       275.     31.24

        ROUTED TO
+                      ECP     6027.   15.92       2942.       819.       274.     31.24


 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY  1991            *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*         (916) 551-1748            *
*                                   *
*************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

```
                                        HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PB56J - Modelers: Jacob Lesue & Wen Chen
  3           ID   100-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: maq_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    4.16    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   3.952    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   3.819    20.0
              * 24-hour distribution
 40           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 50           IN      15 01JAN94       0
 51           JD    3.69    40.0
              * 24-hour distribution

                                        HEC-1 INPUT                                                    PAGE  2

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

 52           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
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 53          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62          IN      15 01JAN94       0
 63          JD   3.565    80.0
             * 24-hour distribution
 64          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      R1
 75          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM   L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
 77          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 78          KO      0       0     0.0       1      22
 79          BA  0.2036
 80          LG    0.35    0.35   4.358   0.374   8.387
             * R1
 81          UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
 82          UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

 83          KK     RCP    CNAME       R
 84          KO      0       0     0.0       0      22
 85          RM     RCP

 86          KK      L1
 87          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 88          KM   L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
 89          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 90          KO      0       0     0.0       1      22
 91          BA  3.5462
 92          LG   0.271   0.318   4.357   0.352  16.317
             * L1
 93          UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
 94          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
 95          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
 96          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
 97          UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
 98          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0
```



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

 99          KK   L1-L2    CNAME     L2R
100          KO      0       0     0.0       0      22
101          RS     10    FLOW     0.0     0.0
102          RC  0.046   0.045   0.046 28949.0  0.0147     0.0
             * L1-L2
103          RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
104          RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

105          KK      L2
106          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
107          KM   L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
108          KM   S-GRAPH TYPE=DESERT RANGELAND
109          KO      0       0     0.0       1      22
110          BA  7.3294
111          LG    0.35    0.35   4.202   0.399     0.0
             * L2
112          UI     0.0   274.2   274.2   274.2   274.2   716.34  906.16 1156.59 1406.58 1625.88
113          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
114          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
115          UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
116          UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
117          UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
118          UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

119          KK     L3R    CNAME   L2-L3
120          KO      0       0     0.0       0      22
121          RC      2     0.0

122          KK   L2-L3    CNAME     L3R
123          KO      0       0     0.0       0      22
124          RS     17    FLOW     0.0     0.0
125          RC    0.05   0.045    0.06 20567.0  0.0084     0.0
             * L2-L3
126          RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
127          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

128          KK      L3
129          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
130          KM   L=4.75      Lca=2.00      S=44.27      Kn=0.055      LAG=91.0
131          KM   S-GRAPH TYPE=DESERT RANGELAND
132          KO      0       0     0.0       1      22
133          BA  5.8518
134          LG   0.341   0.328    3.98   0.419    1.05
             * L3
135          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
136          UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
137          UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
138          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
139          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
140          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
141          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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142          KK       L   CNAME     LCP
143          KO       0       0     0.0       0      22
144          RC       2     0.0

145          KK     LCP   CNAME       L
146          KO       0       0     0.0       0      22
147          RN     LCP

148          KK      Z1
149          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
150          KM   L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
151          KM   S-GRAPH TYPE=DESERT RANGELAND
152          KO       0       0     0.0       1      22
153          BA  0.6644
154          LG   0.321   0.292   4.004    0.43   2.909
             * Z1
155          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
156          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
157          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

158          KK     ZCP   CNAME       Z
159          KO       0       0     0.0       0      22
160          RN     ZCP

161          KK      M1
162          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
163          KM   L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
164          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
165          KO       0       0     0.0       1      22
166          BA  5.5949
167          LG    0.35    0.35   4.306   0.347  17.122
             * M1
168          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
169          UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
170          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
171          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
172          UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
173          UI   64.47   64.47     0.0

174          KK   M1-M2   CNAME     M2R
175          KO       0       0     0.0       0      22
176          RS      26    FLOW     0.0     0.0
177          RC    0.04    0.04   0.045 38719.0  0.0133     0.0
             * M1-M2
178          RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
179          RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

180          KK      M2
181          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
182          KM   L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
183          KM   S-GRAPH TYPE=DESERT RANGELAND
184          KO       0       0     0.0       1      22
185          BA  7.5274
186          LG    0.35    0.35   3.952   0.446   0.287
             * M2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

187          UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
188          UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
189          UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
190          UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
191          UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
192          UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.15   59.89   59.89
193          UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
194          UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

195          KK       M   CNAME     MCP
196          KO       0       0     0.0       0      22
197          RC       2     0.0

198          KK     MCP   CNAME       M
199          KO       0       0     0.0       0      22
200          RN     MCP

201          KK      O1
202          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
203          KM   L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
204          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
205          KO       0       0     0.0       1      22
206          BA  3.0883
207          LG    0.35    0.35   4.189   0.393   2.105
             * O1
208          UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
209          UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
210          UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
211          UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
212          UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
213          UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
214          UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
215          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
216          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
217          UI   19.93   19.93   19.93     0.0

218          KK     OCP   CNAME       O
219          KO       0       0     0.0       0      22
220          RN     OCP

221          KK      N1
222          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
223          KM   L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
224          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
225          KO       0       0     0.0       1      22
226          BA   1.524
227          LG    0.35    0.35   4.075   0.419    8.38
             * N1
228          UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
229          UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
230          UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
231          UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0
```

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                                    HEC-1 INPUT                                                    PAGE  6

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

 232          KK   N1-N2   CNAME     N2R
 233          KO       0       0     0.0       0      22
 234          RS      21    FLOW     0.0     0.0
 235          RC    0.05   0.047    0.05 26511.0  0.0115     0.0
              * N1-N2
 236          RX     0.0   200.0   350.0   350.0   367.0   381.0   451.0   730.0
 237          RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

 238          KK      N2
 239          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 240          KM   L=5.64      Lca=3.27      S=170.14      Kn=0.055      LAG=91.0
 241          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 242          KO       0       0     0.0       1      22
 243          BA  3.3254
 244          LG    0.35    0.35   4.117   0.405    2.67
              * N2
 245          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
 246          UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
 247          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
 248          UI  422.37  387.28   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
 249          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
 250          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
 251          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
 252          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
 253          UI   23.58   23.58   23.58   23.58   23.58

 254          KK       N   CNAME     NCP
 255          KO       0       0     0.0       0      22
 256          RC       2     0.0

 257          KK     NCP   CNAME       N
 258          KO       0       0     0.0       0      22
 259          RN     NCP

 260          KK      P1
 261          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 262          KM   L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
 263          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 264          KO       0       0     0.0       1      22
 265          BA  2.4365
 266          LG    0.35    0.35   4.193   0.396   6.712
              * P1
 267          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
 268          UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
 269          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
 270          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
 271          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
 272          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
 273          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
 274          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0
                                    HEC-1 INPUT                                                    PAGE  7

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

 275          KK     PCP   CNAME       P
 276          KO       0       0     0.0       0      22
 277          RN     PCP

 278          KK      Q1
 279          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 280          KM   L=5.23      Lca=2.81      S=228.56      Kn=0.055      LAG=78.0
 281          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 282          KO       0       0     0.0       1      22
 283          BA  2.2336
 284          LG    0.35    0.35   4.203    0.39  12.313
              * Q1
 285          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
 286          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
 287          UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
 288          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
 289          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
 290          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
 291          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
 292          UI   18.48   18.48   18.48

 293          KK     QCP   CNAME       Q
 294          KO       0       0     0.0       0      22
 295          RN     QCP
 296          ZZ
```

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	N1	387.	12.25	37.	10.	3.	0.28		
+	ROUTED TO	RCP	387.	12.25	37.	10.	3.	0.28		
+	HYDROGRAPH AT	L1	2267.	12.75	527.	150.	50.	3.55		
+	ROUTED TO	L1-L2	1803.	13.58	525.	150.	50.	3.55		
+	HYDROGRAPH AT	L2	2641.	13.25	800.	200.	67.	7.33		
+	2 COMBINED AT	L3R	4184.	13.50	1303.	345.	115.	10.88		

+	ROUTED TO L2-L3	3488.	14.92	1277.	345.	115.	10.88
+	HYDROGRAPH AT L3	2129.	13.25	658.	166.	56.	5.85
+	2 COMBINED AT L	3767.	14.83	1777.	491.	164.	16.73
+	ROUTED TO LCP	3767.	14.83	1777.	491.	164.	16.73
+	HYDROGRAPH AT Z1	558.	12.50	80.	21.	7.	0.66
+	ROUTED TO ZCP	558.	12.50	80.	21.	7.	0.66
+	HYDROGRAPH AT M1	3717.	12.67	821.	235.	78.	5.59
+	ROUTED TO M1-M2	2554.	14.75	816.	233.	78.	5.59
+	HYDROGRAPH AT M2	2304.	13.42	793.	200.	67.	7.53
+	2 COMBINED AT M	3327.	14.58	1551.	422.	141.	13.12
+	ROUTED TO MCP	3327.	14.58	1551.	422.	141.	13.12
+	HYDROGRAPH AT O1	1163.	13.33	349.	91.	30.	3.09
+	ROUTED TO OCP	1163.	13.33	349.	91.	30.	3.09
+	HYDROGRAPH AT N1	1211.	12.50	192.	52.	17.	1.52
+	ROUTED TO N1-N2	757.	14.17	192.	52.	17.	1.52
+	HYDROGRAPH AT N2	1331.	13.17	378.	99.	33.	3.33
+	2 COMBINED AT N	1364.	13.25	565.	149.	50.	4.85
+	ROUTED TO NCP	1364.	13.25	565.	149.	50.	4.85
+	HYDROGRAPH AT P1	1073.	13.08	299.	81.	27.	2.44
+	ROUTED TO PCP	1073.	13.08	299.	81.	27.	2.44
+	HYDROGRAPH AT Q1	1111.	13.00	300.	84.	28.	2.23
+	ROUTED TO QCP	1111.	13.00	300.	84.	28.	2.23

```
 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1) *
*            MAY  1991              *
*         VERSION 4.0.1E            *
*                                   *
* RUN DATE          TIME            *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
```

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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), HECIGS, HECIDB, AND HECIKW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -ANSKK- 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

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

  1           ID   Buckeye/Sun Valley ADMS - 1 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   100-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #2 (Sub-basins S-U)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
```

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 8          ID   Channel Routing Method - Normal Depth
 9          ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       3
14          IN      15 01JAN94       0
15          JD    4.13    0.01
            * 24-hour distribution
16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
26          IN      15 01JAN94       0
27          JD   3.923   10.0
            * 24-hour distribution
28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

38          KK      S1
39          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
40          KM   L=2.32     Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
41          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
42          KO       0       0     0.0       1      22
43          BA  1.4105
44          LG    0.35    0.35   4.484   0.352   6.918
            * S1
45          UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.69  974.39  824.12  687.96
46          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
47          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

48          KK     SCP   CNAME       S
49          KO       0       0     0.0       0      22
50          KM     SCP

51          KK      U1
52          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
53          KM   L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
54          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
55          KO       0       0     0.0       1      22
56          BA  1.3708
57          LG    0.35    0.37   5.258   0.233   6.449
            * U1
58          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
59          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
60          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
61          UI    26.8     0.0

62          KK     UCP   CNAME       U
63          KO       0       0     0.0       0      22
64          KM     UCP

65          KK      T1
66          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
67          KM   L=4.34     Lca=1.59     S=274.89     Kn=0.050     LAG=51.0
68          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
69          KO       0       0     0.0       1      22
70          BA  3.0415
71          LG    0.35    0.35   4.644   0.299  11.497
            * T1
72          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
73          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
74          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
75          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
76          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

77          KK     TCP   CNAME       T
78          KO       0       0     0.0       0      22
79          KM     TCP
80          ZZ
```

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	S1	1449.	12.33	179.	48.	16.	1.41		
+	ROUTED TO	SCP	1449.	12.33	179.	48.	16.	1.41		
+	HYDROGRAPH AT	U1	1365.	12.42	189.	50.	17.	1.37		
+	ROUTED TO	UCP	1365.	12.42	189.	50.	17.	1.37		
+	HYDROGRAPH AT	T1	2151.	12.67	425.	117.	39.	3.04		

```
          ROUTED TO
+                        TCF      2151.   12.67        425.        117.        39.       3.04


 *** NORMAL END OF HEC-1 ***
1*************************************                                          *************************************
 *                                   *                                          *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                       *   U.S. ARMY CORPS OF ENGINEERS    *
 *            MAY  1991              *                                          *  HYDROLOGIC ENGINEERING CENTER    *
 *          VERSION 4.0.1E           *                                          *        609 SECOND STREET          *
 *                                   *                                          *     DAVIS, CALIFORNIA 95616       *
 *  RUN DATE          TIME           *                                          *        (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

                                                HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PB54J - Modelers: Jacob Lesue & Wen Chen
  3           ID   100-year 24-hour
  4           ID   Existing Conditions
  5           ID   FR5 #3 (Sub-basins V-Y)
  6           ID   Reinfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    4.14    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   3.933    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 38           KK      V1
 39           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM   L=2.86      Lca=1.75      S=344.82      Kn=0.050      LAG=43.0
 41           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0       0     0.0       1      22
 43           BA  0.6646
 44           LG    0.35    0.35   3.972   0.405  13.864
              * V1
 45           UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
 46           UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
 47           UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
 48           UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
 49           UI     0.0

                                                HEC-1 INPUT                                                    PAGE  2

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

 50           KK     VCF   CNAME       V
 51           KO       0       0     0.0       0      22
 52           KM     VCF

 53           KK      W1
 54           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 55           KM   L=3.46      Lca=1.78      S=486.28      Kn=0.050      LAG=44.0
 56           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 57           KO       0       0     0.0       1      22
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 58          BA   3.894
 59          LG    0.35    0.35   3.976    0.41  15.199
             * W1
 60          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 61          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
 62          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
 63          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 64          UI   57.11     0.0

 65          KK   W1-W2   CNAME     W2R
 66          KO       0       0     0.0       0      22
 67          RS       6    FLOW     0.0     0.0
 68          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
             * W1-W2
 69          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 70          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 71          KK      W2
 72          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 73          KM   L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
 74          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 75          KO       0       0     0.0       1      22
 76          BA  2.8478
 77          LG    0.35    0.35   4.081   0.402   3.547
             * W2
 78          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 79          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 80          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
 81          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 82          UI   41.77     0.0

 83          KK       W   CNAME     WCP
 84          KO       0       0     0.0       0      22
 85          RC       2     0.0

 86          KK     WCP   CNAME       W
 87          KO       0       0     0.0       0      22
 88          RN     WCP

 89          KK      X1
 90          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM   L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
 92          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 93          KO       0       0     0.0       1      22
 94          BA  0.7867
```



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

 95          LG    0.35    0.35   3.955   0.417  12.555
             * X1
 96          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
 97          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
 98          UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
 99          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

100          KK     XCP   CNAME       X
101          KO       0       0     0.0       0      22
102          RN     XCP

103          KK      Y1
104          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM   L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
106          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
107          KO       0       0     0.0       1      22
108          BA  0.5808
109          LG    0.35    0.35   4.044   0.415  10.947
             * Y1
110          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
111          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

112          KK     YCP   CNAME       Y
113          KO       0       0     0.0       0      22
114          RN     YCP
115          ZZ
```

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	V1	526.	12.50	92.	26.	9.	0.66		
+	ROUTED TO	VCP	526.	12.50	92.	26.	9.	0.66		
+	HYDROGRAPH AT	W1	2976.	12.50	539.	153.	51.	3.89		
+	ROUTED TO	W1-W2	2589.	12.92	538.	153.	51.	3.89		
+	HYDROGRAPH AT	W2	2042.	12.50	332.	86.	29.	2.85		
+	2 COMBINED AT	W	3686.	12.83	863.	237.	79.	6.74		
+	ROUTED TO	WCP	3686.	12.83	863.	237.	79.	6.74		
+	HYDROGRAPH AT	X1	645.	12.50	106.	30.	10.	0.79		
+	ROUTED TO	XCP	645.	12.50	106.	30.	10.	0.79		
	HYDROGRAPH AT									

```
+                          Y1      837.   12.17        77.        21.        7.      0.58
        ROUTED TO
+                          YCP     837.   12.17        77.        21.        7.      0.58

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

E.6.4.bHEC-1 Output File for 100-Year 24-Hour (Future Conditions)

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*             MAY  1991             *
*          VERSION 4.0.1E           *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************

*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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

                                    HEC-1 INPUT                                          PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   100-year 24-hour
  4           ID   Future Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU District (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    4.16     0.01
              * 24-hour distribution
 16           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   3.952     10.0
              * 24-hour distribution
 28           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   3.819     20.0
              * 24-hour distribution
 40           PC     0.0    0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029    0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064    0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11    0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181    0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735    0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856    0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913    0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953    0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983    0.986   0.989   0.992   0.995   0.998     1.0
 50           IN      15 01JAN94       0
 51           JD   3.69     40.0
              * 24-hour distribution

                                    HEC-1 INPUT                                          PAGE  2
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 52         PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53         PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54         PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55         PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56         PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57         PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58         PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59         PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60         PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61         PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62         IN      15 01JAN94       0
 63         JD   3.565    80.0
            * 24-hour distribution
 64         PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65         PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66         PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67         PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68         PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69         PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70         PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71         PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72         PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73         PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74         KK      G1
 75         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76         KM         L=2.38     Lca=1.08     S=33.76     Kn=0.045     LAG=47.0
 77         KM         S-GRAPH TYPE=DESERT RANGELAND
 78         KO      0       0     0.0       1      22
 79         BA  1.1192
 80         LG   0.297   0.297   4.688   0.326  15.814
            * G1
 81         UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 82         UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 83         UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 84         UI   19.51   19.51   19.51   19.51   19.51     0.0

 85         KK   G1-Do
 86         KO      0       0     0.0       0      22
 87         DT    G1-D    47.0     0.0
            * Curve 1
 88         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 89         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
 90         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 91         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 92         KK     GCP    CNAME       G
 93         KO      0       0     0.0       0      22
 94         RN     GCP
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 95         KK      J1
 96         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 97         KM         L=4.09     Lca=1.78     S=70.82     Kn=0.055     LAG=75.0
 98         KM         S-GRAPH TYPE=DESERT RANGELAND
 99         KO      0       0     0.0       1      22
100         BA  1.7341
101         LG    0.25    0.27    3.28   0.657    30.0
            * J1
102         UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  584.74
103         UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
104         UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
105         UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
106         UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
107         UI   18.95   18.95   18.95   18.95   18.95   18.95

108         KK   J1-Do
109         KO      0       0     0.0       0      22
110         DT    J1-D   102.0     0.0
            * Curve 1
111         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
112         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
113         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
114         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

115         KK   J1-J2    CNAME     J2R
116         KO      0       0     0.0       0      22
117         RS     37    FLOW     0.0     0.0
118         RC  0.055    0.04   0.055 24090.0  0.0086     0.0
            * J1-J2
119         RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
120         RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

121         KK      J2
122         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
123         KM         L=5.18     Lca=2.51     S=45.01     Kn=0.050     LAG=93.0
124         KM         S-GRAPH TYPE=DESERT RANGELAND
125         KO      0       0     0.0       1      22
126         BA  3.6379
127         LG    0.25    0.26   3.623   0.499    30.0
            * J2
128         UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
129         UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18 1218.5
130         UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
131         UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
132         UI  201.95   172.6   139.6   139.6   139.6   139.6  118.32   90.16   90.16   90.16
133         UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
134         UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

135         KK   J2-Do
136         KO      0       0     0.0       0      22
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137          DT    J2-D   224.0     0.0
             * Curve 1
138          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
139          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
140          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
141          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

142          KK    K3RB   CNAME   J2-K3
143          KO       0       0     0.0       0      22
144          HC       2     0.0

145          KK   J2-K3   CNAME    K3RB
146          KO       0       0     0.0       0      22
147          RS       6    FLOW     0.0     0.0
148          RC    0.05   0.048    0.05  4072.0  0.0059     0.0
             * J2-K3
149          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
150          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

151          KK      K1
152          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
153          KM          L=3.23     Lca=1.84     S=681.00      Kn=0.050      LAG=40.0
154          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
155          KO       0       0     0.0       1      22
156          BA   1.543
157          LG   0.112   0.255   4.382   0.365   21.06
             * K1
158          UI     0.0  129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
159          UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
160          UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
161          UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0

162          KK   K1-K2   CNAME     K2R
163          KO       0       0     0.0       0      22
164          RS      18    FLOW     0.0     0.0
165          RC   0.048    0.05   0.048 30021.0   0.015     0.0
             * K1-K2
166          RX     0.0    20.0    55.0    85.0   235.0   259.0   289.0   309.0
167          RY    22.0    21.0    20.0    10.0    10.0    20.0    21.0    22.0

168          KK      K2
169          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
170          KM          L=7.3      Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
171          KM          S-GRAPH TYPE=DESERT RANGELAND
172          KO       0       0     0.0       1      22
173          BA   2.365
174          LG   0.272   0.277   4.471   0.382   21.86
             * K2
175          UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
176          UI  324.09  369.36  410.96  453.67  472.54  532.28  550.99   587.9  605.63  610.31
177          UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

178          UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
179          UI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
180          UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
181          UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
182          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
183          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

184          KK   K2-Do
185          KO       0       0     0.0       0      22
186          DT    K2-D   128.0     0.0
             * Curve 1
187          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
188          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
189          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
190          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

191          KK    K3RA   CNAME   K2-K3
192          KO       0       0     0.0       0      22
193          HC       2   1.543

194          KK   K2-K3   CNAME    K3RA
195          KO       0       0     0.0       0      22
196          RS      20    FLOW     0.0     0.0
197          RC    0.05   0.048    0.05 25950.0  0.0084     0.0
             * K2-K3
198          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
199          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

200          KK      F1
201          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
202          KM          L=4.07     Lca=1.63     S=441.98      Kn=0.050      LAG=46.0
203          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
204          KO       0       0     0.0       1      22
205          BA  2.7854
206          LG    0.24    0.27   4.322   0.384  32.052
             * F1
207          UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
208          UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
209          UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
210          UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
211          UI   39.08   39.08   39.08     0.0

212          KK   F1-Do
213          KO       0       0     0.0       0      22
214          DT    F1-D   133.0     0.0
             * Curve 1
215          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
216          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
217          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
218          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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219          KK   F1-F2   CNAME     F2R
220          KO       0       0     0.0       0      22
221          RS       6    FLOW     0.0     0.0
222          RC   0.053   0.045   0.055  8635.0   0.012     0.0
             * F1-F2
223          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
224          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

225          KK      F2
226          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
227          KM          L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
228          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
229          KO       0       0     0.0       1      22
230          BA  2.5261
231          LG    0.25    0.25   4.311   0.436  33.026
             * F2
232          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
233          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
234          UI  443.72  383.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
235          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
236          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
237          UI    28.6    28.6    28.6     0.0

238          KK    F2-D
239          KO       0       0     0.0       0      22
240          DT    F2-D   130.0     0.0
             * Curve 1
241          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
242          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
243          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
244          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

245          KK     F3R   CNAME    F2-F3
246          KO       0       0     0.0       0      22
247          RC       2     0.0

248          KK   F2-F3   CNAME     F3R
249          KO       0       0     0.0       0      22
250          RS       6    FLOW     0.0     0.0
251          RC    0.05   0.047   0.048  7059.0    0.01     0.0
             * F2-F3
252          RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
253          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

254          KK      F3
255          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
256          KM          L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
257          KM          S-GRAPH TYPE=DESERT RANGELAND
258          KO       0       0     0.0       1      22
259          BA  0.7363
260          LG    0.25    0.27   3.266   0.656    30.0
             * F3
261          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

262          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
263          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
264          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
265          UI     0.0

266          KK   F3-Do
267          KO       0       0     0.0       0      22
268          DT    F3-D    45.0     0.0
             * Curve 1
269          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
270          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
271          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
272          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

273          KK    E4RB   CNAME    F3-E4
274          KO       0       0     0.0       0      22
275          RC       2     0.0

276          KK   F3-E4   CNAME    E4RB
277          KO       0       0     0.0       0      22
278          RS      21    FLOW     0.0     0.0
279          RC    0.05   0.044    0.05 27456.0  0.0072     0.0
             * F3-E4
280          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
281          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

282          KK      H1
283          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
284          KM          L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
285          KM          S-GRAPH TYPE=DESERT RANGELAND
286          KO       0       0     0.0       1      22
287          BA  1.0659
288          LG    0.25    0.29   2.733   0.945    30.0
             * H1
289          UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
290          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
291          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
292          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

293          KK   H1-Do
294          KO       0       0     0.0       0      22
295          DT    H1-D    60.0     0.0
             * Curve 1
296          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
297          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
298          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
299          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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300          KK   H1-H2   CNAME     H2R
301          KO      0       0     0.0       0      22
302          RS     32    FLOW     0.0     0.0
303          RC  0.053    0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
304          RX    0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
305          RY   17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

306          KK      E1
307          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
308          KM          L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
309          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
310          KO       0       0     0.0       1      22
311          BA  0.9558
312          LG    0.25    0.25   5.377   0.273   30.69
             * E1
313          UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
314          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
315          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
316          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
317          UI     0.0

318          KK   E1-Do
319          KO      0       0     0.0       0      22
320          DT    E1-D    53.0     0.0
             * Curve 1
321          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
322          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
323          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
324          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

325          KK   E1-E2   CNAME     E2R
326          KO      0       0     0.0       0      22
327          RS     10    FLOW     0.0     0.0
328          RC   0.05   0.047   0.046 11365.0   0.016     0.0
             * E1-E2
329          RX    0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
330          RY   24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

331          KK      E2
332          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
333          KM          L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
334          KM          S-GRAPH TYPE=DESERT RANGELAND
335          KO       0       0     0.0       1      22
336          BA  1.9794
337          LG    0.25    0.25   5.043   0.306    30.0
             * E2
338          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
339          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
340          UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
341          UI   36.05   36.05   36.05   36.05
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

342          KK   E2-Do
343          KO      0       0     0.0       0      22
344          DT    E2-D   118.0     0.0
             * Curve 1
345          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
346          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
347          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
348          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

349          KK     E3R   CNAME   E2-E3
350          KO      0       0     0.0       0      22
351          HC      2     0.0

352          KK   E2-E3   CNAME     E3R
353          KO      0       0     0.0       0      22
354          RS     14    FLOW     0.0     0.0
355          RC   0.052   0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
356          RX    0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
357          RY   22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

358          KK      E3
359          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
360          KM          L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
361          KM          S-GRAPH TYPE=DESERT RANGELAND
362          KO       0       0     0.0       1      22
363          BA  2.4882
364          LG    0.25    0.25   4.358   0.377    30.0
             * E3
365          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
366          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
367          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
368          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
369          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
370          UI   27.19   27.19   27.19   27.19   27.19   27.19

371          KK   E3-Do
372          KO      0       0     0.0       0      22
373          DT    E3-D   152.0     0.0
             * Curve 1
374          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
375          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
376          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
377          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

378          KK    E4RA   CNAME   E3-E4
379          KO      0       0     0.0       0      22
380          HC      2     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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381         KK   E3-E4   CNAME    E4RA
382         KO      0       0     0.0       0      22
383         RS     14    FLOW     0.0     0.0
384         RC   0.056   0.049   0.056 13855.0  0.0048     0.0
            * E3-E4
385         RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
386         RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

387         KK      H2
388         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
389         KM          L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
390         KM          S-GRAPH TYPE=DESERT RANGELAND
391         KO       0       0     0.0       1      22
392         BA  1.4003
393         LG    0.25    0.27   3.222   0.664    30.0
            * H2
394         UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
395         UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
396         UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
397         UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
398         UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
399         UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
400         UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

401         KK   H2-Do
402         KO       0       0     0.0       0      22
403         DT    H2-D    88.0     0.0
            * Curve 1
404         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
405         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
406         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
407         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

408         KK      E4
409         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
410         KM          L=5.36      Lca=2.81      S=38.26      Kn=0.030      LAG=102.0
411         KM          S-GRAPH TYPE=DESERT RANGELAND
412         KO       0       0     0.0       1      22
413         BA  3.0419
414         LG    0.25    0.25   3.816   0.441    30.0
            * E4
415         UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
416         UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
417         UI  958.04  920.88  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
418         UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
419         UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
420         UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
421         UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
422         UI   24.44   24.44   24.44   24.44   24.44   24.44
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

423         KK   E4-Do
424         KO       0       0     0.0       0      22
425         DT    E4-D   190.0     0.0
            * Curve 1
426         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
427         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
428         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
429         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

430         KK     E5R   CNAME  E4H2E5
431         KO       0       0     0.0       0      22
432         HC       5     0.0

433         KK  E4H2E5   CNAME     E5R
434         KO       0       0     0.0       0      22
435         RS      16    FLOW     0.0     0.0
436         RC    0.06    0.05    0.06 15206.0  0.0051     0.0
            * E4H2-E5
437         RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
438         RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

439         KK      K3
440         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
441         KM          L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
442         KM          S-GRAPH TYPE=DESERT RANGELAND
443         KO       0       0     0.0       1      22
444         BA  1.6364
445         LG    0.25    0.27   3.421     0.6    30.0
            * K3
446         UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
447         UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
448         UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.78  243.88
449         UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
450         UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
451         UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
452         UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

453         KK   K3-Do
454         KO       0       0     0.0       0      22
455         DT    K3-D   101.0     0.0
            * Curve 1
456         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
457         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
458         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
459         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

460         KK      E5
461         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
462         KM          L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
463         KM          S-GRAPH TYPE=DESERT RANGELAND
464         KO       0       0     0.0       1      22
465         BA  1.3075
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 466        LG    0.25    0.25    3.94   0.473    30.0
            * E5
 467        UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
 468        UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
 469        UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
 470        UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
 471        UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

 472        KK   E5-Do
 473        KO       0       0     0.0       0      22
 474        DT    E5-D    79.0     0.0
            * Curve 1
 475        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 476        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
 477        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 478        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 479        KK     E6R   CNAME  E5K2E6
 480        KO       0       0     0.0       0      22
 481        HC       5   1.543

 482        KK  E5K2E6   CNAME     E6R
 483        KO       0       0     0.0       0      22
 484        RS       6    FLOW     0.0     0.0
 485        RC   0.063   0.051   0.063  5083.0  0.0037     0.0
            * E5K3-E6
 486        RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
 487        RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

 488        KK      E6
 489        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 490        KM          L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
 491        KM          S-GRAPH TYPE=DESERT RANGELAND
 492        KO       0       0     0.0       1      22
 493        BA  2.0375
 494        LG   0.289   0.289   4.356   0.392  18.293
            * E6
 495        UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
 496        UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
 497        UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
 498        UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
 499        UI   29.29   29.29     0.0

 500        KK   E6-Do
 501        KO       0       0     0.0       0      22
 502        DT    E6-D   100.0     0.0
            * Curve 1
 503        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 504        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
 505        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 506        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 507        KK       E   CNAME     ECP
 508        KO       0       0     0.0       0      22
 509        HC       2   1.543

 510        KK     ECP   CNAME       E
 511        KO       0       0     0.0       0      22
 512        RN     ECP
 513        ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	G1	899.	12.58	171.	48.	16.	1.12		
+	DIVERSION TO	G1-D	899.	12.58	89.	24.	8.	1.12		
+	HYDROGRAPH AT	G1-Do	786.	12.75	92.	25.	8.	1.12		
+	ROUTED TO	GCP	786.	12.75	92.	25.	8.	1.12		
+	HYDROGRAPH AT	J1	909.	13.08	281.	86.	29.	1.73		
+	DIVERSION TO	J1-D	909.	13.08	187.	51.	17.	1.73		
+	HYDROGRAPH AT	J1-Do	612.	13.58	123.	35.	12.	1.73		
+	ROUTED TO	J1-J2	377.	16.08	117.	35.	12.	1.73		
+	HYDROGRAPH AT	J2	1679.	13.33	612.	188.	63.	3.64		
+	DIVERSION TO	J2-D	1679.	13.33	413.	113.	38.	3.64		
+	HYDROGRAPH AT	J2-Do	1178.	13.92	265.	76.	25.	3.64		
+	2 COMBINED AT	K3RB	1174.	13.92	370.	110.	37.	5.37		

+	ROUTED TO	J2-K3	1002.	14.33	367.	110.	37.	5.37
+	HYDROGRAPH AT	K1	1432.	12.50	254.	74.	25.	1.54
+	ROUTED TO	K1-K2	822.	13.92	253.	73.	25.	1.54
+	HYDROGRAPH AT	K2	852.	13.67	369.	110.	37.	2.37
+	DIVERSION TO	K2-D	852.	13.67	240.	65.	22.	2.37
+	HYDROGRAPH AT	K2-Do	651.	14.33	165.	46.	15.	2.37
+	2 COMBINED AT	K3RA	1350.	14.33	416.	120.	40.	1.54
+	ROUTED TO	K2-K3	1007.	15.92	409.	120.	40.	1.54
+	HYDROGRAPH AT	F1	2376.	12.58	498.	152.	51.	2.79
+	DIVERSION TO	F1-D	2316.	12.50	239.	67.	22.	2.79
+	HYDROGRAPH AT	F1-Do	2117.	12.67	309.	86.	29.	2.79
+	ROUTED TO	F1-F2	1743.	13.00	305.	86.	29.	2.79
+	HYDROGRAPH AT	F2	1828.	12.75	449.	138.	46.	2.53
+	DIVERSION TO	F2-D	1828.	12.75	235.	66.	22.	2.53
+	HYDROGRAPH AT	F2-D	1430.	12.92	261.	73.	24.	2.53
+	2 COMBINED AT	F3R	2978.	13.00	559.	157.	52.	5.31
+	ROUTED TO	F2-F3	2483.	13.42	552.	157.	52.	5.31
+	HYDROGRAPH AT	F3	512.	12.75	120.	37.	12.	0.74
+	DIVERSION TO	F3-D	512.	12.75	83.	23.	8.	0.74
+	HYDROGRAPH AT	F3-Do	325.	13.17	50.	14.	5.	0.74
+	2 COMBINED AT	E4RB	2694.	13.42	598.	170.	57.	6.05
+	ROUTED TO	F3-E4	1898.	15.08	569.	170.	57.	6.05
+	HYDROGRAPH AT	H1	694.	12.67	159.	50.	17.	1.07
+	DIVERSION TO	H1-D	694.	12.67	109.	30.	10.	1.07
+	HYDROGRAPH AT	H1-Do	402.	13.17	67.	20.	7.	1.07
+	ROUTED TO	H1-H2	189.	15.25	58.	20.	7.	1.07
+	HYDROGRAPH AT	E1	904.	12.50	179.	54.	18.	0.96
+	DIVERSION TO	E1-D	904.	12.50	97.	27.	9.	0.96
+	HYDROGRAPH AT	E1-Do	649.	12.75	98.	27.	9.	0.96
+	ROUTED TO	E1-E2	505.	13.25	96.	27.	9.	0.96
+	HYDROGRAPH AT	E2	1808.	12.58	361.	109.	36.	1.98
+	DIVERSION TO	E2-D	1808.	12.58	218.	59.	20.	1.98
+	HYDROGRAPH AT	E2-Do	1461.	12.83	176.	49.	16.	1.98
+	2 COMBINED AT	E3R	1455.	12.83	268.	76.	25.	2.94
+	ROUTED TO	E2-E3	1005.	13.92	257.	76.	25.	2.94
+	HYDROGRAPH AT	E3	1443.	13.00	439.	133.	45.	2.49
+	DIVERSION TO	E3-D	1443.	13.00	280.	77.	26.	2.49
+	HYDROGRAPH AT	E3-Do	1053.	13.50	201.	57.	19.	2.49

+	2 COMBINED AT	E4RA	1633.	13.92	450.	131.	44.	5.42
+	ROUTED TO	E3-E4	1365.	15.00	434.	131.	44.	5.42
+	HYDROGRAPH AT	H2	638.	13.25	226.	70.	23.	1.40
+	DIVERSION TO	H2-D	638.	13.25	162.	44.	15.	1.40
+	HYDROGRAPH AT	H2-Do	384.	14.00	89.	26.	9.	1.40
+	HYDROGRAPH AT	E4	1332.	13.42	521.	160.	54.	3.04
+	DIVERSION TO	E4-D	1332.	13.42	350.	96.	32.	3.04
+	HYDROGRAPH AT	E4-Do	950.	14.08	220.	65.	22.	3.04
+	5 COMBINED AT	E5R	3517.	15.08	1231.	375.	125.	16.98
+	ROUTED TO	E4H2E5	3148.	16.33	1214.	375.	125.	16.98
+	HYDROGRAPH AT	H3	724.	13.33	268.	83.	28.	1.64
+	DIVERSION TO	H3-D	724.	13.33	186.	51.	17.	1.64
+	HYDROGRAPH AT	H3-Do	484.	14.00	111.	32.	11.	1.64
+	HYDROGRAPH AT	E5	819.	12.92	225.	69.	23.	1.31
+	DIVERSION TO	E5-D	819.	12.92	146.	40.	13.	1.31
+	HYDROGRAPH AT	E5-Do	586.	13.33	102.	29.	10.	1.31
+	5 COMBINED AT	E6R	5183.	16.17	2271.	712.	238.	1.54
+	ROUTED TO	E5H2E6	5063.	16.58	2262.	712.	238.	1.54
+	HYDROGRAPH AT	E6	1356.	12.75	308.	89.	30.	2.04
+	DIVERSION TO	E6-D	1356.	12.75	189.	50.	17.	2.04
+	HYDROGRAPH AT	E6-Do	1055.	13.08	140.	38.	13.	2.04
+	2 COMBINED AT	E	5088.	16.58	2295.	750.	251.	1.54
+	ROUTED TO	ECP	5088.	16.58	2295.	750.	251.	1.54

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*** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*             MAY  1991             *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
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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 -ANSKK- 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

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

  1           ID  Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID  PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID  100-year 24-hour
```

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 4          ID   Future Conditions
 5          ID   FRS #1 (Sub-basins L-R)
 6          ID   Rainfall Loss Method - Green & Ampt
 7          ID   Unit Hydrograph Method - FCDMC S-Graph
 8          ID   Channel Routing Method - Normal Depth
 9          ID   Land Use - Town of Buckeye LU Districts (2003)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       0
14          IN      15 01JAN94       0
15          JD    4.16    0.01
            * 24-hour distribution
16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
26          IN      15 01JAN94       0
27          JD   3.952    10.0
            * 24-hour distribution
28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
38          IN      15 01JAN94       0
39          JD   3.819    20.0
            * 24-hour distribution
40          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
41          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
42          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
43          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
44          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
45          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
46          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
47          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
48          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
49          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
50          IN      15 01JAN94       0
51          JD    3.69    40.0
            * 24-hour distribution
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

52          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
53          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
54          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
55          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
56          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
57          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
58          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
59          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
60          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
61          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
62          IN      15 01JAN94       0
63          JD   3.565    80.0
            * 24-hour distribution
64          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
65          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

74          KK      R1
75          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
76          KM          L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
77          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
78          KO       0        0      0.0        1       22
79          BA  0.2836
80          LG   0.181   0.282   4.358   0.474  62.881
            * R1
81          UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
82          UI   57.54   39.69   27.52   24.83    9.63    9.63    9.63    9.63     0.0

83          KK   R1-Do
84          KO       0        0      0.0        0       22
85          DT    R1-D    24.0      0.0
            * Curve 1
86          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
87          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
88          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
89          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

90          KK     RCP    CNAME       R
91          KO       0        0      0.0        0       22
92          RW     RCP

93          KK      L1
94          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
95          KM          L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
96          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
97          KO       0        0      0.0        1       22
98          BA  3.5462
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                                        HEC-1 INPUT                                                                    PAGE  3

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

  99          LG   0.271    0.318    4.357    0.352   16.317
              * L1
 100          UI     0.0   195.74   195.74   266.93   603.63   823.25  1120.55  1287.07  1452.32  1611.06
 101          UI  1991.3  2326.75  1575.05  1312.31  1173.42  1097.38  1002.28   929.54   850.69   775.65
 102          UI  701.21   620.51   525.99   484.91   458.87   430.63   397.34   321.56   290.98   250.11
 103          UI  241.82   214.38   214.38   171.29   150.06   150.06   149.52    95.79    95.79    95.79
 104          UI   95.79    95.79     79.7    37.52    37.52    37.52    37.52    37.52    37.52    37.52
 105          UI   37.52    37.52    37.52    37.52    37.52    37.52    37.52      0.0

 106          KK   L1-L2    CNAME     L2R
 107          KO       0        0      0.0        0       22
 108          RS      11     FLOW      0.0      0.0
 109          RC   0.046    0.045    0.046  28949.0   0.0147      0.0
              * L1-L2
 110          RX     0.0     80.0    165.0    200.0    215.0    255.0    340.0    420.0
 111          RY    19.0     17.0     14.0     10.0     10.0     14.0     18.0     22.0

 112          KK      L2
 113          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 114          KM          L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
 115          KM          S-GRAPH TYPE=DESERT RANGELAND
 116          KO       0        0      0.0        1       22
 117          BA  7.3294
 118          LG    0.24    0.257    4.202    0.462   33.542
              * L2
 119          UI     0.0    274.2    274.2    274.2    274.2   716.34   906.16  1156.59  1406.58  1625.88
 120          UI  1873.4  2006.82  2272.85  2404.02  2469.24  2608.71  2627.71  2627.71  2580.41   2477.2
 121          UI  2404.5  2210.07  1962.85  1830.08  1638.23  1474.72  1349.05  1231.09  1114.64  1013.65
 122          UI  919.78   837.26   750.77   677.65   612.28   548.01   516.93    470.8   420.43   420.43
 123          UI  319.44   290.62   290.62   290.62   200.87   187.69   187.69   187.69   187.69   187.69
 124          UI   88.02    66.74    66.74    66.74    66.74    66.74    66.74    66.74    66.74    66.74
 125          UI   66.74    66.74    66.74    66.74    66.74    66.74    66.74

 126          KK   L2-Do
 127          KO       0        0      0.0        0       22
 128          DT    L2-D    475.0      0.0
              * Curve 1
 129          DI     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
 130          DI   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0
              * Curve 1
 131          DQ     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
 132          DQ   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0

 133          KK     L3R    CNAME    L2-L3
 134          KO       0        0      0.0        0       22
 135          RC       2      0.0

 136          KK   L2-L3    CNAME     L3R
 137          KO       0        0      0.0        0       22
 138          RS      22     FLOW      0.0      0.0
 139          RC    0.05    0.045     0.06  20567.0   0.0084      0.0
              * L2-L3
 140          RX     0.0   1093.0   1210.0   1215.0   1225.0   1232.0   1372.0   2000.0
 141          RY    18.0     11.8     11.7     10.0     10.0     11.7     11.8     18.0

                                        HEC-1 INPUT                                                                    PAGE  4

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


 142          KK      L3
 143          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 144          KM          L=4.75      Lca=2.00      S=44.27      Kn=0.055      LAG=91.0
 145          KM          S-GRAPH TYPE=DESERT RANGELAND
 146          KO       0        0      0.0        1       22
 147          BA  5.8518
 148          LG   0.205    0.257     3.98    0.449   45.272
              * L3
 149          UI     0.0   216.51   216.51   216.51   216.51   546.97   701.79    899.0  1098.31  1266.31
 150          UI  1460.0  1557.79   1786.1  1888.63   1950.16  2034.92  2074.91  2074.91  2053.75  1965.49
 151          UI  1920.6  1789.16  1583.48  1486.06  1313.63  1207.77  1091.42   994.62   909.22   825.02
 152          UI  759.89   663.97   614.46   574.55   483.47   461.44   408.18   402.68   331.99   331.99
 153          UI  296.91   229.48   229.48   229.48   197.56   148.21   148.21   148.21   148.21   148.21
 154          UI  121.69     52.7     52.7     52.7     52.7     52.7     52.7     52.7     52.7     52.7
 155          UI    52.7     52.7     52.7     52.7     52.7     52.7     52.7      0.0

 156          KK   L3-Do
 157          KO       0        0      0.0        0       22
 158          DT    L3-D    456.9      0.0
              * Curve 2
 159          DI     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
 160          DI   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0
              * Curve 1
 161          DQ     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
 162          DQ   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0

 163          KK       L    CNAME     LCP
 164          KO       0        0      0.0        0       22
 165          RC       2      0.0

 166          KK     LCP    CNAME       L
 167          KO       0        0      0.0        0       22
 168          RM     LCP

 169          KK      Z1
 170          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 171          KM          L=1.70      Lca=0.66      S=47.00      Kn=0.055      LAG=39.0
 172          KM          S-GRAPH TYPE=DESERT RANGELAND
 173          KO       0        0      0.0        1       22
 174          BA  0.6644
 175          LG   0.168    0.277    4.004    0.489   58.182
              * Z1
 176          UI     0.0    57.36    79.51   205.31   321.74   423.99   504.02   545.15    540.9   493.68
 177          UI  399.44   319.16   256.25   205.08   164.89   127.64   104.63    87.85    60.8    54.09
 178          UI   39.26    39.26    21.79    13.96    13.96    13.96    13.96    13.96    13.96      0.0

 179          KK   Z1-Do
 180          KO       0        0      0.0        0       22
 181          DT    Z1-D     58.0      0.0
              * Curve 1
```

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182          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
183          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
184          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0

                                        HEC-1 INPUT                                          PAGE  5

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

185          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

186          KK     ZCP   CNAME       Z
187          KO       0       0     0.0       0      22
188          RN     ZCP

189          KK      M1
190          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
191          KM          L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
192          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
193          KO       0       0     0.0       1      22
194          BA  5.5949
195          LG   0.349   0.349   4.306   0.348  17.433
             * M1
196          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
197          UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
198          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
199          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
200          UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
201          UI   64.47   64.47     0.0

202          KK   M1-Do
203          KO       0       0     0.0       0      22
204          DT    M1-D   170.0     0.0
             * Curve 1
205          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
206          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
207          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
208          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

209          KK   M1-M2   CNAME     M2R
210          KO       0       0     0.0       0      22
211          RS      30    FLOW     0.0     0.0
212          RC    0.04    0.04   0.045 38719.0  0.0133     0.0
             * M1-M2
213          RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
214          RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

215          KK      M2
216          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
217          KM          L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
218          KM          S-GRAPH TYPE=DESERT RANGELAND
219          KO       0       0     0.0       1      22
220          BA  7.5274
221          LG   0.205   0.255   3.952   0.547  45.352
             * M2
222          UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
223          UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
224          UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
225          UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
226          UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
227          UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
228          UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
229          UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

                                        HEC-1 INPUT                                          PAGE  6

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

230          KK   M2-Do
231          KO       0       0     0.0       0      22
232          DT    M2-D   585.0     0.0
             * Curve 1
233          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
234          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
235          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
236          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

237          KK       M   CNAME     MCP
238          KO       0       0     0.0       0      22
239          HC       2     0.0

240          KK     MCP   CNAME       M
241          KO       0       0     0.0       0      22
242          RN     MCP

243          KK      O1
244          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
245          KM          L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
246          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
247          KO       0       0     0.0       1      22
248          BA  3.0883
249          LG   0.252   0.252   4.189   0.443   31.44
             * O1
250          UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
251          UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
252          UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
253          UI  429.36  410.34   389.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
254          UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
255          UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
256          UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
257          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
258          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
259          UI   19.93   19.93   19.93     0.0

260          KK   O1-Do
261          KO       0       0     0.0       0      22
262          DT    O1-D   150.0     0.0
             * Curve 1
263          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
264          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
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265          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
266          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

267          KK     OCP   CNAME      0
268          KO       0       0     0.0       0      22
269          RN     OCP

                                        HEC-1 INPUT                                          PAGE  7

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


270          KK      N1
271          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
272          KM         L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
273          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
274          KO       0       0     0.0       1      22
275          BA   1.524
276          LG   0.289   0.289   4.075   0.469  26.648
             * N1
277          UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 2439.82 1097.57   811.0
278          UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
279          UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
280          UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

281          KK   N1-Do
282          KO       0       0     0.0       0      22
283          DT    N1-D    65.0     0.0
             * Curve 1
284          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
285          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
286          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
287          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

288          KK   N1-N2   CNAME     N2R
289          KO       0       0     0.0       0      22
290          RS      26    FLOW     0.0     0.0
291          RC    0.05   0.047    0.05 26511.0  0.0115     0.0
             * N1-N2
292          RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
293          RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

294          KK      N2
295          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
296          KM         L=5.64     Lca=3.27     S=170.14     Kn=0.055     LAG=91.0
297          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
298          KO       0       0     0.0       1      22
299          BA  3.3254
300          LG   0.268   0.268   4.117   0.446  27.305
             * N2
301          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
302          UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1537.94 1186.36  925.57  834.34
303          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
304          UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
305          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
306          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
307          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
308          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
309          UI   23.58   23.58   23.58   23.58   23.58

                                        HEC-1 INPUT                                          PAGE  8

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


310          KK   N2-Do
311          KO       0       0     0.0       0      22
312          DT    N2-D   150.0     0.0
             * Curve 1
313          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
314          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
315          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
316          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

317          KK       N   CNAME     NCP
318          KO       0       0     0.0       0      22
319          RC       2     0.0

320          KK     NCP   CNAME       N
321          KO       0       0     0.0       0      22
322          RN     NCP

323          KK      P1
324          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
325          KM         L=6.39     Lca=2.62     S=200.13     Kn=0.055     LAG=85.0
326          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
327          KO       0       0     0.0       1      22
328          BA  2.4365
329          LG   0.312   0.312   4.193   0.424    18.0
             * P1
330          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
331          UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
332          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
333          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
334          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
335          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
336          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
337          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0

338          KK   P1-Do
339          KO       0       0     0.0       0      22
340          DT    P1-D    85.0     0.0
             * Curve 1
341          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
342          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
343          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
344          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

345          KK     PCP   CNAME       P
346          KO       0       0     0.0       0      22
347          RN     PCP
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                                        HEC-1 INPUT                                                          PAGE  9

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


 348          KK      Q1
 349          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 350          KM          L=5.23      Lca=2.81      S=228.56      Kn=0.035      LAG=78.0
 351          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 352          KO       0        0     0.0       1      22
 353          BA  2.2336
 354          LG  0.338    0.34   4.203   0.396  15.896
              * Q1
 355          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
 356          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
 357          UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
 358          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
 359          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
 360          UI   47.18   47.18   47.18   28.56   18.48   18.48   18.48   18.48   18.48   18.48
 361          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
 362          UI   18.48   18.48   18.48

 363          KK   Q1-Do
 364          KO       0        0     0.0       0      22
 365          DT    Q1-D    71.5     0.0
              * Curve 1
 366          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 367          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 368          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 369          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 370          KK     QCP   CNAME       0
 371          KO       0        0     0.0       0      22
 372          KM     QCP
 373          ZZ
```

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	R1	465.	12.25	67.	22.	7.	0.28		
+	DIVERSION TO	R1-D	465.	12.25	42.	12.	4.	0.28		
+	HYDROGRAPH AT	R1-Do	296.	12.42	35.	10.	3.	0.28		
+	ROUTED TO	RCP	296.	12.42	35.	10.	3.	0.28		
+	HYDROGRAPH AT	L1	2267.	12.75	527.	150.	50.	3.55		
+	ROUTED TO	L1-L2	1832.	13.58	525.	150.	50.	3.55		
+	HYDROGRAPH AT	L2	3556.	13.25	1279.	397.	133.	7.33		
+	DIVERSION TO	L2-D	3556.	13.25	871.	239.	80.	7.33		
+	HYDROGRAPH AT	L2-Do	2556.	13.83	553.	160.	53.	7.33		
+	2 COMBINED AT	L3R	3810.	13.83	1041.	304.	101.	10.88		
+	ROUTED TO	L2-L3	2741.	15.58	1002.	303.	101.	10.88		
+	HYDROGRAPH AT	L3	3075.	13.25	1159.	373.	125.	5.85		
+	DIVERSION TO	L3-D	3075.	13.25	826.	230.	77.	5.85		
+	HYDROGRAPH AT	L3-Do	2077.	13.92	489.	145.	48.	5.85		
+	2 COMBINED AT	L	3043.	15.58	1367.	422.	141.	16.73		
+	ROUTED TO	LCP	3043.	15.58	1367.	422.	141.	16.73		
+	HYDROGRAPH AT	Z1	724.	12.50	150.	50.	17.	0.66		
+	DIVERSION TO	Z1-D	724.	12.50	103.	29.	10.	0.66		
+	HYDROGRAPH AT	Z1-Do	476.	12.83	68.	20.	7.	0.66		
+	ROUTED TO	ZCP	476.	12.83	68.	20.	7.	0.66		
+	HYDROGRAPH AT	M1	3723.	12.67	824.	236.	79.	5.59		
+	DIVERSION TO	M1-D	3363.	12.58	313.	86.	29.	5.59		
	HYDROGRAPH AT									

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+                    M1-Do    3712.  12.75    566.    151.    50.    5.59
        ROUTED TO
+                    M1-M2    1874.  15.08    533.    151.    50.    5.59
        HYDROGRAPH AT
+                       M2    3470.  13.42   1447.    471.   158.    7.53
        DIVERSION TO
+                     M2-D    3470.  13.42   1053.    295.    98.    7.53
        HYDROGRAPH AT
+                    M2-Do    2277.  14.25    602.    179.    60.    7.53
        2 COMBINED AT
+                       M    3011.  15.00   1080.    316.   105.   13.12
        ROUTED TO
+                     MCP    3011.  15.00   1080.    316.   105.   13.12
        HYDROGRAPH AT
+                       O1    1476.  13.33    525.    164.    55.    3.09
        DIVERSION TO
+                     O1-D    1476.  13.33    272.     76.    25.    3.09
        HYDROGRAPH AT
+                    O1-Do    1096.  13.58    319.     90.    30.    3.09
        ROUTED TO
+                     OCP    1096.  13.58    319.     90.    30.    3.09
        HYDROGRAPH AT
+                       N1    1346.  12.50    240.     75.    25.    1.52
        DIVERSION TO
+                     N1-D    1306.  12.42    118.     33.    11.    1.52
        HYDROGRAPH AT
+                    N1-Do    1211.  12.58    152.     42.    14.    1.52
        ROUTED TO
+                    N1-N2     565.  14.58    145.     42.    14.    1.52
        HYDROGRAPH AT
+                       N2    1633.  13.17    540.    165.    55.    3.33
        DIVERSION TO
+                     N2-D    1633.  13.17    274.     76.    25.    3.33
        HYDROGRAPH AT
+                    N2-Do    1281.  13.42    327.     91.    30.    3.33
        2 COMBINED AT
+                       N    1276.  13.42    464.    131.    44.    4.85
        ROUTED TO
+                     NCP    1276.  13.42    464.    131.    44.    4.85
        HYDROGRAPH AT
+                       P1    1171.  13.08    351.    103.    34.    2.44
        DIVERSION TO
+                     P1-D    1167.  13.08    158.     43.    14.    2.44
        HYDROGRAPH AT
+                    P1-Do    1064.  13.25    223.     60.    20.    2.44
        ROUTED TO
+                     PCP    1064.  13.25    223.     60.    20.    2.44
        HYDROGRAPH AT
+                       Q1    1141.  13.00    315.     91.    30.    2.23
        DIVERSION TO
+                     Q1-D    1055.  12.92    133.     36.    12.    2.23
        HYDROGRAPH AT
+                    Q1-Do    1059.  13.08    205.     55.    18.    2.23
        ROUTED TO
+                     QCP    1059.  13.08    205.     55.    18.    2.23

 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY  1991             *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************

*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*          (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.
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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   Buckeye/Sun Valley ADMS - 23 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID   100-year 24-hour
   4          ID   Future Conditions
   5          ID   FRS #2 (Sub-basins S-U)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - Town of Buckeye LU Districts (2003)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       0
  14          IN      15 01JAN94       0
  15          JD    4.13    0.01
              * 24-hour distribution
  16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  26          IN      15 01JAN94       0
  27          JD   3.923    10.0
              * 24-hour distribution
  28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

  38          KK      S1
  39          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  40          KM         L=2.32    Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
  41          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
  42          KO       0       0     0.0       1      22
  43          BA  1.4105
  44          LG   0.289   0.313   4.485   0.392  25.978
              * S1
  45          UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
  46          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
  47          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

                                        HEC-1 INPUT                                                    PAGE  2

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

  48          KK   S1-Do
  49          KO       0       0     0.0       0      22
  50          DT    S1-D    61.0     0.0
              * Curve 1
  51          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  52          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  53          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  54          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  55          KK     SCP   CNAME       S
  56          KO       0       0     0.0       0      22
  57          RM     SCP

  58          KK      U1
  59          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  60          KM         L=2.37    Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
  61          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
  62          KO       0       0     0.0       1      22
  63          BA  1.3705
  64          LG   0.316   0.329   5.226   0.254  17.067
              * U1
  65          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
  66          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
  67          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
  68          UI    26.8     0.0

  69          KK   U1-Do
  70          KO       0       0     0.0       0      22
  71          DT    U1-D    47.0     0.0
              * Curve 1
  72          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  73          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  74          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  75          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  76          KK     UCP   CNAME       U
  77          KO       0       0     0.0       0      22
  78          RM     UCP

  79          KK      T1
  80          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  81          KM         L=4.34    Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
  82          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
  83          KO       0       0     0.0       1      22
```

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 84          BA  3.0415
 85          LG   0.327   0.327   4.641   0.316    18.7
             * T1
 86          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
 87          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  783.63  697.43  590.13  511.99
 88          UI  476.04  440.92  396.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 89          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 90          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49
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HEC-1 INPUT PAGE 3

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

 91          KK   T1-Do
 92          KO       0       0     0.0       0      22
 93          DT    T1-D   103.0     0.0
             * Curve 2
 94          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 95          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 96          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 97          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 98          KK     TCP   CNAME       T
 99          KO       0       0     0.0       0      22
100          RN     TCP
101          ZZ
```

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	S1	1572.	12.33	229.	69.	23.	1.41		
+	DIVERSION TO	S1-D	1454.	12.25	111.	31.	10.	1.41		
+	HYDROGRAPH AT	S1-Do	1339.	12.42	139.	38.	13.	1.41		
+	ROUTED TO	SCP	1339.	12.42	139.	38.	13.	1.41		
+	HYDROGRAPH AT	U1	1424.	12.42	216.	61.	20.	1.37		
+	DIVERSION TO	U1-D	1331.	12.33	87.	24.	8.	1.37		
+	HYDROGRAPH AT	U1-Do	1309.	12.50	142.	38.	13.	1.37		
+	ROUTED TO	UCP	1309.	12.50	142.	38.	13.	1.37		
+	HYDROGRAPH AT	T1	2231.	12.67	465.	134.	45.	3.04		
+	DIVERSION TO	T1-D	2069.	12.58	190.	52.	17.	3.04		
+	HYDROGRAPH AT	T1-Do	2067.	12.75	307.	82.	27.	3.04		
+	ROUTED TO	TCP	2067.	12.75	307.	82.	27.	3.04		

```
 *** NORMAL END OF HEC-1 ***
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
 *             MAY   1991            *
 *          VERSION 4.0.1E           *
 *                                   *
 *  RUN DATE          TIME           *
 *                                   *
 *************************************
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```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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

HEC-1 INPUT PAGE 1

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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 1          ID   Buckeye/Sun Valley ADMS - 23 March 2004
 2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
 3          ID   100-year 24-hour
 4          ID   Future Conditions
 5          ID   FRS #3 (Sub-basins V-Y)
 6          ID   Rainfall Loss Method - Green & Ampt
 7          ID   Unit Hydrograph Method - FCDMC S-Graph
 8          ID   Channel Routing Method - Normal Depth
 9          ID   Land Use - Town of Buckeye LU Districts (2003)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       0
14          IN      15 01JAN94       0
15          JD    4.14     0.01
            * 24-hour distribution
16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
26          IN      15 01JAN94       0
27          JD   3.933    10.0
            * 24-hour distribution
28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

38          KK      V1
39          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
40          KM          L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
41          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
42          KO       0        0     0.0        1       22
43          BA  0.6646
44          LG   0.335    0.335   3.971    0.405   18.644
            * V1
45          UI     0.0    52.04   54.19   166.27   256.03   338.03   396.86   496.51   578.99   373.13
46          UI  313.66   281.75   250.64   220.87   193.81   162.52   133.66   122.94   111.92     90.9
47          UI   74.78    66.34    56.99     53.4     39.9     39.9    30.81    25.47    25.47    25.47
48          UI   16.36     9.97     9.97     9.97     9.97     9.97     9.97     9.97     9.97     9.97
49          UI     0.0
```



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

50          KK   V1-Do
51          KO       0        0     0.0        0       22
52          DT    V1-D     23.0     0.0
            * Curve 3
53          DI     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
54          DI   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0
            * Curve 1
55          DQ     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
56          DQ   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0

57          KK     VCP    CNAME       V
58          KO       0        0     0.0        0       22
59          RN     VCP

60          KK      W1
61          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
62          KM          L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
63          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
64          KO       0        0     0.0        1       22
65          BA   3.894
66          LG    0.35     0.35   3.975     0.41   15.228
            * W1
67          UI     0.0   297.97   297.97   920.94  1416.37  1894.97  2238.82  2710.48  3465.75  2237.36
68          UI  1844.7  1658.52  1479.19  1314.83  1166.02   980.71    816.4   720.69    665.9   577.11
69          UI  477.35   380.74   352.03   326.35   259.78   228.45   225.14   145.82   145.82   145.82
70          UI  145.82    65.63    57.11    57.11    57.11    57.11    57.11    57.11    57.11    57.11
71          UI   57.11      0.0

72          KK   W1-W2    CNAME     W2R
73          KO       0        0     0.0        0       22
74          RS       6     FLOW     0.0      0.0
75          RC   0.050     0.05    0.06  11249.0   0.0189      0.0
            * W1-W2
76          RX     0.0    350.0    372.0    384.0    472.0    489.0    525.0   1005.0
77          RY    17.5     13.5     11.6     10.0     11.2     13.4     13.6     17.5

78          KK      W2
79          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
80          KM          L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
81          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
82          KO       0        0     0.0        1       22
83          BA  2.8478
84          LG   0.321    0.321   4.063    0.409   12.128
            * W2
85          UI     0.0   217.92   217.92   673.51  1035.83  1385.85  1637.32  1982.26   2534.6  1636.25
86          UI  1349.1  1212.93  1081.78   961.58   852.74   717.22   597.06   527.06   486.99   422.06
87          UI   349.1   278.45   257.45   238.67   189.98   167.07   164.65   106.64   106.64   106.64
88          UI  106.64     48.0    41.77    41.77    41.77    41.77    41.77    41.77    41.77    41.77
89          UI   41.77      0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 90          KK   W2-Do
 91          KO       0       0     0.0       0      22
 92          DT    W2-D   130.0     0.0
             * Curve 1
 93          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 94          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 2
 95          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 96          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 97          KK       W   CNAME     WCP
 98          KO       0       0     0.0       0      22
 99          HC       2     0.0

100          KK     WCP   CNAME       W
101          KO       0       0     0.0       0      22
102          RN     WCP

103          KK      X1
104          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM          L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
106          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
107          KO       0       0     0.0       1      22
108          BA  0.7867
109          LG    0.35    0.35   3.947   0.418  12.841
             * X1
110          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
111          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
112          UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
113          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

114          KK     XCP   CNAME       X
115          KO       0       0     0.0       0      22
116          RN     XCP

117          KK      Y1
118          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
119          KM          L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
120          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
121          KO       0       0     0.0       1      22
122          BA  0.5808
123          LG    0.35    0.35   4.051   0.415  10.599
             * Y1
124          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
125          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

126          KK     YCP   CNAME       Y
127          KO       0       0     0.0       0      22
128          RN     YCP
129          EE
```

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	V1	545.	12.50	99.	29.	10.	0.66		
+	DIVERSION TO	V1-D	490.	12.42	42.	12.	4.	0.66		
+	HYDROGRAPH AT	V1-Do	487.	12.58	64.	17.	6.	0.66		
+	ROUTED TO	VCP	487.	12.58	64.	17.	6.	0.66		
+	HYDROGRAPH AT	W1	2976.	12.50	539.	153.	51.	3.89		
+	ROUTED TO	W1-W2	2589.	12.92	538.	153.	51.	3.89		
+	HYDROGRAPH AT	W2	2180.	12.50	385.	107.	36.	2.85		
+	DIVERSION TO	W2-D	2180.	12.50	250.	66.	22.	2.85		
+	HYDROGRAPH AT	W2-Do	1076.	13.00	154.	41.	14.	2.85		
+	2 COMBINED AT	W	3591.	12.92	681.	192.	64.	6.74		
+	ROUTED TO	WCP	3591.	12.92	681.	192.	64.	6.74		
+	HYDROGRAPH AT	X1	645.	12.50	107.	30.	10.	0.79		
+	ROUTED TO	XCP	645.	12.50	107.	30.	10.	0.79		
+	HYDROGRAPH AT	Y1	835.	12.17	76.	21.	7.	0.58		
+	ROUTED TO	YCP	835.	12.17	76.	21.	7.	0.58		

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

E.6.5 HEC-1 Output File 200-Year 24-Hour

E.6.5.a HEC-1 Output File for 200-Year 24-Hour (Existing Conditions)

```
1*************************************                    *************************************
*                                   *                    *                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *  U.S. ARMY CORPS OF ENGINEERS     *
*            MAY  1991              *                    *  HYDROLOGIC ENGINEERING CENTER    *
*         VERSION 4.0.1E            *                    *        609 SECOND STREET          *
*                                   *                    *     DAVIS, CALIFORNIA 95616       *
*  RUN DATE          TIME           *                    *        (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

                                        HEC-1 INPUT                                        PAGE  1

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

   1          ID  Buckeye/Sun Valley ADMS - 01 March 2004
   2          ID  PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID  200-year 24-hour
   4          ID  Existing Conditions
   5          ID  Area 3 - Sub-basins A-C
   6          ID  Rainfall Loss Method - Green & Ampt
   7          ID  Unit Hydrograph Method - FCDMC S-Graph
   8          ID  Channel Routing Method - Normal Depth
   9          ID  Land Use - FCDMC GIS Data: mag_landuse (2000)
  10          ID  Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       3
  14          IN      15 01JAN94       0
  15          JD    4.63    0.01
              * 24-hour distribution
  16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  26          IN      15 01JAN94       0
  27          JD   4.398    10.0
              * 24-hour distribution
  28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  38          IN      15 01JAN94       0
  39          JD    4.25    20.0
              * 24-hour distribution
  40          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  41          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  42          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  43          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  44          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  45          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  46          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  47          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  48          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  49          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

                                        HEC-1 INPUT                                        PAGE  2

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

  50          KK      C1
  51          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
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 52          KM   L=3.99     Lca=2.01     S=387.22     Kn=0.050     LAG=51.0
 53          KM   S-GRAPH TYPE-PHOENIX MOUNTAIN
 54          KO      0       0     0.0       1      22
 55          BA  3.5862
 56          LG   0.215   0.296   3.933   0.407  21.409
             * C1
 57          UI     0.0  236.76  236.76  527.08  911.83 1306.09 1576.15 1799.13  2131.6 2761.78
 58          UI  2038.2 1574.43 1396.84 1275.29 1154.27 1044.98  935.76  822.33  695.81  603.68
 59          UI  561.29  519.88  455.15  388.96  307.02  297.68   259.3   259.3  183.85  181.51
 60          UI  181.51  121.77  115.86  115.86  115.86  107.68   45.38   45.38   45.38   45.38
 61          UI   45.38   45.38   45.38   45.38   45.38   45.38   45.38   45.38

 62          KK   C1-C2   CNAME     C2R
 63          KO      0       0     0.0       0      22
 64          RS      6    FLOW     0.0     0.0
 65          RC   0.05   0.044    0.05 18437.0  0.0176     0.0
             * C1-C2
 66          RX     0.0    35.0    90.0   138.0   159.0   209.0   264.0   309.0
 67          RY    21.0    19.0    16.0    10.0    10.0    15.0    20.0    24.0

 68          KK      C2
 69          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 70          KM   L=3.69     Lca=1.53     S=105.29     Kn=0.055     LAG=63.0
 71          KM   S-GRAPH TYPE-DESERT RANGELAND
 72          KO      0       0     0.0       1      22
 73          BA  1.9204
 74          LG   0.35    0.35    3.92   0.436     0.0
             * C2
 75          UI     0.0  102.63  102.63  122.26  304.94  432.24  556.99  679.25  778.73  881.69
 76          UI   929.5  983.56  983.56  952.35  904.47  807.23  701.83  605.44  531.11  463.45
 77          UI  404.15  349.94  303.68  267.04  229.18  194.49  177.79  157.37  130.91  108.78
 78          UI  108.78   77.56   70.25   70.25   70.25   44.14   24.98   24.98   24.98   24.98
 79          UI   24.98   24.98   24.98   24.98   24.98   24.98   24.98     0.0

 80          KK     C3R   CNAME   C2-C3
 81          KO      0       0     0.0       0      22
 82          HC      2     0.0

 83          KK   C2-C3   CNAME     C3R
 84          KO      0       0     0.0       0      22
 85          RS     10    FLOW     0.0     0.0
 86          RC   0.046    0.05  0.0462 23418.0  0.0107     0.0
             * C2-C3
 87          RX     0.0    60.0   125.0   140.0   172.0   232.0   292.0   352.0
 88          RY    26.0    25.0    23.0    10.0    10.0    16.0    20.0    23.0

 89          KK      C3
 90          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM   L=4.44     Lca=2.51     S=56.33     Kn=0.050     LAG=84.0
 92          KM   S-GRAPH TYPE-DESERT RANGELAND
 93          KO      0       0     0.0       1      22
 94          BA  3.7859
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 95          LG   0.345   0.345   4.357   0.372     0.0
             * C3
 96          UI     0.0  151.75  151.75  151.75  190.44  436.28  559.26  700.12  855.69  975.52
 97          UI  1073.3 1242.28 1321.31 1364.94 1436.99 1454.26 1454.26 1418.19 1372.63 1299.19
 98          UI  1161.9 1057.64   941.4  855.14  770.03  694.14  628.58  566.66   510.9  460.18
 99          UI   415.5   362.4  338.86  288.07  286.08  237.34  232.68  204.46  160.84  160.84
100          UI  160.84  118.28  103.88  103.88  103.88  103.88   97.02   36.93   36.93   36.93
101          UI   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93
102          UI   36.93   36.93     0.0

103          KK     C4R   CNAME   C3-C4
104          KO      0       0     0.0       0      22
105          HC      2     0.0

106          KK      C4
107          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
108          KM   L=2.18     Lca=0.88     S=44.31     Kn=0.045     LAG=40.0
109          KM   S-GRAPH TYPE-DESERT RANGELAND
110          KO      0       0     0.0       1      22
111          BA  1.4001
112          LG   0.327   0.327   4.737    0.29     0.0
             * C4
113          UI     0.0  117.85  153.21  406.59  642.02   848.8 1023.51 1108.81 1120.37 1044.08
114          UI  868.12  694.78   559.8  452.89  361.01  288.88  232.67  190.33  149.01  124.91
115          UI    88.1   80.67   73.19   28.68   28.68   28.68   28.68   28.68   28.68   28.68
116          UI     0.0

117          KK       C   CNAME     CCP
118          KO      0       0     0.0       0      22
119          HC      2     0.0

120          KK     CCP   CNAME       C
121          KO      0       0     0.0       0      22
122          RM     CCP

123          KK      B1
124          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
125          KM   L=2.52     Lca=1.19     S=227.45     Kn=0.050     LAG=38.0
126          KM   S-GRAPH TYPE-PHOENIX MOUNTAIN
127          KO      0       0     0.0       1      22
128          BA  0.5559
129          LG    0.35    0.35   3.733    0.47   6.272
             * B1
130          UI     0.0   49.25   72.53  179.11  283.42  353.86  433.69  556.28  354.96  293.83
131          UI  258.29  226.62  196.88  163.69   131.5  117.02  105.83   83.39   66.1   58.84
132          UI   53.95   40.03   37.76   29.84    24.1    24.1   23.99    9.44    9.44    9.44
133          UI    9.44    9.44    9.44    9.44    9.44    9.44

134          KK   B1-B2   CNAME     B2R
135          KO      0       0     0.0       0      22
136          RS      8    FLOW     0.0     0.0
137          RC   0.055   0.042   0.055 11334.0  0.0137     0.0
             * B1-B2
138          RX     0.0    75.0   140.0   167.0   193.0   226.0   296.0   371.0
139          RY    20.0    17.0    14.0    10.0    10.0    13.0    17.0    22.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 140        KK      B2
 141        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 142        KM   L=2.21      Lca=0.98      S=84.6      Kn=0.050      LAG=45.0
 143        KM   S-GRAPH TYPE=DESERT RANGELAND
 144        KO       0        0      0.0        1       22
 145        BA  0.4888
 146        LG    0.35     0.35    3.617    0.513      0.0
            * B2
 147        UI     0.0    36.57    36.57    108.2   170.94   233.37   285.41    325.0   349.22   347.33
 148        UI  325.56   278.29   231.3   188.32   156.44   128.94   105.91    86.03    71.02    59.44
 149        UI   49.34    38.76    32.78    25.03    25.03    18.39      8.9      8.9      8.9      8.9
 150        UI     8.9      8.9      8.9      8.9

 151        KK     B3R    CNAME    B2-B3
 152        KO       0        0      0.0        0       22
 153        RC       2      0.0

 154        KK   B2-B3    CNAME      B3R
 155        KO       0        0      0.0        0       22
 156        RS      23     FLOW      0.0      0.0
 157        RC    0.05    0.025     0.05 19622.0   0.0121      0.0
            * B2-B3
 158        RX     0.0    120.0    278.0    285.0    301.5    312.5    446.5    529.5
 159        RY    13.5     10.0     11.6     10.1     10.1     11.5     10.8     12.6

 160        KK      B3
 161        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 162        KM   L=3.72      Lca=1.65      S=63.31      Kn=0.045      LAG=59.0
 163        KM   S-GRAPH TYPE=DESERT RANGELAND
 164        KO       0        0      0.0        1       22
 165        BA   1.987
 166        LG   0.331    0.331    4.284    0.389      0.0
            * B3
 167        UI     0.0   113.39   113.39    174.2   365.68   513.62   667.08   787.09    935.3  1014.02
 168        UI  1066.6  1086.67  1065.15  1007.46   902.78   777.14   664.54   576.28   502.42   427.51
 169        UI  369.72   321.51   269.65   233.59   211.46   173.87   158.42   120.18   120.18    89.23
 170        UI   77.62    77.62    77.62    39.48     27.6     27.6     27.6     27.6     27.6     27.6
 171        UI    27.6     27.6     27.6     27.6      0.0

 172        KK       B    CNAME      BCP
 173        KO       0        0      0.0        0       22
 174        RC       2      0.0

 175        KK     BCP    CNAME        B
 176        KO       0        0      0.0        0       22
 177        RM     BCP

 178        KK      A1
 179        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 180        KM   L=2.20      Lca=0.86      S=322.08      Kn=0.050      LAG=30.0
 181        KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 182        KO       0        0      0.0        1       22
 183        BA  1.1067
 184        LG    0.35     0.35    4.058    0.417    9.677
            * A1
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 185        UI     0.0   124.21   285.26   628.48   880.99  1178.37  1187.81   769.89   652.53   550.24
 186        UI  454.03   347.39   294.06   245.68    184.1   150.55   131.95    95.22    84.89    60.78
 187        UI   60.78    43.03    23.81    23.81    23.81    23.81    23.81    23.81      0.0

 188        KK   A1-A2    CNAME      A2R
 189        KO       0        0      0.0        0       22
 190        RS       7     FLOW      0.0      0.0
 191        RC   0.045    0.045    0.045  15153.0   0.0134      0.0
            * A1-A2
 192        RX     0.0     75.0    125.0    185.0    190.0    220.0    280.0    340.0
 193        RY    27.0     23.0     19.0     10.0     10.0     20.0     26.0     32.0

 194        KK      A2
 195        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 196        KM   L=3.34      Lca=1.28      S=94.61      Kn=0.055      LAG=57.0
 197        KM   S-GRAPH TYPE=DESERT RANGELAND
 198        KO       0        0      0.0        1       22
 199        BA  1.6622
 200        LG    0.35     0.35    4.547    0.339      0.0
            * A2
 201        UI     0.0    98.18    98.18    167.77    329.1   468.89   598.13   713.32    831.1    883.8
 202        UI  940.94   940.94   897.33   847.41   719.99   625.76   533.26   458.89   397.46    336.4
 203        UI  288.45    247.3   210.36    185.1   155.06   143.14   104.07   104.07     78.8    67.21
 204        UI   67.21    67.21    30.17     23.9     23.9     23.9     23.9     23.9     23.9     23.9
 205        UI    23.9     23.9      0.0

 206        KK     A3R    CNAME    A2-A3
 207        KO       0        0      0.0        0       22
 208        RC       2    2.769

 209        KK   A2-A3    CNAME      A3R
 210        KO       0        0      0.0        0       22
 211        RS       9     FLOW      0.0      0.0
 212        RC    0.05    0.043     0.05  18190.0   0.0116      0.0
            * A2-A3
 213        RX     0.0     20.0     30.0     165.0    186.0    346.0    361.0    381.0
 214        RY    20.0     19.0     18.0     10.0     10.0     20.0     21.0     22.0

 215        KK      A3
 216        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 217        KM   L=3.92      Lca=1.69      S=58.21      Kn=0.045      LAG=64.0
 218        KM   S-GRAPH TYPE=DESERT RANGELAND
 219        KO       0        0      0.0        1       22
 220        BA  3.7294
 221        LG    0.35     0.35    4.23    0.405      0.0
            * A3
 222        UI     0.0    196.2    196.2    216.8   570.49   813.36  1043.19  1275.51  1464.32  1668.95
 223        UI  1757.8  1876.99  1880.23  1841.12  1751.54  1592.99  1387.91  1202.84  1048.95   919.72
 224        UI  805.43   710.05   606.86   538.24   447.15   397.83   367.69   300.84   290.73   207.95
 225        UI  207.95   183.56    134.3    134.3    134.3   131.67    47.75    47.75    47.75    47.75
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 226        UI   47.75   47.75   47.75   47.75   47.75   47.75   47.75   47.75
                                          HEC-1 INPUT                                                    PAGE  6

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

 227        KK       A   CNAME     ACP
 228        KO       0       0     0.0       0      22
 229        HC       2   6.498
 230        KK     ACP   CNAME       A
 231        KO       0       0     0.0       0      22
 232        RN     ACP
 233        ZZ
```

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	C1	3073.	12.67	653.	190.	63.	3.59		
+	ROUTED TO	C1-C2	2664.	13.08	652.	190.	63.	3.59		
+	HYDROGRAPH AT	C2	1155.	12.83	250.	63.	21.	1.92		
+	2 COMBINED AT	C3R	3723.	13.00	896.	251.	84.	5.51		
+	ROUTED TO	C2-C3	3305.	13.67	891.	250.	84.	5.51		
+	HYDROGRAPH AT	C3	1795.	13.17	510.	127.	42.	3.79		
+	2 COMBINED AT	C4R	4662.	13.58	1381.	375.	125.	9.29		
+	HYDROGRAPH AT	C4	1427.	12.50	209.	52.	17.	1.40		
+	2 COMBINED AT	C	4747.	13.58	1575.	423.	141.	10.69		
+	ROUTED TO	CCP	4747.	13.58	1575.	423.	141.	10.69		
+	HYDROGRAPH AT	B1	529.	12.42	80.	21.	7.	0.56		
+	ROUTED TO	B1-B2	442.	12.92	80.	21.	7.	0.56		
+	HYDROGRAPH AT	B2	390.	12.58	62.	15.	5.	0.49		
+	2 COMBINED AT	B3R	714.	12.83	140.	36.	12.	1.04		
+	ROUTED TO	B2-B3	507.	14.58	139.	36.	12.	1.04		
+	HYDROGRAPH AT	B3	1315.	12.75	269.	67.	22.	1.99		
+	2 COMBINED AT	B	1309.	12.75	401.	103.	34.	3.03		
+	ROUTED TO	BCP	1309.	12.75	401.	103.	34.	3.03		
+	HYDROGRAPH AT	A1	1293.	12.33	169.	46.	15.	1.11		
+	ROUTED TO	A1-A2	1019.	12.83	169.	46.	15.	1.11		
+	HYDROGRAPH AT	A2	1169.	12.75	232.	58.	19.	1.66		
+	2 COMBINED AT	A3R	2153.	12.83	397.	103.	34.	2.77		
+	ROUTED TO	A2-A3	1807.	13.50	396.	103.	34.	2.77		
+	HYDROGRAPH AT	A3	2214.	12.83	488.	122.	41.	3.73		
+	2 COMBINED AT	A	3011.	13.33	874.	223.	74.	6.50		
+	ROUTED TO	ACP	3011.	13.33	874.	223.	74.	6.50		

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

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1*************************************                    *************************************
*                                   *                    *                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *  U.S. ARMY CORPS OF ENGINEERS     *
*            MAY  1991              *                    *  HYDROLOGIC ENGINEERING CENTER    *
*          VERSION 4.0.1E           *                    *        609 SECOND STREET          *
*                                   *                    *     DAVIS, CALIFORNIA 95616       *
*  RUN DATE          TIME           *                    *       (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

                                        HEC-1 INPUT                                          PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wan Chen
  3           ID   200-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: maq_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    4.63     0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   4.398    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD    4.25    20.0
              * 24-hour distribution
 40           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 50           IN      15 01JAN94       0
 51           JD   4.107    40.0
              * 24-hour distribution

                                        HEC-1 INPUT                                          PAGE  2

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

 52           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62           IN      15 01JAN94       0
 63           JD   3.968    60.0
              * 24-hour distribution
 64           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
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 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.216   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      G1
 75          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM   L=2.38     Lca=1.08     S=33.76     Kn=0.045     LAG=47.0
 77          KM   S-GRAPH TYPE=DESERT RANGELAND
 78          KO       0       0     0.0       1      22
 79          BA  1.1192
 80          LG    0.35    0.35   4.688   0.298     0.0
             * G1
 81          UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 82          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 83          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 84          UI   19.51   19.51   19.51   19.51   19.51     0.0

 85          KK     GCP    CNAME       G
 86          KO       0       0     0.0       0      22
 87          RN     GCP

 88          KK      J1
 89          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 90          KM   L=4.09     Lca=1.78     S=70.82     Kn=0.055     LAG=75.0
 91          KM   S-GRAPH TYPE=DESERT RANGELAND
 92          KO       0       0     0.0       1      22
 93          BA  1.7341
 94          LG    0.35    0.35    3.25   0.652     0.0
             * J1
 95          UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
 96          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
 97          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
 98          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
 99          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
100          UI   18.95   18.95   18.95   18.95   18.95   18.95
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

101          KK   J1-J2    CNAME     J2R
102          KO       0       0     0.0       0      22
103          RS      25    FLOW     0.0     0.0
104          RC   0.055    0.04   0.055 24090.0  0.0086     0.0
             * J1-J2
105          RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
106          RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

107          KK      J2
108          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
109          KM   L=5.18     Lca=2.51     S=45.01     Kn=0.050     LAG=93.0
110          KM   S-GRAPH TYPE=DESERT RANGELAND
111          KO       0       0     0.0       1      22
112          BA  3.6379
113          LG   0.349   0.348   3.623   0.495   0.281
             * J2
114          UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
115          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
116          UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
117          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
118          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
119          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
120          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

121          KK    K3RB    CNAME   J2-K3
122          KO       0       0     0.0       0      22
123          RC       2   5.372

124          KK   J2-K3    CNAME    K3RB
125          KO       0       0     0.0       0      22
126          RS       4    FLOW     0.0     0.0
127          RC    0.05   0.048    0.05  4072.0  0.0059     0.0
             * J2-K3
128          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
129          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

130          KK      K1
131          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
132          KM   L=3.23     Lca=1.84     S=681.00     Kn=0.050     LAG=40.0
133          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
134          KO       0       0     0.0       1      22
135          BA   1.543
136          LG   0.112   0.255   4.382   0.365   21.06
             * K1
137          UI     0.0  129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
138          UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
139          UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
140          UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

141          KK   K1-K2    CNAME     K2R
142          KO       0       0     0.0       0      22
143          RS      15    FLOW     0.0     0.0
144          RC   0.048    0.05   0.048 30021.0   0.015     0.0
             * K1-K2
145          RX     0.0    20.0    55.0    85.0   235.0   259.0   289.0   309.0
146          RY    22.0    21.0    20.0    10.0    10.0    20.0    21.0    22.0

147          KK      K2
148          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
149          KM   L=7.3      Lca=4.04     S=108.84     Kn=0.055     LAG=119.0
150          KM   S-GRAPH TYPE=DESERT RANGELAND
151          KO       0       0     0.0       1      22
152          BA   2.365
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153          LG   0.341   0.346   4.471   0.348   1.018
             * K2
154          UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
155          UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
156          UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
157          UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
158          UI  205.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
159          UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
160          UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
161          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
162          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

163          KK    K3RA   CNAME   K2-K3
164          KO       0       0     0.0       0      22
165          HC       2   3.908

166          KK   K2-K3   CNAME    K3RA
167          KO       0       0     0.0       0      22
168          RS      19    FLOW     0.0     0.0
169          RC    0.05   0.048    0.05 25950.0  0.0084     0.0
             * K2-K3
170          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
171          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

172          KK      F1
173          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
174          KM   L=4.07      Lca=1.63      S=441.96      Kn=0.050      LAG=46.0
175          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
176          KO       0       0     0.0       1      22
177          BA  2.7854
178          LG   0.299    0.33   4.322   0.361  14.271
             * F1
179          UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
180          UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
181          UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
182          UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
183          UI   39.08   39.08   39.08     0.0
                                          HEC-1 INPUT                                          PAGE  5

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

184          KK   F1-F2   CNAME     F2R
185          KO       0       0     0.0       0      22
186          RS       3    FLOW     0.0     0.0
187          RC   0.053   0.045   0.055  8635.0   0.012     0.0
             * F1-F2
188          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
189          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

190          KK      F2
191          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
192          KM   L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
193          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
194          KO       0       0     0.0       1      22
195          BA  2.5261
196          LG    0.35    0.35   4.311   0.375   3.026
             * F2
197          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
198          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
199          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
200          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
201          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
202          UI    28.6    28.6    28.6     0.0

203          KK     F3R   CNAME   F2-F3
204          KO       0       0     0.0       0      22
205          HC       2   5.312

206          KK   F2-F3   CNAME     F3R
207          KO       0       0     0.0       0      22
208          RS       4    FLOW     0.0     0.0
209          RC    0.05   0.047   0.048  7059.0    0.01     0.0
             * F2-F3
210          RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
211          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

212          KK      F3
213          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
214          KM   L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
215          KM   S-GRAPH TYPE=DESERT RANGELAND
216          KO       0       0     0.0       1      22
217          BA  0.7363
218          LG    0.35    0.35   3.266   0.647     0.0
             * F3
219          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
220          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
221          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
222          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
223          UI     0.0
                                          HEC-1 INPUT                                          PAGE  6

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

224          KK    E4RB   CNAME   F3-E4
225          KO       0       0     0.0       0      22
226          HC       2   6.048

227          KK   F3-E4   CNAME    E4RB
228          KO       0       0     0.0       0      22
229          RS      19    FLOW     0.0     0.0
230          RC    0.05   0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
231          RX     0.0   370.0   650.0   690.0   705.0   735.0   810.0  1200.0
232          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

233          KK      H1
234          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
235          KM   L=2.41      Lca=1.09      S=54.59      Kn=0.055      LAG=51.0
236          KM   S-GRAPH TYPE=DESERT RANGELAND
237          KO       0       0     0.0       1      22
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238          BA  1.0659
239          LG    0.35     0.35   2.733   0.945     0.0
             * H1
240          UI     0.0    70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
241          UI  672.89    639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
242          UI  143.71   125.13   107.9   82.11   74.58   59.77   48.17   48.27   44.02   17.13
243          UI   17.13    17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

244          KK   H1-H2    CNAME     H2R
245          KO       0        0     0.0       0      22
246          RS      17     FLOW     0.0     0.0
247          RC   0.053     0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
248          RX     0.0    330.0   430.0   465.0   495.0   530.0   630.0   960.0
249          RY    17.0     14.0    12.0    10.0    10.0    12.0    14.0    17.0

250          KK      E1
251          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
252          KM   L=2.51      Lca=1.13     S=178.34      Kn=0.055      LAG=43.0
253          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
254          KO       0        0     0.0       1      22
255          BA  0.9558
256          LG    0.35    0.378   5.377   0.222    0.69
             * E1
257          UI     0.0    74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
258          UI  451.09    405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
259          UI  107.54    95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
260          UI   23.52    14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
261          UI     0.0

262          KK   E1-E2    CNAME     E2R
263          KO       0        0     0.0       0      22
264          RS       5     FLOW     0.0     0.0
265          RC    0.05    0.047   0.046 11365.0   0.016     0.0
             * E1-E2
266          RX     0.0     65.0   140.0   170.0   185.0   200.0   270.0   340.0
267          RY    24.0     21.0    17.0    10.0    10.0    14.0    18.0    22.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

268          KK      E2
269          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
270          KM   L=2.92      Lca=0.80     S=96.39      Kn=0.055      LAG=45.0
271          KM   S-GRAPH TYPE=DESERT RANGELAND
272          KO       0        0     0.0       1      22
273          BA  1.9794
274          LG    0.35     0.36   5.043   0.256     0.0
             * E2
275          UI     0.0    148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
276          UI  1318.3   1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
277          UI  199.81   156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
278          UI   36.05    36.05   36.05   36.05

279          KK     E3R    CNAME    E2-E3
280          KO       0        0     0.0       0      22
281          RC       2    2.935

282          KK   E2-E3    CNAME     E3R
283          KO       0        0     0.0       0      22
284          RS       8     FLOW     0.0     0.0
285          RC   0.052    0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
286          RX     0.0    133.0   173.0   213.0   223.0   263.0   303.0   403.0
287          RY    22.0     17.0    14.0    10.0    10.0    15.0    18.0    22.0

288          KK      E3
289          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
290          KM   L=3.87      Lca=1.99     S=49.65      Kn=0.050      LAG=75.0
291          KM   S-GRAPH TYPE=DESERT RANGELAND
292          KO       0        0     0.0       1      22
293          BA  2.4882
294          LG    0.35     0.35   4.358   0.347     0.0
             * E3
295          UI     0.0    111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
296          UI  924.52    981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
297          UI  671.88   595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
298          UI  210.58   188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
299          UI   76.46    75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
300          UI   27.19    27.19   27.19   27.19   27.19   27.19

301          KK    E4RA    CNAME    E3-E4
302          KO       0        0     0.0       0      22
303          RC       2    5.423

304          KK   E3-E4    CNAME    E4RA
305          KO       0        0     0.0       0      22
306          RS      13     FLOW     0.0     0.0
307          RC   0.056    0.049   0.056 13855.0  0.0048     0.0
             * E3-E4
308          RX     0.0    570.0   650.0   690.0   705.0   735.0   810.0  1200.0
309          RY    21.0     14.0    13.0    10.0    10.0    12.5    14.5    21.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

310          KK      H2
311          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
312          KM   L=4.41      Lca=2.60     S=44.71      Kn=0.050      LAG=89.0
313          KM   S-GRAPH TYPE=DESERT RANGELAND
314          KO       0        0     0.0       1      22
315          BA  1.4003
316          LG    0.35     0.35   3.222   0.664     0.0
             * H2
317          UI     0.0    52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
318          UI  365.43   394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
319          UI  456.78   413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
320          UI  169.48   155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
321          UI   56.15    56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
322          UI   12.89    12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
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 323          UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

 324          KK      E4
 325          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 326          KM   L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
 327          KM   S-GRAPH TYPE=DESERT RANGELAND
 328          KO       0       0     0.0       1      22
 329          BA  3.0419
 330          LG    0.35    0.35   3.816   0.439     0.0
              * E4
 331          UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
 332          UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
 333          UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
 334          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
 335          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
 336          UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
 337          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
 338          UI   24.44   24.44   24.44   24.44   24.44   24.44

 339          KK     E5R   CNAME  E4H2E5
 340          KO       0       0     0.0       0      22
 341          RC       5  16.979

 342          KK  E4H2E5   CNAME     E5R
 343          KO       0       0     0.0       0      22
 344          RS      13    FLOW     0.0     0.0
 345          RC    0.06    0.05    0.06 15206.0  0.0081     0.0
              * E4H2-E5
 346          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
 347          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

 348          KK      K3
 349          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 350          KM   L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
 351          KM   S-GRAPH TYPE=DESERT RANGELAND
 352          KO       0       0     0.0       1      22
 353          BA  1.6364
 354          LG    0.35    0.35   3.421   0.382     0.0
              * K3
 355          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 356          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
 357          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
 358          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
 359          UI   89.07   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
 360          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
 361          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

 362          KK      E5
 363          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 364          KM   L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
 365          KM   S-GRAPH TYPE=DESERT RANGELAND
 366          KO       0       0     0.0       1      22
 367          BA  1.3075
 368          LG   0.347   0.344    3.94   0.429   0.968
              * E5
 369          UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
 370          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
 371          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
 372          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
 373          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

 374          KK     E6R   CNAME  E5K2E6
 375          KO       0       0     0.0       0      22
 376          RC       5  29.203

 377          KK  E5K2E6   CNAME     E6R
 378          KO       0       0     0.0       0      22
 379          RS       5    FLOW     0.0     0.0
 380          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
              * E5K3-E6
 381          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
 382          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

 383          KK      E6
 384          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 385          KM   L=3.04      Lca=1.06      S=34.17      Kn=0.050      LAG=57.0
 386          KM   S-GRAPH TYPE=DESERT RANGELAND
 387          KO       0       0     0.0       1      22
 388          BA  2.0375
 389          LG   0.343   0.336   4.356   0.367   0.711
              * E6
 390          UI     0.0  120.35  120.35  205.65  403.41  574.78  733.18  874.37 1018.75 1083.35
 391          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.3   487.2  412.36
 392          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
 393          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
 394          UI   29.29   29.29     0.0

 395          KK       E   CNAME     ECP
 396          KO       0       0     0.0       0      22
 397          RC       2  31.241
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          KK     ECP   CNAME       E
 399          KO       0       0     0.0       0      22
 400          RN     ECP
 401          ZZ
```

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	G1	974.	12.58	164.	41.	14.	1.12
+	ROUTED TO	GCF	974.	12.58	164.	41.	14.	1.12
+	HYDROGRAPH AT	J1	778.	13.08	198.	49.	16.	1.73
+	ROUTED TO	J1-J2	601.	15.17	196.	49.	16.	1.73
+	HYDROGRAPH AT	J2	1460.	13.33	458.	115.	38.	3.64
+	2 COMBINED AT	K3RB	1454.	13.33	644.	163.	54.	5.37
+	ROUTED TO	J2-K3	1433.	13.58	643.	163.	54.	5.37
+	HYDROGRAPH AT	K1	1648.	12.50	293.	84.	28.	1.54
+	ROUTED TO	K1-K2	976.	13.83	291.	84.	28.	1.54
+	HYDROGRAPH AT	K2	828.	13.67	327.	84.	28.	2.37
+	2 COMBINED AT	K3RA	1772.	13.83	609.	167.	56.	3.91
+	ROUTED TO	K2-K3	1482.	15.25	602.	167.	56.	3.91
+	HYDROGRAPH AT	F1	2502.	12.58	468.	131.	44.	2.79
+	ROUTED TO	F1-F2	2347.	12.75	467.	131.	44.	2.79
+	HYDROGRAPH AT	F2	1773.	12.75	356.	92.	31.	2.53
+	2 COMBINED AT	F3R	4087.	12.75	816.	220.	74.	5.31
+	ROUTED TO	F2-F3	3682.	13.00	816.	220.	74.	5.31
+	HYDROGRAPH AT	F3	457.	12.75	85.	21.	7.	0.74
+	2 COMBINED AT	E4RB	4032.	13.00	897.	241.	80.	6.05
+	ROUTED TO	F3-E4	3070.	14.50	893.	240.	80.	6.05
+	HYDROGRAPH AT	H1	580.	12.75	101.	25.	8.	1.07
+	ROUTED TO	H1-H2	380.	14.25	99.	25.	8.	1.07
+	HYDROGRAPH AT	E1	924.	12.50	149.	37.	12.	0.96
+	ROUTED TO	E1-E2	809.	12.83	149.	37.	12.	0.96
+	HYDROGRAPH AT	E2	1830.	12.58	296.	74.	25.	1.98
+	2 COMBINED AT	E3R	2415.	12.67	442.	111.	37.	2.93
+	ROUTED TO	E2-E3	2032.	13.33	439.	111.	37.	2.93
+	HYDROGRAPH AT	E3	1349.	13.00	346.	86.	29.	2.49
+	2 COMBINED AT	E4RA	3194.	13.25	775.	195.	65.	5.42
+	ROUTED TO	E3-E4	2668.	14.25	768.	195.	65.	5.42
+	HYDROGRAPH AT	H2	533.	13.25	159.	40.	13.	1.40
+	HYDROGRAPH AT	E4	1156.	13.42	394.	99.	33.	3.04
+	5 COMBINED AT	E5R	6338.	14.42	2160.	568.	190.	16.98
+	ROUTED TO	E4H2E5	5729.	15.50	2153.	568.	190.	16.98
+	HYDROGRAPH AT	K3	619.	13.33	195.	49.	16.	1.64
+	HYDROGRAPH AT	E5	767.	12.92	175.	44.	15.	1.32
+	5 COMBINED AT	E6R	7568.	15.50	3435.	926.	309.	29.20
+	ROUTED TO	E5K2E6	7408.	15.83	3419.	926.	309.	29.20

```
        HYDROGRAPH AT
+                       E6     1419.  12.75        283.        71.        24.      2.04

        2 COMBINED AT
+                        E     7408.  15.83       3592.       990.       331.     31.24

        ROUTED TO
+                       ECP    7364.  15.83       3572.       984.       329.     31.24


 *** NORMAL END OF HEC-1 ***
1****************************************                                  ****************************************
 *                                      *                                  *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                  *   U.S. ARMY CORPS OF ENGINEERS       *
 *             MAY   1991               *                                  *   HYDROLOGIC ENGINEERING CENTER      *
 *           VERSION 4.0.1E             *                                  *         609 SECOND STREET            *
 *                                      *                                  *      DAVIS, CALIFORNIA 95616         *
 *  RUN DATE            TIME            *                                  *         (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

                                        HEC-1 INPUT                                                    PAGE  1

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

   1          ID   Buckeye/Sun Valley ADMS - 01 March 2004
   2          ID   PBSJ - Modelers: Jacob Lesue & Wen Chen
   3          ID   200-year 24-hour
   4          ID   Existing Conditions
   5          ID   FRS #1 (Sub-basins L-R)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - FCDMC GIS Data: maq_landuse (2000)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       3
  14          IN      15 01JAN94       0
  15          JD    4.63    0.01
              * 24-hour distribution
  16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  26          IN      15 01JAN94       0
  27          JD   4.398    10.0
              * 24-hour distribution
  28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  38          IN      15 01JAN94       0
  39          JD   4.25    20.0
              * 24-hour distribution
  40          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  41          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  42          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  43          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  44          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  45          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  46          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  47          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  48          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  49          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  50          IN      15 01JAN94       0
  51          JD   4.107    40.0
              * 24-hour distribution

                                        HEC-1 INPUT                                                    PAGE  2

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

  52          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  53          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
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 54          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62          IN      15 01JAN94       0
 63          JD   3.968    80.0
             * 24-hour distribution
 64          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      R1
 75          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM   L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
 77          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 78          KO       0       0     0.0       1      22
 79          BA  0.2836
 80          LG    0.35    0.35   4.358   0.374   8.387
             * R1
 81          UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
 82          UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

 83          KK     RCP    CNAME       R
 84          KO       0       0     0.0       0      22
 85          RN     RCP

 86          KK      L1
 87          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 88          KM   L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
 89          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 90          KO       0       0     0.0       1      22
 91          BA  3.5462
 92          LG   0.271   0.318   4.357   0.352  16.317
             * L1
 93          UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
 94          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
 95          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
 96          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
 97          UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
 98          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 99          KK   L1-L2    CNAME     L2R
100          KO       0       0     0.0       0      22
101          RS      10    FLOW     0.0     0.0
102          RC   0.046   0.045   0.046 28949.0  0.0147     0.0
             * L1-L2
103          RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
104          RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

105          KK      L2
106          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
107          KM   L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
108          KM   S-GRAPH TYPE=DESERT RANGELAND
109          KO       0       0     0.0       1      22
110          BA  7.3294
111          LG    0.35    0.35   4.202   0.399     0.0
             * L2
112          UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
113          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
114          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
115          UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
116          UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
117          UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
118          UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

119          KK     L3R    CNAME   L2-L3
120          KO       0       0     0.0       0      22
121          NC       2     0.0

122          KK   L2-L3    CNAME     L3R
123          KO       0       0     0.0       0      22
124          RS      17    FLOW     0.0     0.0
125          RC    0.05   0.045    0.06 20567.0  0.0084     0.0
             * L2-L3
126          RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
127          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

128          KK      L3
129          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
130          KM   L=4.75      Lca=2.00      S=44.27      Kn=0.055      LAG=91.0
131          KM   S-GRAPH TYPE=DESERT RANGELAND
132          KO       0       0     0.0       1      22
133          BA  5.8518
134          LG   0.341   0.328    3.98   0.419    1.05
             * L3
135          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
136          UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
137          UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
138          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
139          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
140          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
141          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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142          KK       L   CNAME     LCP
143          KO       0       0     0.0       0      22
144          KC       2     0.0

145          KK     LCP   CNAME       L
146          KO       0       0     0.0       0      22
147          RM     LCP

148          KK      Z1
149          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
150          KM   L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
151          KM   S-GRAPH TYPE=DESERT RANGELAND
152          KO       0       0     0.0       1      22
153          BA  0.6644
154          LG   0.321   0.292   4.004    0.43   2.909
             * Z1
155          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.18   540.9  493.68
156          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
157          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

158          KK     ZCP   CNAME       Z
159          KO       0       0     0.0       0      22
160          RM     ZCP

161          KK      M1
162          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
163          KM   L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
164          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
165          KO       0       0     0.0       1      22
166          BA  5.5949
167          LG    0.35    0.35   4.306   0.347  17.122
             * M1
168          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
169          UI  4005.2 2791.27  2249.2 1997.59 1649.54 1685.71 1552.54 1393.19 1268.31 1104.08
170          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
171          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
172          UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
173          UI   64.47   64.47     0.0

174          KK   M1-M2   CNAME     M2R
175          KO       0       0     0.0       0      22
176          RS      26    FLOW     0.0     0.0
177          RC    0.04    0.04   0.045 38719.0  0.0133     0.0
             * M1-M2
178          RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
179          RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

180          KK      M2
181          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
182          KM   L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
183          KM   S-GRAPH TYPE=DESERT RANGELAND
184          KO       0       0     0.0       1      22
185          BA  7.5274
186          LG    0.35    0.35   3.952   0.446   0.287
             * M2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

187          UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
188          UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
189          UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
190          UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
191          UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
192          UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
193          UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
194          UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

195          KK       M   CNAME     MCP
196          KO       0       0     0.0       0      22
197          KC       2     0.0

198          KK     MCP   CNAME       M
199          KO       0       0     0.0       0      22
200          RM     MCP

201          KK      O1
202          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
203          KM   L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=160.0
204          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
205          KO       0       0     0.0       1      22
206          BA  3.0803
207          LG    0.35    0.35   4.189   0.393   2.105
             * O1
208          UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
209          UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
210          UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
211          UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
212          UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
213          UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
214          UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
215          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
216          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
217          UI   19.93   19.93   19.93     0.0

218          KK     OCP   CNAME       O
219          KO       0       0     0.0       0      22
220          RM     OCP

221          KK      N1
222          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
223          KM   L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
224          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
225          KO       0       0     0.0       1      22
226          BA   1.524
227          LG    0.35    0.35   4.075   0.419   8.38
             * N1
228          UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
229          UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
230          UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
231          UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 232          KK   N1-N2   CNAME     N2R
 233          KO       0       0     0.0       0      22
 234          RS      21    FLOW     0.0     0.0
 235          RC    0.05   0.047    0.05 26511.0  0.0115     0.0
              * N1-N2
 236          RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
 237          RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

 238          KK      N2
 239          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 240          KM   L=5.64      Lca=3.27      S=170.14      Kn=0.055      LAG=91.0
 241          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 242          KO       0       0     0.0       1      22
 243          BA  3.3254
 244          LG    0.35    0.35   4.117   0.405    2.67
              * N2
 245          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
 246          UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
 247          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
 248          UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
 249          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
 250          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
 251          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
 252          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
 253          UI   23.58   23.58   23.58   23.58   23.58

 254          KK       N   CNAME     NCP
 255          KO       0       0     0.0       0      22
 256          RC       2     0.0

 257          KK     NCP   CNAME       N
 258          KO       0       0     0.0       0      22
 259          RN     NCP

 260          KK      P1
 261          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 262          KM   L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
 263          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 264          KO       0       0     0.0       1      22
 265          BA  2.4365
 266          LG    0.35    0.35   4.193   0.396   6.712
              * P1
 267          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
 268          UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
 269          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
 270          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
 271          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
 272          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
 273          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
 274          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 275          KK     PCP   CNAME       P
 276          KO       0       0     0.0       0      22
 277          RN     PCP

 278          KK      Q1
 279          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 280          KM   L=5.23      Lca=2.81      S=228.56      Kn=0.055      LAG=78.0
 281          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 282          KO       0       0     0.0       1      22
 283          BA  2.2336
 284          LG    0.35    0.35   4.203    0.39  12.313
              * Q1
 285          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
 286          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
 287          UI  505.03  473.57  449.52  412.98  388.87  360.82  325.28  298.43  254.89  242.17
 288          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
 289          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
 290          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
 291          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
 292          UI   18.48   18.48   18.48

 293          KK     QCP   CNAME       Q
 294          KO       0       0     0.0       0      22
 295          RN     QCP
 296          ZZ
```

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	R1	450.	12.25	44.	12.	4.	0.28		
+	ROUTED TO	RCP	450.	12.25	44.	12.	4.	0.28		
+	HYDROGRAPH AT	L1	2640.	12.75	616.	174.	58.	3.55		
+	ROUTED TO	L1-L2	2143.	13.50	613.	174.	58.	3.55		
+	HYDROGRAPH AT	L2	3155.	13.25	957.	239.	80.	7.33		
+	2 COMBINED AT	L3R	5027.	13.42	1545.	408.	136.	10.88		
	ROUTED TO									

```
+                    L2-L3    4256.  14.75     1514.     407.     136.    10.88
        HYDROGRAPH AT
+                      L3    2533.  13.25      783.     198.      66.     5.85
        2 COMBINED AT
+                       L    4669.  14.75     2116.     583.     195.    16.73
        ROUTED TO
+                     LCP    4669.  14.75     2116.     583.     195.    16.73
        HYDROGRAPH AT
+                      E1     656.  12.50       95.      24.       8.     0.66
        ROUTED TO
+                     ECP     656.  12.50       95.      24.       8.     0.66
        HYDROGRAPH AT
+                      M1    4335.  12.67      959.     273.      91.     5.59
        ROUTED TO
+                   M1-M2    2991.  14.75      955.     271.      91.     5.59
        HYDROGRAPH AT
+                      M2    2769.  13.42      954.     241.      80.     7.53
        2 COMBINED AT
+                       M    3960.  14.58     1843.     499.     167.    13.12
        ROUTED TO
+                     MCP    3960.  14.58     1843.     499.     167.    13.12
        HYDROGRAPH AT
+                      O1    1373.  13.33      415.     108.      36.     3.09
        ROUTED TO
+                     OCP    1373.  13.33      415.     108.      36.     3.09
        HYDROGRAPH AT
+                      N1    1421.  12.50      227.      61.      20.     1.52
        ROUTED TO
+                   N1-N2     900.  14.17      227.      61.      20.     1.52
        HYDROGRAPH AT
+                      N2    1574.  13.17      450.     117.      39.     3.33
        2 COMBINED AT
+                       N    1620.  13.25      671.     176.      59.     4.85
        ROUTED TO
+                     NCP    1620.  13.25      671.     176.      59.     4.85
        HYDROGRAPH AT
+                      P1    1262.  13.08      353.      95.      32.     2.44
        ROUTED TO
+                     PCP    1262.  13.08      353.      95.      32.     2.44
        HYDROGRAPH AT
+                      Q1    1299.  13.00      352.      98.      33.     2.23
        ROUTED TO
+                     QCP    1299.  13.00      352.      98.      33.     2.23

 *** NORMAL END OF HEC-1 ***
1****************************************                    ****************************************
 *                                      *                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS       *
 *             MAY  1991                *                    *   HYDROLOGIC ENGINEERING CENTER      *
 *           VERSION 4.0.1E             *                    *          609 SECOND STREET           *
 *                                      *                    *       DAVIS, CALIFORNIA 95616        *
 *  RUN DATE            TIME            *                    *          (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 HEC1KN.

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   Buckeye/Sun Valley ADMS - 1 March 2004
    2          ID   PBS&J - Modelers: Jacob Lesue & Wan Chen
    3          ID   200-year 24-hour
    4          ID   Existing Conditions
    5          ID   FRS #2 (Sub-basins S-U)
    6          ID   Rainfall Loss Method - Green & Ampt
    7          ID   Unit Hydrograph Method - FCDMC S-Graph
    8          ID   Channel Routing Method - Normal Depth
```

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 9          ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       3
14          IN      15 01JAN94       0
15          JD    4.61    0.01
            * 24-hour distribution
16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
26          IN      15 01JAN94       0
27          JD    4.38    10.0
            * 24-hour distribution
28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

38          KK      S1
39          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
40          KM   L=2.32    Lca=0.52    S=143.99     Kn=0.050     LAG=29.0
41          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
42          KO       0        0     0.0        1       22
43          BA   1.4105
44          LG    0.35     0.35   4.484   0.352   6.918
            * S1
45          UI     0.0   163.76   399.96   863.78 1191.38 1674.04 1389.89   974.39   824.12   687.96
46          UI   554.64   420.01   366.82   290.75   215.71    183.9   145.46   125.55    85.13    80.14
47          UI    72.14    31.39    31.39    31.39    31.39    31.39    31.39      0.0
```



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

48          KK     SCP    CNAME       S
49          KO       0        0     0.0        0       22
50          RN     SCP

51          KK      U1
52          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
53          KM   L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
54          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
55          KO       0        0     0.0        1       22
56          BA   1.3705
57          LG    0.35     0.37   5.258   0.233   6.449
            * U1
58          UI     0.0   139.83    266.2   626.33   919.49 1139.88 1569.26 1014.69   819.13   707.21
59          UI   603.81   505.84   395.99   334.05   299.65   225.43   178.67    155.8   129.72    107.2
60          UI   86.65    68.43    68.43    50.61     26.8     26.8     26.8     26.8     26.8     26.8
61          UI    26.8      0.0

62          KK     UCP    CNAME       U
63          KO       0        0     0.0        0       22
64          RN     UCP

65          KK      T1
66          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
67          KM   L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
68          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
69          KO       0        0     0.0        1       22
70          BA   3.0415
71          LG    0.35     0.35   4.644   0.299  11.497
            * T1
72          UI     0.0    200.8    200.8   447.02   773.33 1107.71 1336.75 1525.87 1807.83 2359.26
73          UI  1728.6 1338.29 1184.68 1081.59   978.95   886.26   793.63   697.43   590.13   511.99
74          UI  476.04   440.92   386.02   329.88   260.38   252.47   219.92   219.92   155.92   153.94
75          UI  153.94   103.27    98.26    98.26    98.26    91.33    38.49    38.49    38.49    38.49
76          UI   38.49    38.49    38.49    38.49    38.49    38.49    38.49    38.49

77          KK     TCP    CNAME       T
78          KO       0        0     0.0        0       22
79          RN     TCP
80          ZZ
```

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	S1	1703.	12.33	213.	57.	19.	1.41		
+	ROUTED TO	SCP	1703.	12.33	213.	57.	19.	1.41		
+	HYDROGRAPH AT	U1	1598.	12.42	224.	59.	20.	1.37		
+	ROUTED TO	UCP	1598.	12.42	224.	59.	20.	1.37		
+	HYDROGRAPH AT	T1	2532.	12.67	504.	138.	46.	3.04		

```
        ROUTED TO
+                          TCP      2532.   12.67        504.        138.        46.       3.04


 *** NORMAL END OF HEC-1 ***
1*************************************                                                  *************************************
*                                   *                                                  *                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                                                  *  U.S. ARMY CORPS OF ENGINEERS     *
*            MAY  1991              *                                                  *  HYDROLOGIC ENGINEERING CENTER    *
*          VERSION 4.0.1E           *                                                  *        609 SECOND STREET          *
*                                   *                                                  *     DAVIS, CALIFORNIA 95616       *
* RUN DATE            TIME          *                                                  *        (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

                                                  HEC-1 INPUT                                                    PAGE  1

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

   1          ID   Buckeye/Sun Valley ADMS - 01 March 2004
   2          ID   PBS&J - Modeler: Jacob Lesue & Wan Chen
   3          ID   200-year 24-hour
   4          ID   Existing Conditions
   5          ID   FRS #3 (Sub-basins V-Y)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       3
  14          IN      15 01JAN94       0
  15          JD    4.62    0.01
              * 24-hour distribution
  16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  26          IN      15 01JAN94       0
  27          JD   4.389    10.0
              * 24-hour distribution
  28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

  38          KK      V1
  39          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  40          KM   L=2.86     Lca=1.75     S=344.62     Kn=0.050     LAG=43.0
  41          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
  42          KO       0       0     0.0       1      22
  43          BA  0.6646
  44          LG    0.35    0.35   3.972   0.405  13.864
              * V1
  45          UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
  46          UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
  47          UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
  48          UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
  49          UI     0.0

                                                  HEC-1 INPUT                                                    PAGE  2

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


  50          KK     VCP   CNAME       V
  51          KO       0       0     0.0       0      22
  52          RM     VCP

  53          KK      W1
  54          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  55          KM   L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
  56          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
  57          KO       0       0     0.0       1      22
  58          BA   3.894
```

```
 59          LG    0.35    0.35   3.976    0.41  15.199
             * W1
 60          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 61          UI  1844.7 1658.52 1479.19 1314.63 1166.02  980.71   816.4  720.69   665.9  577.11
 62          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
 63          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 64          UI   57.11     0.0

 65          KK   W1-W2   CNAME     W2R
 66          KO       0       0     0.0       0      22
 67          RS       6    FLOW     0.0     0.0
 68          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
             * W1-W2
 69          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 70          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 71          KK      W2
 72          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 73          KM   L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
 74          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 75          KO       0       0     0.0       1      22
 76          BA  2.8478
 77          LG    0.35    0.35   4.081   0.402   3.547
             * W2
 78          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 79          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 80          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
 81          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 82          UI   41.77     0.0

 83          KK       W   CNAME     WCP
 84          KO       0       0     0.0       0      22
 85          RC       2     0.0

 86          KK     WCP   CNAME       W
 87          KO       0       0     0.0       0      22
 88          RN     WCP

 89          KK      X1
 90          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM   L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
 92          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 93          KO       0       0     0.0       1      22
 94          BA  0.7867
```



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

 95          LG    0.35    0.35   3.955   0.417  12.555
             * X1
 96          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
 97          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
 98          UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
 99          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

100          KK     XCP   CNAME       X
101          KO       0       0     0.0       0      22
102          RN     XCP

103          KK      Y1
104          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM   L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
106          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
107          KO       0       0     0.0       1      22
108          BA  0.5808
109          LG    0.35    0.35   4.044   0.415  10.947
             * Y1
110          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
111          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

112          KK     YCP   CNAME       Y
113          KO       0       0     0.0       0      22
114          RN     YCP
115          ZZ
```

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	V1	617.	12.50	108.	30.	10.	0.66		
+	ROUTED TO	VCP	617.	12.50	108.	30.	10.	0.66		
+	HYDROGRAPH AT	W1	3489.	12.50	632.	178.	60.	3.89		
+	ROUTED TO	W1-W2	3062.	12.92	631.	178.	60.	3.89		
+	HYDROGRAPH AT	W2	2419.	12.50	397.	103.	34.	2.85		
+	2 COMBINED AT	W	4424.	12.83	1019.	278.	93.	6.74		
+	ROUTED TO	WCP	4424.	12.83	1019.	278.	93.	6.74		
+	HYDROGRAPH AT	X1	755.	12.50	125.	35.	12.	0.79		
+	ROUTED TO	XCP	755.	12.50	125.	35.	12.	0.79		
+	HYDROGRAPH AT	Y1	979.	12.17	90.	25.	8.	0.58		

```
        ROUTED TO
+                          YCP       979.   12.17          90.         25.         8.       0.58


*** NORMAL END OF HEC-1 ***
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E.6.5.bHEC-1 Output File for 200-Year 24-Hour (Future Conditions)

```
1*************************************                                    *************************************
*                                   *                                    *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                                    *   U.S. ARMY CORPS OF ENGINEERS    *
*          MAY  1991                *                                    *   HYDROLOGIC ENGINEERING CENTER   *
*        VERSION 4.0.1E             *                                    *        609 SECOND STREET          *
*                                   *                                    *      DAVIS, CALIFORNIA 95616      *
* RUN DATE          TIME            *                                    *        (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 HEC1KM.

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   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   200-year 24-hour
  4           ID   Future Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU District (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    4.63    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   4.399    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   4.25    20.0
              * 24-hour distribution
 40           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 50           IN      15 01JAN94       0
 51           JD   4.107    40.0
              * 24-hour distribution

                                                HEC-1 INPUT                                                    PAGE  2

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 52          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62          IN      15 01JAN94       0
 63          JD   3.968    80.0
             * 24-hour distribution
 64          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      G1
 75          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM          L=2.38     Lca=1.08     S=33.76     Kn=0.045     LAG=47.0
 77          KM          S-GRAPH TYPE=DESERT RANGELAND
 78          KO       0       0     0.0       1      22
 79          BA  1.1192
 80          LG   0.297   0.297   4.688   0.326  15.814
             * G1
 81          UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 82          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 83          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 84          UI   19.51   19.51   19.51   19.51   19.51     0.0

 85          KK   G1-Do
 86          KO       0       0     0.0       0      22
 87          DT    G1-D    47.0     0.0
             * Curve 1
 88          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 89          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 90          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 91          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 92          KK     GCP    CNAME       G
 93          KO       0       0     0.0       0      22
 94          RN     GCP
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 95          KK      J1
 96          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 97          KM          L=4.09     Lca=1.78     S=70.82     Kn=0.055     LAG=75.0
 98          KM          S-GRAPH TYPE=DESERT RANGELAND
 99          KO       0       0     0.0       1      22
100          BA  1.7341
101          LG    0.25    0.27    3.25   0.657    30.0
             * J1
102          UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
103          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
104          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
105          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
106          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
107          UI   18.95   18.95   18.95   18.95   18.95   18.95

108          KK   J1-Do
109          KO       0       0     0.0       0      22
110          DT    J1-D   102.0     0.0
             * Curve 1
111          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
112          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
113          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
114          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

115          KK   J1-J2    CNAME     J2R
116          KO       0       0     0.0       0      22
117          RS      35    FLOW     0.0     0.0
118          RC   0.055    0.04   0.055 24090.0  0.0086     0.0
             * J1-J2
119          RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
120          RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

121          KK      J2
122          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
123          KM          L=5.18     Lca=2.51     S=45.01     Kn=0.050     LAG=93.0
124          KM          S-GRAPH TYPE=DESERT RANGELAND
125          KO       0       0     0.0       1      22
126          BA  3.6379
127          LG    0.25    0.26   3.623   0.499    30.0
             * J2
128          UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
129          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
130          UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
131          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
132          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
133          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
134          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

135          KK   J2-Do
136          KO       0       0     0.0       0      22
137          DT    J2-D   224.0     0.0
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            * Curve 1
138         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
139         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
140         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
141         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

142         KK    K3RB    CNAME    J2-K3
143         KO       0        0      0.0        0       22
144         HC       2      0.0

145         KK   J2-K3    CNAME     K3RB
146         KO       0        0      0.0        0       22
147         RS       6     FLOW      0.0      0.0
148         RC    0.05    0.048     0.05   4072.0   0.0059      0.0
            * J2-K3
149         RX     0.0    390.0    490.0    502.0    520.0    532.0    632.0   1022.0
150         RY    20.0     14.5     11.5     10.0     10.0     11.5     14.5     20.0

151         KK      K1
152         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
153         KM          L=3.23     Lca=1.84     S=681.00     Kn=0.050     LAG=40.0
154         KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
155         KO       0        0      0.0        1       22
156         BA   1.543
157         LG   0.112    0.235    4.382    0.365    21.06
            * K1
158         UI     0.0   129.88   168.84   442.11   706.31   896.38  1061.91  1457.77  1111.25   821.11
159         UI   726.82   641.11   561.31   488.34   403.67   331.29   304.06   271.41   213.37   169.75
160         UI   154.58   142.25   108.11    99.57    85.17    63.56    63.56    63.56    38.81    24.89
161         UI    24.89    24.89    24.89    24.89    24.89    24.89    24.89      0.0

162         KK   K1-K2    CNAME      K2R
163         KO       0        0      0.0        0       22
164         RS      17     FLOW      0.0      0.0
165         RC    0.048     0.05    0.048  30021.0    0.015      0.0
            * K1-K2
166         RX     0.0     20.0     55.0     85.0    235.0    259.0    289.0    309.0
167         RY    22.0     21.0     20.0     10.0     10.0     20.0     21.0     22.0

168         KK      K2
169         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
170         KM          L=7.3      Lca=4.04     S=108.84     Kn=0.035     LAG=119.0
171         KM          S-GRAPH TYPE=DESERT RANGELAND
172         KO       0        0      0.0        1       22
173         BA   2.365
174         LG   0.272    0.277    4.471    0.382    21.86
            * K2
175         UI     0.0    66.91    66.91    66.91    66.91    66.91   132.91   192.38   234.97   273.87
176         UI   324.09   369.36   410.96   453.67   472.54   532.28   558.99    587.9   605.63   610.31
177         UI   641.26   641.26   641.26   641.26   620.87   601.29   597.45   565.84   516.46   476.06
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

178         UI   460.97   411.12   386.21   359.14   335.65   312.63   290.38   266.75   251.32   236.77
179         UI   209.97    203.8   183.22   181.03   149.42   149.42   135.15   126.15   126.15   109.44
180         UI    102.6    102.6    98.17    70.92    70.92    70.92    70.92    70.92    46.43     45.8
181         UI     45.8     45.8     45.8     45.8     45.8     45.8    16.92    16.29    16.29    16.29
182         UI    16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29
183         UI    16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29      0.0

184         KK   K2-Do
185         KO       0        0      0.0        0       22
186         DT    K2-D    128.0      0.0
            * Curve 1
187         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
188         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
189         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
190         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

191         KK    K3RA    CNAME    K2-K3
192         KO       0        0      0.0        0       22
193         HC       2    1.543

194         KK   K2-K3    CNAME     K3RA
195         KO       0        0      0.0        0       22
196         RS      20     FLOW      0.0      0.0
197         RC    0.05    0.048     0.05  25950.0   0.0084      0.0
            * K2-K3
198         RX     0.0    390.0    490.0    502.0    520.0    532.0    632.0   1022.0
199         RY    20.0     14.5     11.5     10.0     10.0     11.5     14.5     20.0

200         KK      F1
201         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
202         KM          L=4.07     Lca=1.63     S=441.98     Kn=0.050     LAG=46.0
203         KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
204         KO       0        0      0.0        1       22
205         BA  2.7854
206         LG    0.24     0.27    4.322    0.384    32.052
            * F1
207         UI     0.0   203.88   203.88   570.72   906.57  1255.03  1478.42  1724.35  2318.93  1830.17
208         UI  1348.3  1190.57  1067.92   966.08   849.55   752.02    639.8   527.23   486.03   447.26
209         UI   380.98   319.46   260.51   239.96   223.29   181.76    156.3    156.3   107.68    99.77
210         UI    99.77    99.77    67.24    39.08    39.08    39.08    39.08    39.08    39.08    39.08
211         UI    39.08    39.08    39.08      0.0

212         KK   F1-Do
213         KO       0        0      0.0        0       22
214         DT    F1-D    133.0      0.0
            * Curve 1
215         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
216         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
217         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
218         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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219          KK   F1-F2   CNAME     F2R
220          KO       0       0     0.0       0      22
221          RS       5    FLOW     0.0     0.0
222          RC   0.053   0.045   0.055  8635.0   0.012     0.0
             * F1-F2
223          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
224          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

225          KK      F2
226          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
227          KM          L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
228          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
229          KO       0       0     0.0       1      22
230          BA  2.5261
231          LG    0.25    0.25   4.311   0.436  33.026
             * F2
232          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
233          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
234          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
235          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
236          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
237          UI    28.6    28.6    28.6     0.0

238          KK    F2-D
239          KO       0       0     0.0       0      22
240          DT    F2-D   130.0     0.0
             * Curve 1
241          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
242          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
243          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
244          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

245          KK     F3R   CNAME   F2-F3
246          KO       0       0     0.0       0      22
247          HC       2     0.0

248          KK   F2-F3   CNAME     F3R
249          KO       0       0     0.0       0      22
250          RS       5    FLOW     0.0     0.0
251          RC    0.05   0.047   0.048  7059.0    0.01     0.0
             * F2-F3
252          RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
253          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

254          KK      F3
255          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
256          KM          L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
257          KM          S-GRAPH TYPE=DESERT RANGELAND
258          KO       0       0     0.0       1      22
259          BA  0.7363
260          LG    0.25    0.27   3.266   0.656    30.0
             * F3
261          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

262          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
263          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
264          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
265          UI     0.0

266          KK    F3-Do
267          KO       0       0     0.0       0      22
268          DT    F3-D    45.0     0.0
             * Curve 1
269          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
270          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
271          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
272          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

273          KK    E4RB   CNAME   F3-E4
274          KO       0       0     0.0       0      22
275          HC       2     0.0

276          KK   F3-E4   CNAME    E4RB
277          KO       0       0     0.0       0      22
278          RS      21    FLOW     0.0     0.0
279          RC    0.05   0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
280          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
281          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

282          KK      H1
283          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
284          KM          L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
285          KM          S-GRAPH TYPE=DESERT RANGELAND
286          KO       0       0     0.0       1      22
287          BA  1.0659
288          LG    0.25    0.29   2.733   0.945    30.0
             * H1
289          UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
290          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
291          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
292          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

293          KK    H1-Do
294          KO       0       0     0.0       0      22
295          DT    H1-D    60.0     0.0
             * Curve 1
296          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
297          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
298          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
299          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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300          KK   H1-H2   CNAME     H2R
301          KO       0       0     0.0       0      22
302          RS      27    FLOW     0.0     0.0
303          RC   0.053    0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
304          RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
305          RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

306          KK      E1
307          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
308          KM          L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
309          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
310          KO       0       0     0.0       1      22
311          BA  0.9558
312          LG    0.25    0.25   5.377   0.273   30.69
             * E1
313          UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
314          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
315          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
316          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
317          DI     0.0

318          KK   E1-Do
319          KO       0       0     0.0       0      22
320          DT    E1-D    53.0     0.0
             * Curve 1
321          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
322          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
323          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
324          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

325          KK   E1-E2   CNAME     E2R
326          KO       0       0     0.0       0      22
327          RS       9    FLOW     0.0     0.0
328          RC    0.05   0.047   0.046 11365.0   0.016     0.0
             * E1-E2
329          RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
330          RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

331          KK      E2
332          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
333          KM          L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
334          KM          S-GRAPH TYPE=DESERT RANGELAND
335          KO       0       0     0.0       1      22
336          BA  1.9794
337          LG    0.25    0.25   5.043   0.306    30.0
             * E2
338          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
339          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
340          UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
341          UI   36.05   36.05   36.05   36.05
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

342          KK   E2-Do
343          KO       0       0     0.0       0      22
344          DT    E2-D   118.0     0.0
             * Curve 1
345          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
346          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
347          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
348          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

349          KK     E3R   CNAME   E2-E3
350          KO       0       0     0.0       0      22
351          RC       2     0.0

352          KK   E2-E3   CNAME     E3R
353          KO       0       0     0.0       0      22
354          RS      13    FLOW     0.0     0.0
355          RC   0.052   0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
356          RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
357          RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

358          KK      E3
359          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
360          KM          L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
361          KM          S-GRAPH TYPE=DESERT RANGELAND
362          KO       0       0     0.0       1      22
363          BA  2.4882
364          LG    0.25    0.25   4.358   0.377    30.0
             * E3
365          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
366          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
367          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
368          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
369          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
370          UI   27.19   27.19   27.19   27.19   27.19   27.19

371          KK   E3-Do
372          KO       0       0     0.0       0      22
373          DT    E3-D   152.0     0.0
             * Curve 1
374          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
375          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
376          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
377          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

378          KK    E4RA   CNAME   E3-E4
379          KO       0       0     0.0       0      22
380          RC       2     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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381        KK   E3-E4    CNAME    E4RA
382        KO       0        0     0.0       0      22
383        RS      14     FLOW     0.0     0.0
384        RC   0.056    0.049   0.056 13855.0  0.0048     0.0
           * E3-E4
385        RX     0.0    570.0   650.0   690.0   705.0   735.0   810.0  1200.0
386        RY    21.0     14.0    13.0    10.0    10.0    12.5    14.5    21.0

387        KK      H2
388        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
389        KM          L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
390        KM          S-GRAPH TYPE=DESERT RANGELAND
391        KO       0        0     0.0       1      22
392        BA  1.4003
393        LG    0.25     0.27   3.222   0.664    30.0
           * H2
394        UI     0.0    52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
395        UI  365.43   394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
396        UI  456.78   413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
397        UI  169.48   155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
398        UI   56.15    56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
399        UI   12.89    12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
400        UI   12.89    12.89   12.89   12.89   12.89   12.89     0.0

401        KK   H2-Do
402        KO       0        0     0.0       0      22
403        DT    H2-D     88.0     0.0
           * Curve 1
404        DI     0.0   2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
405        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
406        DQ     0.0   2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
407        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

408        KK      E4
409        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
410        KM          L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
411        KM          S-GRAPH TYPE=DESERT RANGELAND
412        KO       0        0     0.0       1      22
413        BA  3.0419
414        LG    0.25     0.25   3.816   0.441    30.0
           * E4
415        UI     0.0   100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
416        UI   586.7   661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
417        UI  958.04   920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
418        UI  469.44   435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
419        UI   189.3    189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
420        UI   68.73    68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
421        UI   24.44    24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
422        UI   24.44    24.44   24.44   24.44   24.44   24.44
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

423        KK   E4-Do
424        KO       0        0     0.0       0      22
425        DT    E4-D    190.0     0.0
           * Curve 1
426        DI     0.0   2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
427        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
428        DQ     0.0   2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
429        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

430        KK     E5R    CNAME   E4R2E5
431        KO       0        0     0.0       0      22
432        RC       5      0.0

433        KK  E4R2E5    CNAME     E5R
434        KO       0        0     0.0       0      22
435        RS      15     FLOW     0.0     0.0
436        RC    0.06     0.05    0.06 15206.0  0.0051     0.0
           * E4R2-E5
437        RX     0.0   1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
438        RY    27.0     16.0    15.0    10.0    10.0    14.0    16.0    27.0

439        KK      K3
440        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
441        KM          L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
442        KM          S-GRAPH TYPE=DESERT RANGELAND
443        KO       0        0     0.0       1      22
444        BA  1.6364
445        LG    0.25     0.27   3.421     0.6    30.0
           * K3
446        UI     0.0    58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
447        UI  374.73   416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
448        UI  529.11   508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
449        UI  222.25   205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
450        UI   89.87    88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
451        UI   40.12    40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
452        UI   14.27    14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

453        KK   K3-Do
454        KO       0        0     0.0       0      22
455        DT    K3-D    101.0     0.0
           * Curve 1
456        DI     0.0   2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
457        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
458        DQ     0.0   2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
459        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

460        KK      E5
461        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
462        KM          L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
463        KM          S-GRAPH TYPE=DESERT RANGELAND
464        KO       0        0     0.0       1      22
465        BA  1.3075
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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466          LG    0.25    0.25    3.94   0.473    30.0
             * E5
467          UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
468          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
469          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
470          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
471          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

472          KK   E5-Do
473          KO       0       0     0.0       0      22
474          DT    E5-D    79.0     0.0
             * Curve 1
475          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
476          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
477          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
478          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

479          KK     E6R   CNAME  E5K2E6
480          KO       0       0     0.0       0      22
481          RC       5   1.543

482          KK  E5K2E6   CNAME     E6R
483          KO       0       0     0.0       0      22
484          RS       3    FLOW     0.0     0.0
485          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
             * E5K3-E6
486          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
487          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

488          KK      E6
489          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
490          KM          L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
491          KM          S-GRAPH TYPE=DESERT RANGELAND
492          KO       0       0     0.0       1      22
493          BA  2.0375
494          LG   0.289   0.289   4.356   0.392  18.293
             * E6
495          UI     0.0  120.35  120.35  208.65  403.41  574.76  733.18  874.37 1018.75 1083.35
496          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
497          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
498          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
499          UI   29.29   29.29     0.0

500          KK   E6-Do
501          KO       0       0     0.0       0      22
502          DT    E6-D   100.0     0.0
             * Curve 1
503          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
504          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
505          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
506          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
```



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

507          KK       E   CNAME     ECP
508          KO       0       0     0.0       0      22
509          HC       2   1.543

510          KK     ECP   CNAME       E
511          KO       0       0     0.0       0      22
512          RN     ECP
513          ZZ
```

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	G1	1050.	12.58	199.	56.	19.	1.12		
+	DIVERSION TO	G1-D	1005.	12.50	88.	24.	8.	1.12		
+	HYDROGRAPH AT	G1-Do	1031.	12.67	122.	32.	11.	1.12		
+	ROUTED TO	GCP	1031.	12.67	122.	32.	11.	1.12		
+	HYDROGRAPH AT	J1	1055.	13.00	324.	99.	33.	1.73		
+	DIVERSION TO	J1-D	1055.	13.00	186.	51.	17.	1.73		
+	HYDROGRAPH AT	J1-Do	927.	13.33	171.	48.	16.	1.73		
+	ROUTED TO	J1-J2	518.	13.83	164.	48.	16.	1.73		
+	HYDROGRAPH AT	J2	1931.	13.33	702.	214.	72.	3.64		
+	DIVERSION TO	J2-D	1931.	13.33	411.	113.	38.	3.64		
+	HYDROGRAPH AT	J2-Do	1688.	13.67	364.	102.	34.	3.64		
+	2 COMBINED AT	K3RB	1681.	13.67	516.	148.	49.	5.37		

+	ROUTED TO	J2-K3	1454.	14.00	511.	148.	49.	5.37
+	HYDROGRAPH AT	K1	1649.	12.50	293.	84.	28.	1.54
+	ROUTED TO	K1-K2	1013.	13.83	292.	84.	28.	1.54
+	HYDROGRAPH AT	K2	991.	13.67	428.	127.	42.	2.37
+	DIVERSION TO	K2-D	991.	13.67	239.	65.	22.	2.37
+	HYDROGRAPH AT	K2-Do	898.	14.08	229.	63.	21.	2.37
+	2 COMBINED AT	K3RA	1758.	14.08	520.	147.	49.	1.54
+	ROUTED TO	K2-K3	1348.	15.67	511.	147.	49.	1.54
+	HYDROGRAPH AT	F1	2731.	12.58	572.	174.	58.	2.79
+	DIVERSION TO	F1-D	2465.	12.50	236.	67.	22.	2.79
+	HYDROGRAPH AT	F1-Do	2617.	12.58	391.	107.	36.	2.79
+	ROUTED TO	F1-F2	2261.	12.92	386.	107.	36.	2.79
+	HYDROGRAPH AT	F2	2096.	12.75	514.	157.	53.	2.53
+	DIVERSION TO	F2-D	2069.	12.67	233.	66.	22.	2.53
+	HYDROGRAPH AT	F2-D	1957.	12.83	334.	92.	31.	2.53
+	2 COMBINED AT	F3R	3875.	12.92	712.	198.	66.	5.31
+	ROUTED TO	F2-F3	3191.	13.25	704.	198.	66.	5.31
+	HYDROGRAPH AT	F3	594.	12.75	139.	42.	14.	0.74
+	DIVERSION TO	F3-D	594.	12.75	82.	23.	8.	0.74
+	HYDROGRAPH AT	F3-Do	487.	13.00	70.	20.	7.	0.74
+	2 COMBINED AT	E4RB	3504.	13.25	770.	216.	72.	6.05
+	ROUTED TO	F3-E4	2499.	14.92	738.	216.	72.	6.05
+	HYDROGRAPH AT	H1	818.	12.67	185.	57.	19.	1.07
+	DIVERSION TO	H1-D	818.	12.67	109.	30.	10.	1.07
+	HYDROGRAPH AT	H1-Do	702.	12.92	96.	27.	9.	1.07
+	ROUTED TO	H1-H2	306.	14.83	87.	27.	9.	1.07
+	HYDROGRAPH AT	E1	1034.	12.50	204.	61.	20.	0.96
+	DIVERSION TO	E1-D	1034.	12.50	96.	27.	9.	0.96
+	HYDROGRAPH AT	E1-Do	909.	12.67	127.	35.	12.	0.96
+	ROUTED TO	E1-E2	677.	13.17	124.	35.	12.	0.96
+	HYDROGRAPH AT	E2	2076.	12.58	413.	124.	41.	1.98
+	DIVERSION TO	E2-D	2076.	12.58	216.	59.	20.	1.98
+	HYDROGRAPH AT	E2-Do	1889.	12.75	235.	65.	22.	1.98
+	2 COMBINED AT	E3R	1883.	12.75	354.	98.	33.	2.94
+	ROUTED TO	E2-E3	1456.	13.75	341.	98.	33.	2.94
+	HYDROGRAPH AT	E3	1666.	13.00	505.	152.	51.	2.49
+	DIVERSION TO	E3-D	1666.	13.00	279.	77.	26.	2.49
+	HYDROGRAPH AT	E3-Do	1521.	13.25	274.	76.	25.	2.49

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          2 COMBINED AT
+                          E4RA     2359.  13.67        605.       172.       57.      5.42
          ROUTED TO
+                         E3-E4     1950.  14.75        588.       172.       57.      5.42
          HYDROGRAPH AT
+                            H2      740.  13.25        261.        80.       27.      1.40
          DIVERSION TO
+                          H2-D      740.  13.25        161.        44.       15.      1.40
          HYDROGRAPH AT
+                         H2-Do      610.  13.67        127.        36.       12.      1.40
          HYDROGRAPH AT
+                            E4     1535.  13.42        599.       183.       61.      3.04
          DIVERSION TO
+                          E4-D     1535.  13.42        349.        96.       32.      3.04
          HYDROGRAPH AT
+                         E4-Do     1341.  13.83        314.        88.       29.      3.04
          5 COMBINED AT
+                           E5R     5000.  14.92       1679.       499.      166.     16.98
          ROUTED TO
+                       E4R2E5     4427.  16.08       1661.       498.      166.     16.98
          HYDROGRAPH AT
+                            K3      838.  13.33        308.        95.       32.      1.64
          DIVERSION TO
+                          K3-D      838.  13.33        185.        51.       17.      1.64
          HYDROGRAPH AT
+                         K3-Do      697.  13.75        156.        44.       15.      1.64
          HYDROGRAPH AT
+                            E5      943.  12.92        258.        78.       26.      1.31
          DIVERSION TO
+                          E5-D      943.  12.92        145.        40.       13.      1.31
          HYDROGRAPH AT
+                         E5-Do      822.  13.17        138.        39.       13.      1.31
          5 COMBINED AT
+                           E6R     7149.  15.92       3051.       930.      311.      1.54
          ROUTED TO
+                       E5K2E6     6946.  16.25       3041.       930.      311.      1.54
          HYDROGRAPH AT
+                            E6     1581.  12.75        358.       102.       34.      2.04
          DIVERSION TO
+                          E6-D     1581.  12.75        188.        50.       17.      2.04
          HYDROGRAPH AT
+                         E6-Do     1420.  12.92        193.        52.       17.      2.04
          2 COMBINED AT
+                             E     6975.  16.25       3093.       982.      328.      1.54
          ROUTED TO
+                           ECP     6975.  16.25       3093.       982.      328.      1.54

 *** NORMAL END OF HEC-1 ***
1*************************************                    *************************************
 *                                   *                    *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *   U.S. ARMY CORPS OF ENGINEERS    *
 *            MAY  1991              *                    *   HYDROLOGIC ENGINEERING CENTER   *
 *          VERSION 4.0.1E           *                    *         609 SECOND STREET         *
 *                                   *                    *      DAVIS, CALIFORNIA 95616      *
 *  RUN DATE          TIME           *                    *         (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

                                                  HEC-1 INPUT                                          PAGE  1

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

          1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
          2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
          3           ID   200-year 24-hour
          4           ID   Future Conditions
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 5   ID  FRS #1 (Sub-basins L-R)
 6   ID  Rainfall Loss Method - Green & Ampt
 7   ID  Unit Hydrograph Method - FCDMC S-Graph
 8   ID  Channel Routing Method - Normal Depth
 9   ID  Land Use - Town of Buckeye LU Districts (2003)
10   ID  Soil Data - USDA SCS Soil Survey (1972 & 1981)
11   ID  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
     *DIAGRAM
12   IT      5  1JAN94       0    2000
13   IO      0
14   IN     15 01JAN94       0
15   JD   4.63    0.01
     * 24-hour distribution
16   PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
17   PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
18   PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
19   PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
20   PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
21   PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
22   PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
23   PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
24   PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
25   PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
26   IN     15 01JAN94       0
27   JD   4.398    10.0
     * 24-hour distribution
28   PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
29   PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
30   PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
31   PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
32   PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
33   PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
34   PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
35   PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
36   PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
37   PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
38   IN     15 01JAN94       0
39   JD   4.25    20.0
     * 24-hour distribution
40   PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
41   PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
42   PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
43   PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
44   PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
45   PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
46   PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
47   PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
48   PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
49   PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
50   IN     15 01JAN94       0
51   JD   4.107    40.0
     * 24-hour distribution
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LINE  ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

52   PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
53   PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
54   PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
55   PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
56   PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
57   PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
58   PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
59   PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
60   PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
61   PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
62   IN     15 01JAN94       0
63   JD   3.968    80.0
     * 24-hour distribution
64   PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
65   PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
66   PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
67   PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
68   PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
69   PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
70   PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
71   PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
72   PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
73   PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

74   KK      R1
75   KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
76   KM          L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
77   KM          S-GRAPH TYPE-PHOENIX MOUNTAIN
78   KO       0       0     0.0       1      22
79   BA  0.2836
80   LG   0.181   0.282   4.358   0.474  62.581
     * R1
81   UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
82   UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

83   KK   R1-Do
84   KO       0       0     0.0       0      22
85   DT    R1-D    24.0     0.0
     * Curve 1
86   DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
87   DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
     * Curve 1
88   DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
89   DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

90   KK     RCP    CNAME       R
91   KO       0       0     0.0       0      22
92   KM     RCP

93   KK      L1
94   KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
95   KM          L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
96   KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
97   KO       0       0     0.0       1      22
98   BA  3.5462
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 99         LG   0.271   0.318   4.357   0.352  16.317
            * L1
100         UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
101         UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
102         UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
103         UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
104         UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
105         UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

106         KK   L1-L2   CNAME     L2R
107         KO       0       0     0.0       0      22
108         RS      10    FLOW     0.0     0.0
109         RC   0.046   0.045   0.046 26949.0  0.0147     0.0
            * L1-L2
110         RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
111         RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

112         KK      L2
113         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
114         KM          L=5.21     Lca=2.40     S=82.13     Kn=0.055     LAG=90.0
115         KM          S-GRAPH TYPE=DESERT RANGELAND
116         KO       0       0     0.0       1      22
117         BA  7.3294
118         LG    0.24   0.257   4.202   0.462  33.542
            * L2
119         UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
120         UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
121         UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.68
122         UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
123         UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
124         UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
125         UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

126         KK   L2-Do
127         KO       0       0     0.0       0      22
128         DT    L2-D   475.0     0.0
            * Curve 1
129         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
130         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
131         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
132         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

133         KK     L3R   CNAME   L2-L3
134         KO       0       0     0.0       0      22
135         RC       2     0.0

136         KK   L2-L3   CNAME     L3R
137         KO       0       0     0.0       0      22
138         RS      20    FLOW     0.0     0.0
139         RC    0.05   0.045    0.06 20567.0  0.0084     0.0
            * L2-L3
140         RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
141         RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

142         KK      L3
143         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
144         KM          L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
145         KM          S-GRAPH TYPE=DESERT RANGELAND
146         KO       0       0     0.0       1      22
147         BA  5.8518
148         LG   0.205   0.287    3.98   0.449  45.272
            * L3
149         UI     0.0  216.51  216.51  216.51  216.51  546.87  701.79   899.0 1098.31 1266.31
150         UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
151         UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
152         UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
153         UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
154         UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
155         UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

156         KK   L3-Do
157         KO       0       0     0.0       0      22
158         DT    L3-D   456.9     0.0
            * Curve 2
159         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
160         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
161         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
162         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

163         KK       L   CNAME     LCP
164         KO       0       0     0.0       0      22
165         RC       2     0.0

166         KK     LCP   CNAME       L
167         KO       0       0     0.0       0      22
168         RN     LCP

169         KK      Z1
170         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
171         KM          L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
172         KM          S-GRAPH TYPE=DESERT RANGELAND
173         KO       0       0     0.0       1      22
174         BA  0.6644
175         LG   0.168   0.277   4.004   0.499  58.182
            * Z1
176         UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
177         UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85   60.8   54.09
178         UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

179         KK   Z1-Do
180         KO       0       0     0.0       0      22
181         DT    Z1-D    58.0     0.0
            * Curve 1
182         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
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183        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
184        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
                                          HEC-1 INPUT                                          PAGE  5

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

185        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

186        KK     ZCP   CNAME       Z
187        KO       0       0     0.0       0      22
188        RN     ZCP

189        KK      M1
190        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
191        KM          L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
192        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
193        KO       0       0     0.0       1      22
194        BA  5.5949
195        LG   0.349   0.349   4.306   0.348  17.433
           * M1
196        UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
197        UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
198        UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
199        UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
200        UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
201        UI   64.47   64.47     0.0

202        KK   M1-Do
203        KO       0       0     0.0       0      22
204        DT    M1-D   170.0     0.0
           * Curve 1
205        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
206        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
207        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
208        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

209        KK   M1-M2   CNAME     M2R
210        KO       0       0     0.0       0      22
211        RS      29    FLOW     0.0     0.0
212        RC    0.04    0.04   0.045 38719.0  0.0133     0.0
           * M1-M2
213        RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
214        RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

215        KK      M2
216        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
217        KM          L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
218        KM          S-GRAPH TYPE=DESERT RANGELAND
219        KO       0       0     0.0       1      22
220        BA  7.5274
221        LG   0.205   0.255   3.952   0.547  45.552
           * M2
222        UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
223        UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
224        UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1693.54  1501.0  1393.0 1284.99
225        UI  1178.7  1088.8  595.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
226        UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
227        UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
228        UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
229        UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0
                                          HEC-1 INPUT                                          PAGE  6

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

230        KK   M2-Do
231        KO       0       0     0.0       0      22
232        DT    M2-D   585.0     0.0
           * Curve 1
233        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
234        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
235        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
236        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

237        KK       M   CNAME     MCP
238        KO       0       0     0.0       0      22
239        HC       2     0.0

240        KK     MCP   CNAME       M
241        KO       0       0     0.0       0      22
242        RN     MCP

243        KK      O1
244        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
245        KM          L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
246        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
247        KO       0       0     0.0       1      22
248        BA  3.0883
249        LG   0.252   0.252   4.189   0.443  31.44
           * O1
250        UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
251        UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
252        UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
253        UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
254        UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
255        UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
256        UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
257        UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
258        UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
259        UI   19.93   19.93   19.93     0.0

260        KK   O1-Do
261        KO       0       0     0.0       0      22
262        DT    O1-D   150.0     0.0
           * Curve 1
263        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
264        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
265        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
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266        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

267        KK     OCP   CNAME       O
268        KO       0       0     0.0       0      22
269        KK     OCP

                                    HEC-1 INPUT                                          PAGE  7

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


270        KK      N1
271        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
272        KM          L=2.79      Lca=1.44      S=340.38      Kn=0.050      LAG=40.0
273        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
274        KO       0       0     0.0       1      22
275        BA   1.524
276        LG   0.289   0.289   4.075   0.469  26.648
           * N1
277        UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
278        UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
279        UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
280        UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

281        KK   N1-Do
282        KO       0       0     0.0       0      22
283        DT    N1-D    65.0     0.0
           * Curve 1
284        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
285        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
286        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
287        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

288        KK   N1-N2   CNAME     N2R
289        KO       0       0     0.0       0      22
290        RS      24    FLOW     0.0     0.0
291        RC    0.05   0.047    0.05 26511.0  0.0115     0.0
           * N1-N2
292        RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
293        RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

294        KK      N2
295        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
296        KM          L=5.64      Lca=3.27      S=170.14      Kn=0.055      LAG=91.0
297        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
298        KO       0       0     0.0       1      22
299        BA  3.3254
300        LG   0.268   0.268   4.117   0.446  27.305
           * N2
301        UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
302        UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
303        UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
304        UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
305        UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
306        UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
307        UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
308        UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
309        UI   23.58   23.58   23.58   23.58   23.58

                                    HEC-1 INPUT                                          PAGE  8

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


310        KK   N2-Do
311        KO       0       0     0.0       0      22
312        DT    N2-D   150.0     0.0
           * Curve 1
313        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
314        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
315        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
316        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

317        KK       N   CNAME     NCP
318        KO       0       0     0.0       0      22
319        HC       2     0.0

320        KK     NCP   CNAME       N
321        KO       0       0     0.0       0      22
322        KK     NCP

323        KK      P1
324        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
325        KM          L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
326        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
327        KO       0       0     0.0       1      22
328        BA  2.4365
329        LG   0.312   0.312   4.193   0.424    18.0
           * P1
330        UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
331        UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
332        UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
333        UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
334        UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
335        UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
336        UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
337        UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0

338        KK   P1-Do
339        KO       0       0     0.0       0      22
340        DT    P1-D    85.0     0.0
           * Curve 1
341        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
342        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
343        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
344        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

345        KK     PCP   CNAME       P
346        KO       0       0     0.0       0      22
347        KK     PCP
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 348          KK      Q1
 349          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 350          KM         L=5.23     Lca=2.81     S=228.56     Kn=0.055     LAG=78.0
 351          KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
 352          KO       0       0     0.0       1      22
 353          BA  2.2336
 354          LG   0.338    0.34   4.203   0.396  15.896
              * Q1
 355          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
 356          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
 357          UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
 358          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
 359          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
 360          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
 361          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
 362          UI   18.48   18.48   18.48

 363          KK   Q1-Do
 364          KO       0       0     0.0       0      22
 365          DT    Q1-D    71.5     0.0
              * Curve 1
 366          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 367          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 368          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 369          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 370          KK     QCP   CNAME       Q
 371          KO       0       0     0.0       0      22
 372          RM     QCP
 373          ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	R1	525.	12.25	75.	25.	8.	0.28		
+	DIVERSION TO	R1-D	521.	12.17	42.	12.	4.	0.28		
+	HYDROGRAPH AT	R1-Do	450.	12.33	45.	13.	4.	0.28		
+	ROUTED TO	RCP	450.	12.33	45.	13.	4.	0.28		
+	HYDROGRAPH AT	L1	2640.	12.75	616.	174.	58.	3.55		
+	ROUTED TO	L1-L2	2143.	13.50	613.	174.	58.	3.55		
+	HYDROGRAPH AT	L2	4082.	13.25	1462.	452.	151.	7.33		
+	DIVERSION TO	L2-D	4082.	13.25	866.	239.	80.	7.33		
+	HYDROGRAPH AT	L2-Do	3645.	13.58	757.	214.	71.	7.33		
+	2 COMBINED AT	L3R	5417.	13.58	1333.	382.	127.	10.88		
+	ROUTED TO	L2-L3	3681.	15.33	1287.	381.	127.	10.88		
+	HYDROGRAPH AT	L3	3505.	13.25	1316.	422.	141.	5.85		
+	DIVERSION TO	L3-D	3505.	13.25	821.	230.	77.	5.85		
+	HYDROGRAPH AT	L3-Do	3013.	13.67	669.	194.	65.	5.85		
+	2 COMBINED AT	L	4186.	15.33	1798.	545.	182.	16.73		
+	ROUTED TO	LCP	4186.	15.33	1798.	545.	182.	16.73		
+	HYDROGRAPH AT	Z1	820.	12.50	169.	56.	19.	0.66		
+	DIVERSION TO	Z1-D	820.	12.50	102.	29.	10.	0.66		
+	HYDROGRAPH AT	Z1-Do	639.	12.75	91.	27.	9.	0.66		
+	ROUTED TO	ZCP	639.	12.75	91.	27.	9.	0.66		
+	HYDROGRAPH AT	M1	4341.	12.67	962.	274.	92.	5.59		
+	DIVERSION TO	M1-D	3606.	12.50	310.	86.	29.	5.59		
+	HYDROGRAPH AT	M1-Do	4341.	12.67	713.	189.	63.	5.59		

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+        ROUTED TO          M1-M2    2379.  15.00    677.    189.    63.    5.59
+        HYDROGRAPH AT        M2     3962.  13.42   1645.    533.   179.    7.53
+        DIVERSION TO       M2-D     3962.  13.42   1049.    295.    98.    7.53
+        HYDROGRAPH AT     M2-Do     3355.  13.92    930.    242.    81.    7.53
+        2 COMBINED AT        M     3762.  14.92   1440.    414.   138.   13.12
+        ROUTED TO          MCP     3762.  14.92   1440.    414.   138.   13.12
+        HYDROGRAPH AT       O1     1693.  13.33    602.    187.    63.    3.09
+        DIVERSION TO      O1-D     1607.  13.25    270.     76.    25.    3.09
+        HYDROGRAPH AT    O1-Do     1620.  13.42    405.    113.    38.    3.09
+        ROUTED TO          OCP     1620.  13.42    405.    113.    38.    3.09
+        HYDROGRAPH AT       N1     1552.  12.50    285.     85.    29.    1.52
+        DIVERSION TO      N1-D     1385.  12.42    116.     33.    11.    1.52
+        HYDROGRAPH AT    N1-Do     1455.  12.58    194.     53.    18.    1.52
+        ROUTED TO        N1-N2      731.  14.42    186.     53.    18.    1.52
+        HYDROGRAPH AT       N2     1879.  13.17    620.    189.    63.    3.33
+        DIVERSION TO      N2-D     1753.  13.08    272.     76.    25.    3.33
+        HYDROGRAPH AT    N2-Do     1719.  13.33    416.    115.    38.    3.33
+        2 COMBINED AT        N     1712.  13.33    594.    166.    55.    4.85
+        ROUTED TO          NCP     1712.  13.33    594.    166.    55.    4.85
+        HYDROGRAPH AT       P1     1361.  13.08    408.    119.    40.    2.44
+        DIVERSION TO      P1-D     1178.  12.92    157.     43.    14.    2.44
+        HYDROGRAPH AT    P1-Do     1350.  13.17    284.     76.    25.    2.44
+        ROUTED TO          PCP     1350.  13.17    284.     76.    25.    2.44
+        HYDROGRAPH AT       Q1     1329.  13.00    368.    105.    35.    2.23
+        DIVERSION TO      Q1-D     1148.  12.83    132.     36.    12.    2.23
+        HYDROGRAPH AT    Q1-Do     1329.  13.00    261.     69.    23.    2.23
+        ROUTED TO          QCP     1329.  13.00    261.     69.    23.    2.23

 *** NORMAL END OF HEC-1 ***
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
 *             MAY   1991            *
 *          VERSION 4.0.1E           *
 *                                   *
 *  RUN DATE            TIME         *
 *                                   *
 *************************************

 ************************************
 *                                  *
 *    U.S. ARMY CORPS OF ENGINEERS  *
 *   HYDROLOGIC ENGINEERING CENTER  *
 *         609 SECOND STREET        *
 *      DAVIS, CALIFORNIA 95616     *
 *          (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

                                        HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   200-year 24-hour
  4           ID   Future Conditions
  5           ID   FRS #2 (Sub-basins S-U)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    4.61    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD    4.38    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 38           KK      S1
 39           KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM          L=2.32     Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
 41           KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0       0     0.0       1      22
 43           BA  1.4105
 44           LG   0.289   0.313   4.485   0.392  25.978
              * S1
 45           UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
 46           UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
 47           UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

                                        HEC-1 INPUT                                                    PAGE  2

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

 48           KK   S1-Do
 49           KO       0       0     0.0       0      22
 50           DT    S1-D    61.0     0.0
              * Curve 1
 51           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 52           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 53           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 54           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 55           KK     SCP    CNAME       S
 56           KO       0       0     0.0       0      22
 57           RN     SCP

 58           KK      U1
 59           KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 60           KM          L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
 61           KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 62           KO       0       0     0.0       1      22
 63           BA  1.3705
 64           LG   0.316   0.329   5.226   0.254  17.067
              * U1
 65           UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
 66           UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
 67           UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
 68           UI    26.8     0.0

 69           KK   U1-Do
 70           KO       0       0     0.0       0      22
 71           DT    U1-D    47.0     0.0
              * Curve 1
 72           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 73           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 74           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 75           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 76           KK     UCP    CNAME       U
 77           KO       0       0     0.0       0      22
 78           RN     UCP

 79           KK      T1
 80           KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 81           KM          L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
 82           KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 83           KO       0       0     0.0       1      22
 84           BA  3.0415
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 85          LG   0.327   0.327   4.641   0.316    18.7
             * T1
 86          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
 87          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
 88          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 89          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 90          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49
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                                        HEC-1 INPUT                                                PAGE  3

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


 91          KK   T1-Do
 92          KO      0       0     0.0       0      22
 93          DT    T1-D   103.0     0.0
             * Curve 2
 94          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 95          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 96          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 97          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 98          KK     TCP   CNAME       T
 99          KO       0       0     0.0       0      22
100          RM     TCP
101          ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	S1	1820.	12.33	266.	79.	26.	1.41		
+	DIVERSION TO	S1-D	1690.	12.25	110.	31.	10.	1.41		
+	HYDROGRAPH AT	S1-Do	1718.	12.42	179.	48.	16.	1.41		
+	ROUTED TO	SCP	1718.	12.42	179.	48.	16.	1.41		
+	HYDROGRAPH AT	U1	1653.	12.42	252.	71.	24.	1.37		
+	DIVERSION TO	U1-D	1391.	12.25	96.	24.	8.	1.37		
+	HYDROGRAPH AT	U1-Do	1653.	12.42	180.	47.	16.	1.37		
+	ROUTED TO	UCP	1653.	12.42	180.	47.	16.	1.37		
+	HYDROGRAPH AT	T1	2608.	12.67	545.	156.	52.	3.04		
+	DIVERSION TO	T1-D	2223.	12.50	188.	52.	17.	3.04		
+	HYDROGRAPH AT	T1-Do	2608.	12.67	392.	104.	35.	3.04		
+	ROUTED TO	TCP	2608.	12.67	392.	104.	35.	3.04		

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 *** NORMAL END OF HEC-1 ***
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
 *              MAY  1991            *
 *           VERSION 4.0.1E          *
 *                                   *
 *  RUN DATE            TIME         *
 *                                   *
 *************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X       XXXXX   X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX          XXX
```

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

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

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                                        HEC-1 INPUT                                                PAGE  1

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 1          ID   Buckeye/Sun Valley ADMS - 23 March 2004
 2          ID   PBS&J - Modelers: Jacob Leaue & Wan Chen
 3          ID   200-year 24-hour
 4          ID   Future Conditions
 5          ID   TRS #3 (Sub-basins V-Y)
 6          ID   Rainfall Loss Method - Green & Ampt
 7          ID   Unit Hydrograph Method - FCDMC S-Graph
 8          ID   Channel Routing Method - Normal Depth
 9          ID   Land Use - Town of Buckeye LU Districts (2003)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       0
14          IN      15 01JAN94       0
15          JD    4.62    0.01
            * 24-hour distribution
16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
26          IN      15 01JAN94       0
27          JD   4.389    10.0
            * 24-hour distribution
28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

38          KK      V1
39          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
40          KM         L=2.86      Lca=1.75      S=344.82      Kn=0.050      LAG=43.0
41          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
42          KO       0       0     0.0       1      22
43          BA  0.6646
44          LG   0.335   0.335   3.971   0.405  18.644
            * V1
45          UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
46          UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
47          UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
48          UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
49          UI     0.0
```



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

50          KK   V1-Do
51          KO       0       0     0.0       0      22
52          DT    V1-D    23.0     0.0
            * Curve 3
53          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
54          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
55          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
56          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

57          KK     VCP   CNAME       V
58          KO       0       0     0.0       0      22
59          RM     VCP

60          KK      W1
61          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
62          KM         L=3.46      Lca=1.78      S=486.28      Kn=0.050      LAG=44.0
63          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
64          KO       0       0     0.0       1      22
65          BA   3.894
66          LG    0.35    0.35   3.975    0.41  15.228
            * W1
67          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
68          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
69          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
70          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
71          UI   57.11     0.0

72          KK   W1-W2   CNAME     W2R
73          KO       0       0     0.0       0      22
74          RS       6    FLOW     0.0     0.0
75          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
            * W1-W2
76          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
77          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

78          KK      W2
79          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
80          KM         L=3.25      Lca=1.19      S=178.54      Kn=0.050      LAG=44.0
81          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
82          KO       0       0     0.0       1      22
83          BA  2.8478
84          LG   0.321   0.321   4.063   0.409  12.128
            * W2
85          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
86          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
87          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
88          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
89          UI   41.77     0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 90          KK   W2-Do
 91          KO      0       0     0.0       0      22
 92          DT    W2-D   130.0     0.0
             * Curve 1
 93          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 94          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 2
 95          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 96          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 97          KK       W   CNAME     WCP
 98          KO       0       0     0.0       0      22
 99          KC       2     0.0

100          KK     WCP   CNAME       W
101          KO       0       0     0.0       0      22
102          RW     WCP

103          KK      X1
104          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM         L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
106          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
107          KO       0       0     0.0       1      22
108          BA  0.7867
109          LG    0.35    0.35   3.947   0.419  12.841
             * X1
110          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
111          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
112          UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
113          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

114          KK     XCP   CNAME       X
115          KO       0       0     0.0       0      22
116          RW     XCP

117          KK      Y1
118          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
119          KM         L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
120          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
121          KO       0       0     0.0       1      22
122          BA  0.5808
123          LG    0.35    0.35   4.051   0.415  10.599
             * Y1
124          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
125          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

126          KK     YCP   CNAME       Y
127          KO       0       0     0.0       0      22
128          RW     YCP
129          ZZ
```

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	V1	635.	12.50	116.	33.	11.	0.66		
+	DIVERSION TO	V1-D	541.	12.42	42.	12.	4.	0.66		
+	HYDROGRAPH AT	V1-Do	619.	12.58	82.	22.	7.	0.66		
+	ROUTED TO	VCP	619.	12.58	82.	22.	7.	0.66		
+	HYDROGRAPH AT	W1	3490.	12.50	632.	178.	60.	3.89		
+	ROUTED TO	W1-W2	3063.	12.92	632.	178.	60.	3.89		
+	HYDROGRAPH AT	W2	2554.	12.50	452.	125.	42.	2.85		
+	DIVERSION TO	W2-D	2554.	12.50	249.	66.	22.	2.85		
+	HYDROGRAPH AT	W2-Do	1607.	12.75	224.	60.	20.	2.85		
+	2 COMBINED AT	W	4546.	12.83	843.	235.	79.	6.74		
+	ROUTED TO	WCP	4546.	12.83	843.	235.	79.	6.74		
+	HYDROGRAPH AT	X1	756.	12.50	126.	35.	12.	0.79		
+	ROUTED TO	XCP	756.	12.50	126.	35.	12.	0.79		
+	HYDROGRAPH AT	Y1	978.	12.17	90.	25.	8.	0.58		
+	ROUTED TO	YCP	978.	12.17	90.	25.	8.	0.58		

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

E.6.6 ..... HEC-1 Output File 500-Year 24-Hour

E.6.6.a HEC-1 Output File for 500-Year 24-Hour (Existing Conditions)

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*              MAY  1991            *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*         (916) 551-1748            *
*                                   *
*************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X       XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

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                                    HEC-1 INPUT                                                    PAGE  1

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

   1          ID  Buckeye/Sun Valley ADMS - 01 March 2004
   2          ID  PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID  500-year 24-hour
   4          ID  Existing Conditions
   5          ID  Area 3 - Sub-basins A-C
   6          ID  Rainfall Loss Method - Green & Ampt
   7          ID  Unit Hydrograph Method - FCDMC S-Graph
   8          ID  Channel Routing Method - Normal Depth
   9          ID  Land Use - FCDMC GIS Data: maq_landuse (2000)
  10          ID  Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID  Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       3
  14          IN      15 01JAN94       0
  15          JD    5.24    0.01
              * 24-hour distribution
  16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  26          IN      15 01JAN94       0
  27          JD   4.978    10.0
              * 24-hour distribution
  28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  38          IN      15 01JAN94       0
  39          JD    4.81    20.0
              * 24-hour distribution
  40          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  41          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  42          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  43          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  44          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  45          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  46          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  47          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  48          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  49          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

                                    HEC-1 INPUT                                                    PAGE  2

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

  50          KK      C1
  51          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
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 52          KM   L=3.99      Lca=2.01      S=387.22      Kn=0.050      LAG=51.0
 53          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 54          KO       0        0      0.0        1       22
 55          BA  3.5862
 56          LG   0.215    0.296    3.933    0.407   21.409
             * C1
 57          UI     0.0   236.76   236.76   527.08   911.83  1306.09  1576.15  1799.13   2131.6  2781.78
 58          UI  2038.2  1574.43  1396.84  1275.29  1154.27  1044.98   935.76   822.33   695.81   603.68
 59          UI  561.29   519.88   455.15   388.96   307.02   297.68   259.3    259.3   183.85   181.51
 60          UI  181.51   121.77   115.86   115.86   115.86   107.68    45.38    45.38    45.38    45.38
 61          UI   45.38    45.38    45.38    45.38    45.38    45.38    45.38    45.38

 62          KK   C1-C2    CNAME     C2R
 63          KO       0        0      0.0        0       22
 64          RS       5     FLOW      0.0      0.0
 65          RC    0.05    0.044     0.05  18437.0   0.0176      0.0
             * C1-C2
 66          RX     0.0     35.0     90.0    138.0    159.0    209.0    264.0    309.0
 67          RY    21.0     19.0     16.0     10.0     10.0     15.0     20.0     24.0

 68          KK      C2
 69          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 70          KM   L=3.69      Lca=1.53      S=105.29      Kn=0.055      LAG=53.0
 71          KM   S-GRAPH TYPE=DESERT RANGELAND
 72          KO       0        0      0.0        1       22
 73          BA  1.9204
 74          LG    0.35     0.35     3.92    0.436      0.0
             * C2
 75          UI     0.0   102.63   102.63   122.26   304.94   432.24   556.99   679.25   778.73   881.69
 76          UI   929.5   983.56   983.56   952.35   904.47   807.23   701.83   605.44   531.11   463.45
 77          UI  404.15   349.94   303.68   267.04   229.18   194.49   177.79   157.37   130.91   108.78
 78          UI  108.78    77.56    70.25    70.25    70.25    44.14    24.98    24.98    24.98    24.98
 79          UI   24.98    24.98    24.98    24.98    24.98    24.98    24.98      0.0

 80          KK     C3R    CNAME    C2-C3
 81          KO       0        0      0.0        0       22
 82          RC       2      0.0

 83          KK   C2-C3    CNAME     C3R
 84          KO       0        0      0.0        0       22
 85          RS       6     FLOW      0.0      0.0
 86          RC   0.046     0.05   0.0462  23418.0   0.0107      0.0
             * C2-C3
 87          RX     0.0     60.0    125.0    140.0    172.0    232.0    292.0    352.0
 88          RY    26.0     25.0     23.0     10.0     10.0     16.0     20.0     23.0

 89          KK      C3
 90          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM   L=4.44      Lca=2.51      S=56.33      Kn=0.050      LAG=84.0
 92          KM   S-GRAPH TYPE=DESERT RANGELAND
 93          KO       0        0      0.0        1       22
 94          BA  3.7859
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 95          LG   0.345    0.345    4.357    0.372      0.0
             * C3
 96          UI     0.0   151.75   151.75   151.75   190.44   436.28   559.26   700.12   855.69   975.92
 97          UI  1073.3  1242.28  1321.31  1364.94  1436.99  1454.26  1454.26  1418.19  1372.63  1299.19
 98          UI  1161.9  1057.64    941.4   855.14   770.03   694.14   628.58   566.66    510.9   460.18
 99          UI   415.5    362.4   338.86   288.07   286.08   237.34   232.68   204.46   160.84   160.84
100          UI  160.84   118.28   103.88   103.88   103.88   103.88    97.02    36.93    36.93    36.93
101          UI   36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93    36.93
102          UI   36.93    36.93      0.0

103          KK     C4R    CNAME    C3-C4
104          KO       0        0      0.0        0       22
105          RC       2      0.0

106          KK      C4
107          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
108          KM   L=2.18      Lca=0.88      S=44.31      Kn=0.045      LAG=40.0
109          KM   S-GRAPH TYPE=DESERT RANGELAND
110          KO       0        0      0.0        1       22
111          BA  1.4001
112          LG   0.327    0.327    4.737     0.29      0.0
             * C4
113          UI     0.0   117.85   153.21   406.59   642.02   848.8  1023.51  1108.81  1120.37  1044.08
114          UI  868.12   694.78    559.8   452.89   361.01   288.88   232.67   190.33   149.01   124.91
115          UI    88.1    80.67    73.19    28.68    28.68    28.68    28.68    28.68    28.68    28.68
116          UI     0.0

117          KK       C    CNAME     CCP
118          KO       0        0      0.0        0       22
119          RC       2      0.0

120          KK     CCP    CNAME       C
121          KO       0        0      0.0        0       22
122          RN     CCP

123          KK      B1
124          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
125          KM   L=2.52      Lca=1.19      S=227.45      Kn=0.050      LAG=38.0
126          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
127          KO       0        0      0.0        1       22
128          BA  0.5559
129          LG    0.35     0.35    3.733     0.47    6.272
             * B1
130          UI     0.0    49.25    72.53   179.11   283.42   353.86   433.69   556.28   354.96   293.83
131          UI  258.29   226.62   196.88   163.69    131.5   117.02   105.83    83.39     66.1    58.84
132          UI   53.95    40.03    37.76    29.84     24.1     24.1    23.99     9.44     9.44     9.44
133          UI    9.44     9.44     9.44     9.44     9.44     9.44

134          KK   B1-B2    CNAME     B2R
135          KO       0        0      0.0        0       22
136          RS       7     FLOW      0.0      0.0
137          RC   0.055    0.042    0.055  11334.0   0.0137      0.0
             * B1-B2
138          RX     0.0     75.0    140.0    167.0    193.0    226.0    296.0    371.0
139          RY    20.0     17.0     14.0     10.0     10.0     13.0     17.0     22.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 140        KK      B2
 141        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 142        KM   L=2.21      Lca=0.98      S=84.6      Kn=0.050      LAG=45.0
 143        KM   S-GRAPH TYPE=DESERT RANGELAND
 144        KO       0        0     0.0        1       22
 145        BA  0.4888
 146        LG    0.35     0.35   3.617    0.513      0.0
            * B2
 147        UI     0.0    36.57   36.57    108.2   170.94   233.37   285.41    325.0   349.22   347.33
 148        UI  325.56   278.29   231.3   188.32   156.44   128.94   105.91    86.03    71.02    59.44
 149        UI   49.34    38.76   32.78    25.03    25.03    18.39      8.9      8.9      8.9      8.9
 150        UI     8.9      8.9     8.9      8.9

 151        KK     B3R    CNAME    B2-B3
 152        KO       0        0     0.0        0       22
 153        HC       2      0.0

 154        KK   B2-B3    CNAME      B3R
 155        KO       0        0     0.0        0       22
 156        RS      21     FLOW     0.0      0.0
 157        RC    0.05    0.025    0.05 19622.0   0.0121      0.0
            * B2-B3
 158        RX     0.0    120.0   278.0    265.0    301.5    312.5    446.5    529.5
 159        RY    13.5     10.0    11.6     10.1     10.1     11.5     10.8     12.6

 160        KK      B3
 161        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 162        KM   L=3.72      Lca=1.65      S=63.31      Kn=0.045      LAG=59.0
 163        KM   S-GRAPH TYPE=DESERT RANGELAND
 164        KO       0        0     0.0        1       22
 165        BA   1.987
 166        LG   0.331    0.331   4.284    0.389      0.0
            * B3
 167        UI     0.0   113.39  113.39    174.2   365.68   513.62   667.08   787.09    935.3  1014.02
 168        UI  1066.6  1086.67 1065.15  1007.46   902.78   777.14   664.54   576.28   502.42   427.51
 169        UI  369.72   321.51  269.65   233.59   211.46   173.87   158.42   120.18   120.18    89.23
 170        UI   77.62    77.62   77.62    39.48     27.6     27.6     27.6     27.6     27.6     27.6
 171        UI    27.6     27.6    27.6     27.6      0.0

 172        KK       B    CNAME      BCP
 173        KO       0        0     0.0        0       22
 174        HC       2      0.0

 175        KK     BCP    CNAME        B
 176        KO       0        0     0.0        0       22
 177        RN     BCP

 178        KK      A1
 179        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 180        KM   L=2.20      Lca=0.86      S=322.08      Kn=0.050      LAG=30.0
 181        KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 182        KO       0        0     0.0        1       22
 183        BA  1.1067
 184        LG    0.35     0.35   4.058    0.417    9.677
            * A1
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 185        UI     0.0   124.21  285.26   628.48   880.99  1178.37  1187.81   769.89   652.53   550.24
 186        UI  454.03   347.39  294.06   245.68    184.1   150.55   131.95    95.22    84.89    60.78
 187        UI   60.78    43.03   23.81    23.81    23.81    23.81    23.81    23.81      0.0

 188        KK   A1-A2    CNAME     A2R
 189        KO       0        0     0.0        0       22
 190        RS       7     FLOW     0.0      0.0
 191        RC   0.045    0.045   0.045 15153.0   0.0134      0.0
            * A1-A2
 192        RX     0.0     75.0   125.0    185.0    190.0    220.0    280.0    340.0
 193        RY    27.0     23.0    19.0     10.0     10.0     20.0     26.0     32.0

 194        KK      A2
 195        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 196        KM   L=3.34      Lca=1.28      S=94.61      Kn=0.055      LAG=57.0
 197        KM   S-GRAPH TYPE=DESERT RANGELAND
 198        KO       0        0     0.0        1       22
 199        BA  1.6522
 200        LG    0.35     0.35   4.547    0.339      0.0
            * A2
 201        UI     0.0    98.18   98.18   167.77    329.1   468.89   598.13   713.32    831.1    883.8
 202        UI  940.94   940.94  897.33   847.41   719.99   625.76   533.26   458.89   397.46   336.4
 203        UI  288.45    247.3  210.36    185.1   155.06   143.14   104.07   104.07     78.8    67.21
 204        UI   67.21    67.21   30.17     23.9     23.9     23.9     23.9     23.9     23.9     23.9
 205        UI    23.9     23.9     0.0

 206        KK     A3R    CNAME    A2-A3
 207        KO       0        0     0.0        0       22
 208        HC       2    2.769

 209        KK   A2-A3    CNAME      A3R
 210        KO       0        0     0.0        0       22
 211        RS       9     FLOW     0.0      0.0
 212        RC    0.05    0.043    0.05 18190.0   0.0116      0.0
            * A2-A3
 213        RX     0.0     20.0    30.0    165.0    186.0    346.0    361.0    381.0
 214        RY    20.0     19.0    18.0     10.0     10.0     20.0     21.0     22.0

 215        KK      A3
 216        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 217        KM   L=3.92      Lca=1.89      S=58.21      Kn=0.045      LAG=64.0
 218        KM   S-GRAPH TYPE=DESERT RANGELAND
 219        KO       0        0     0.0        1       22
 220        BA  3.7294
 221        LG    0.35     0.35    4.23    0.405      0.0
            * A3
 222        UI     0.0    196.2   196.2    216.8   570.49   813.36  1043.19  1275.51  1464.32  1668.95
 223        UI  1757.8  1876.99 1880.23  1841.12  1751.54  1592.99  1387.91  1202.84  1048.95   919.72
 224        UI  805.43   710.05  606.86   538.24   447.15   397.83   367.89   300.84   290.73   207.95
 225        UI  207.95   183.56   134.3    134.3    134.3   131.67    47.75    47.75    47.75    47.75
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 226          UI   47.75   47.75   47.75   47.75   47.75   47.75   47.75   47.75

                                        HEC-1 INPUT                                          PAGE  6

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

 227          KK       A   CNAME     ACP
 228          KO       0       0     0.0       0      22
 229          HC       2   6.498

 230          KK     ACP   CNAME       A
 231          KO       0       0     0.0       0      22
 232          RN     ACP
 233          ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	C1	3622.	12.67	771.	223.	74.	3.59		
+	ROUTED TO	C1-C2	3113.	13.00	770.	222.	74.	3.59		
+	HYDROGRAPH AT	C2	1410.	12.83	307.	77.	26.	1.92		
+	2 COMBINED AT	C3R	4419.	13.00	1069.	297.	99.	5.51		
+	ROUTED TO	C2-C3	3928.	13.58	1065.	297.	99.	5.51		
+	HYDROGRAPH AT	C3	2197.	13.17	626.	156.	52.	3.79		
+	2 COMBINED AT	C4R	5668.	13.50	1669.	450.	150.	9.29		
+	HYDROGRAPH AT	C4	1702.	12.50	252.	63.	21.	1.40		
+	2 COMBINED AT	C	5813.	13.50	1903.	509.	170.	10.69		
+	ROUTED TO	CCP	5813.	13.50	1903.	509.	170.	10.69		
+	HYDROGRAPH AT	B1	634.	12.42	96.	25.	8.	0.56		
+	ROUTED TO	B1-B2	531.	12.92	96.	25.	8.	0.56		
+	HYDROGRAPH AT	B2	473.	12.58	76.	19.	6.	0.49		
+	2 COMBINED AT	B3R	883.	12.83	171.	44.	15.	1.04		
+	ROUTED TO	B2-B3	617.	14.50	170.	44.	15.	1.04		
+	HYDROGRAPH AT	B3	1601.	12.75	330.	82.	27.	1.99		
+	2 COMBINED AT	B	1595.	12.75	491.	125.	42.	3.03		
+	ROUTED TO	BCP	1595.	12.75	491.	125.	42.	3.03		
+	HYDROGRAPH AT	A1	1542.	12.33	204.	55.	18.	1.11		
+	ROUTED TO	A1-A2	1237.	12.83	203.	55.	18.	1.11		
+	HYDROGRAPH AT	A2	1418.	12.75	283.	71.	24.	1.66		
+	2 COMBINED AT	A3R	2632.	12.75	482.	125.	42.	2.77		
+	ROUTED TO	A2-A3	2249.	13.42	482.	125.	42.	2.77		
+	HYDROGRAPH AT	A3	2707.	12.83	600.	150.	50.	3.73		
+	2 COMBINED AT	A	3853.	13.25	1070.	272.	91.	6.50		
+	ROUTED TO	ACP	3853.	13.25	1070.	272.	91.	6.50		

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

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1*************************************
*                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY  1991              *
*         VERSION 4.0.1E            *
*                                   *
* RUN DATE          TIME            *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*        (916) 551-1748             *
*                                   *
*************************************
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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

HEC-1 INPUT PAGE 1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   500-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    5.23     0.01
              * 24-hour distribution
 16           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 17           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 18           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 19           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 20           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 21           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 22           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 23           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 24           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 25           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 26           IN      15 01JAN94       0
 27           JD   4.969     10.0
              * 24-hour distribution
 28           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 29           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 30           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 31           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 32           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 33           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 34           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 35           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 36           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 37           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 38           IN      15 01JAN94       0
 39           JD   4.801     20.0
              * 24-hour distribution
 40           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 41           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 42           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 43           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 44           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 45           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 46           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 47           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 48           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 49           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 50           IN      15 01JAN94       0
 51           JD   4.639     40.0
              * 24-hour distribution
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 52           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 53           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 54           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 55           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 56           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 57           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 58           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 59           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 60           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 61           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 62           IN      15 01JAN94       0
 63           JD   4.482     80.0
              * 24-hour distribution
 64           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 65           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
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 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      G1
 75          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM   L=2.38      Lca=1.08      S=33.76      Kn=0.045      LAG=47.0
 77          KM   S-GRAPH TYPE=DESERT RANGELAND
 78          KO       0         0     0.0       1      22
 79          BA  1.1182
 80          LG    0.35      0.35   4.688   0.298     0.0
             * G1
 81          UI     0.0     80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 82          UI  735.76     667.1  553.01  458.12  381.96   318.8  263.39  222.24  176.97  151.13
 83          UI  124.99     103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 84          UI   19.51     19.51   19.51   19.51   19.51     0.0

 85          KK     GCP    CNAME       G
 86          KO       0         0     0.0       0      22
 87          KN     GCP

 88          KK      J1
 89          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 90          KM   L=4.09      Lca=1.78      S=70.82      Kn=0.055      LAG=75.0
 91          KM   S-GRAPH TYPE=DESERT RANGELAND
 92          KO       0         0     0.0       1      22
 93          BA  1.7341
 94          LG    0.35      0.35    3.25   0.652     0.0
             * J1
 95          UI     0.0     77.85   77.85   77.85  158.13   261.7  335.81  417.88  494.16  554.74
 96          UI  644.32    684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
 97          UI  468.25    415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
 98          UI  146.76    131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
 99          UI   53.29      52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
100          UI   18.95     18.95   18.95   18.95   18.95   18.95
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

101          KK   J1-J2    CNAME     J2R
102          KO       0         0     0.0       0      22
103          RS      25      FLOW     0.0     0.0
104          RC   0.055      0.04   0.055 24090.0  0.0086     0.0
             * J1-J2
105          RX     0.0     161.0   247.0   254.0   271.0   279.0   393.0   660.0
106          RY    17.0      12.5    12.2    10.8    10.0    12.1    12.9    17.0

107          KK      J2
108          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
109          KM   L=5.18      Lca=2.51      S=45.01      Kn=0.050      LAG=93.0
110          KM   S-GRAPH TYPE=DESERT RANGELAND
111          KO       0         0     0.0       1      22
112          BA  3.6379
113          LG   0.349     0.348   3.623   0.495   0.281
             * J2
114          UI     0.0    131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
115          UI  857.31    932.01 1064.78 1131.28 1183.02 1213.17 1262.18 1262.18 1262.18 1218.5
116          UI 1189.1   1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
117          UI  484.42    440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
118          UI  201.95    172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
119          UI   90.16     79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
120          UI   32.06     32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

121          KK    K3RB    CNAME    J2-K3
122          KO       0         0     0.0       0      22
123          RC       2     5.372

124          KK   J2-K3    CNAME    K3RB
125          KO       0         0     0.0       0      22
126          RS       4      FLOW     0.0     0.0
127          RC    0.05     0.048    0.05  4072.0  0.0059     0.0
             * J2-K3
128          RX     0.0     390.0   490.0   502.0   520.0   532.0   632.0  1022.0
129          RY    20.0      14.5    11.5    10.0    10.0    11.5    14.5    20.0

130          KK      K1
131          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
132          KM   L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
133          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
134          KO       0         0     0.0       1      22
135          BA   1.543
136          LG   0.112     0.255   4.382   0.365   21.06
             * K1
137          UI     0.0    129.88  168.84  442.11  706.31  896.38 1061.91 1487.77 1111.25  821.11
138          UI  726.82    641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
139          UI  154.58    142.25  108.11   99.57   65.17   63.56   63.56   63.56   38.61   24.89
140          UI   24.89     24.89   24.89   24.89   24.89   24.89     0.0
```



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

141          KK   K1-K2    CNAME     K2R
142          KO       0         0     0.0       0      22
143          RS      15      FLOW     0.0     0.0
144          RC   0.048     0.05   0.048 30021.0   0.015     0.0
             * K1-K2
145          RX     0.0      20.0    55.0    85.0   235.0   259.0   289.0   309.0
146          RY    22.0      21.0    20.0    10.0    10.0    20.0    21.0    22.0

147          KK      K2
148          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
149          KM   L=7.3       Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
150          KM   S-GRAPH TYPE=DESERT RANGELAND
151          KO       0         0     0.0       1      22
152          BA   2.365
```

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153        LG   0.341   0.346   4.471   0.348   1.018
           * K2
154        UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.07
155        UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
156        UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
157        UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
158        UI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
159        UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
160        UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
161        UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
162        UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

163        KK    K3RA   CNAME   K2-K3
164        KO       0       0     0.0       0      22
165        HC       2   3.908

166        KK   K2-K3   CNAME    K3RA
167        KO       0       0     0.0       0      22
168        RS      19    FLOW     0.0     0.0
169        RC    0.05   0.048    0.05 25950.0  0.0084     0.0
           * K2-K3
170        RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
171        RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

172        KK      F1
173        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
174        KM   L=4.07     Lca=1.63     S=441.98     Kn=0.050     LAG=46.0
175        KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
176        KO       0       0     0.0       1      22
177        BA  2.7854
178        LG   0.299    0.33   4.322   0.361  14.271
           * F1
179        UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
180        UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
181        UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
182        UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
183        UI   39.08   39.08   39.08     0.0
```



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

184        KK   F1-F2   CNAME     F2R
185        KO       0       0     0.0       0      22
186        RS       3    FLOW     0.0     0.0
187        RC   0.053   0.045   0.055  8535.0   0.012     0.0
           * F1-F2
188        RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
189        RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

190        KK      F2
191        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
192        KM   L=3.88     Lca=1.76     S=161.6     Kn=0.050     LAG=57.0
193        KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
194        KO       0       0     0.0       1      22
195        BA  2.5261
196        LG   0.35     0.35   4.311   0.375   3.026
           * F2
197        UI     0.0  149.21  149.21  284.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
198        UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
199        UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
200        UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
201        UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
202        UI    28.6    28.6    28.6     0.0

203        KK     F3R   CNAME   F2-F3
204        KO       0       0     0.0       0      22
205        HC       2   5.312

206        KK   F2-F3   CNAME     F3R
207        KO       0       0     0.0       0      22
208        RS       4    FLOW     0.0     0.0
209        RC    0.05   0.047   0.048  7059.0    0.01     0.0
           * F2-F3
210        RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
211        RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

212        KK      F3
213        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
214        KM   L=2.71     Lca=1.26     S=81.34     Kn=0.055     LAG=54.0
215        KM   S-GRAPH TYPE=DESERT RANGELAND
216        KO       0       0     0.0       1      22
217        BA  0.7363
218        LG    0.35    0.35   3.266   0.647     0.0
           * F3
219        UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
220        UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
221        UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
222        UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
223        UI     0.0
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LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

224        KK    E4RB   CNAME   F3-E4
225        KO       0       0     0.0       0      22
226        HC       2   6.048

227        KK   F3-E4   CNAME    E4RB
228        KO       0       0     0.0       0      22
229        RS      19    FLOW     0.0     0.0
230        RC    0.05   0.044    0.05 27656.0  0.0072     0.0
           * F3-E4
231        RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
232        RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

233        KK      H1
234        KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
235        KM   L=2.41     Lca=1.09     S=64.59     Kn=0.055     LAG=51.0
236        KM   S-GRAPH TYPE=DESERT RANGELAND
237        KO       0       0     0.0       1      22
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238          BA  1.0659
239          LG    0.35    0.35   2.733   0.945     0.0
             * H1
240          UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
241          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
242          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
243          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

244          KK   H1-H2   CNAME     H2R
245          KO       0       0     0.0       0      22
246          RS      17    FLOW     0.0     0.0
247          RC   0.053    0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
248          RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
249          RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

250          KK      E1
251          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
252          KM   L=2.51     Lca=1.13     S=178.34     Kn=0.055     LAG=43.0
253          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
254          KO       0       0     0.0       1      22
255          BA  0.9558
256          LG    0.35   0.378   5.377   0.222    0.69
             * E1
257          UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
258          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
259          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
260          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
261          UI     0.0

262          KK   E1-E2   CNAME     E2R
263          KO       0       0     0.0       0      22
264          RS       5    FLOW     0.0     0.0
265          RC    0.05   0.047   0.046 11365.0   0.016     0.0
             * E1-E2
266          RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
267          RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

268          KK      E2
269          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
270          KM   L=2.92     Lca=0.80     S=96.39     Kn=0.055     LAG=45.0
271          KM   S-GRAPH TYPE=DESERT RANGELAND
272          KO       0       0     0.0       1      22
273          BA  1.9794
274          LG    0.35    0.36   5.043   0.256     0.0
             * E2
275          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
276          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
277          UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
278          UI   36.05   36.05   36.05   36.05

279          KK     E3R   CNAME   E2-E3
280          KO       0       0     0.0       0      22
281          RC       2   2.935

282          KK   E2-E3   CNAME     E3R
283          KO       0       0     0.0       0      22
284          RS       8    FLOW     0.0     0.0
285          RC   0.052   0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
286          RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
287          RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

288          KK      E3
289          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
290          KM   L=3.87     Lca=1.99     S=49.65     Kn=0.050     LAG=75.0
291          KM   S-GRAPH TYPE=DESERT RANGELAND
292          KO       0       0     0.0       1      22
293          BA  2.4802
294          LG    0.35    0.35   4.388   0.347     0.0
             * E3
295          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
296          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
297          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
298          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
299          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
300          UI   27.19   27.19   27.19   27.19   27.19   27.19

301          KK    E4RA   CNAME   E3-E4
302          KO       0       0     0.0       0      22
303          RC       2   5.423

304          KK   E3-E4   CNAME    E4RA
305          KO       0       0     0.0       0      22
306          RS      13    FLOW     0.0     0.0
307          RC   0.056   0.049   0.056 13855.0  0.0048     0.0
             * E3-E4
308          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
309          RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

310          KK      H2
311          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
312          KM   L=4.41     Lca=2.60     S=44.71     Kn=0.050     LAG=89.0
313          KM   S-GRAPH TYPE=DESERT RANGELAND
314          KO       0       0     0.0       1      22
315          BA  1.4003
316          LG    0.35    0.35   3.222   0.664     0.0
             * H2
317          UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
318          UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
319          UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
320          UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
321          UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
322          UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
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 323          UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

 324          KK      E4
 325          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 326          KM   L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
 327          KM   S-GRAPH TYPE=DESERT RANGELAND
 328          KO       0       0     0.0       1      22
 329          BA  3.0419
 330          LG    0.35    0.35   3.816   0.439     0.0
              * E4
 331          UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
 332          UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
 333          UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
 334          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
 335          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
 336          UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
 337          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
 338          UI   24.44   24.44   24.44   24.44   24.44   24.44

 339          KK     E5R   CNAME   E4H2E5
 340          KO       0       0     0.0       0      22
 341          HC       5  16.979

 342          KK  E4H2E5   CNAME     E5R
 343          KO       0       0     0.0       0      22
 344          RS      13    FLOW     0.0     0.0
 345          RC    0.06    0.05    0.06 15206.0  0.0051     0.0
              * E4H2-E5
 346          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
 347          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

 348          KK      K3
 349          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 350          KM   L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
 351          KM   S-GRAPH TYPE=DESERT RANGELAND
 352          KO       0       0     0.0       1      22
 353          BA  1.6364
 354          LG    0.35    0.35   3.421   0.582     0.0
              * K3
 355          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 356          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
 357          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
 358          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
 359          UI   89.87   88.81   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
 360          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
 361          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

 362          KK      E5
 363          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 364          KM   L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
 365          KM   S-GRAPH TYPE=DESERT RANGELAND
 366          KO       0       0     0.0       1      22
 367          BA  1.3075
 368          LG   0.347   0.344    3.94   0.429   0.968
              * E5
 369          UI     0.0    66.7    68.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
 370          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
 371          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
 372          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
 373          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

 374          KK     E6R   CNAME   E5K2E6
 375          KO       0       0     0.0       0      22
 376          HC       5  29.203

 377          KK  E5K2E6   CNAME     E6R
 378          KO       0       0     0.0       0      22
 379          RS       5    FLOW     0.0     0.0
 380          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
              * E5K3-E6
 381          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
 382          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

 383          KK      E6
 384          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 385          KM   L=3.04      Lca=1.06      S=34.17      Kn=0.050      LAG=57.0
 386          KM   S-GRAPH TYPE=DESERT RANGELAND
 387          KO       0       0     0.0       1      22
 388          BA  2.0375
 389          LG   0.343   0.336   4.356   0.367   0.711
              * E6
 390          UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
 391          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
 392          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
 393          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
 394          UI   29.29   29.29     0.0

 395          KK       Z   CNAME     ECP
 396          KO       0       0     0.0       0      22
 397          HC       2  31.241
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 398          KK     ECP   CNAME       Z
 399          KO       0       0     0.0       0      22
 400          RN     ECP
 401          ZZ
```

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	G1	1166.	12.58	197.	49.	16.	1.12
+	ROUTED TO	GCF	1166.	12.58	197.	49.	16.	1.12
+	HYDROGRAPH AT	J1	960.	13.00	245.	61.	20.	1.73
+	ROUTED TO	J1-J2	767.	15.00	243.	61.	20.	1.73
+	HYDROGRAPH AT	J2	1773.	13.33	557.	140.	47.	3.64
+	2 COMBINED AT	K3RB	1766.	13.33	789.	200.	67.	5.37
+	ROUTED TO	J2-K3	1747.	13.58	788.	200.	67.	5.37
+	HYDROGRAPH AT	K1	1922.	12.50	342.	98.	33.	1.54
+	ROUTED TO	K1-K2	1227.	13.75	340.	98.	33.	1.54
+	HYDROGRAPH AT	K2	1006.	13.67	398.	102.	34.	2.37
+	2 COMBINED AT	K3RA	2210.	13.75	727.	199.	66.	3.91
+	ROUTED TO	K2-K3	1844.	15.17	720.	198.	66.	3.91
+	HYDROGRAPH AT	F1	2962.	12.58	556.	155.	52.	2.79
+	ROUTED TO	F1-F2	2797.	12.75	556.	154.	52.	2.79
+	HYDROGRAPH AT	F2	2134.	12.75	433.	111.	37.	2.53
+	2 COMBINED AT	F3R	4895.	12.75	981.	264.	88.	5.31
+	ROUTED TO	F2-F3	4441.	13.00	981.	264.	88.	5.31
+	HYDROGRAPH AT	F3	560.	12.75	105.	26.	9.	0.74
+	2 COMBINED AT	E4RB	4868.	13.00	1082.	289.	96.	6.05
+	ROUTED TO	F3-E4	3735.	14.50	1077.	289.	96.	6.05
+	HYDROGRAPH AT	H1	739.	12.67	130.	33.	11.	1.07
+	ROUTED TO	H1-H2	525.	14.08	128.	33.	11.	1.07
+	HYDROGRAPH AT	E1	1093.	12.50	179.	45.	15.	0.96
+	ROUTED TO	E1-E2	977.	12.83	179.	45.	15.	0.96
+	HYDROGRAPH AT	E2	2182.	12.58	357.	89.	30.	1.98
+	2 COMBINED AT	E3R	2921.	12.67	532.	133.	44.	2.93
+	ROUTED TO	E2-E3	2484.	13.25	528.	133.	44.	2.93
+	HYDROGRAPH AT	E3	1636.	13.00	421.	105.	35.	2.49
+	2 COMBINED AT	E4RA	3960.	13.25	939.	237.	79.	5.42
+	ROUTED TO	E3-E4	3324.	14.25	932.	237.	79.	5.42
+	HYDROGRAPH AT	H2	659.	13.25	197.	49.	16.	1.40
+	HYDROGRAPH AT	E4	1411.	13.42	481.	121.	40.	3.04
+	5 COMBINED AT	E5R	7805.	14.33	2641.	692.	231.	16.98
+	ROUTED TO	E4H2E5	7136.	15.33	2634.	692.	231.	16.98
+	HYDROGRAPH AT	K3	758.	13.33	240.	60.	20.	1.64
+	HYDROGRAPH AT	E5	932.	12.92	214.	54.	18.	1.31
+	5 COMBINED AT	E6R	9509.	15.33	4217.	1129.	377.	29.20
+	ROUTED TO	E5K2E6	9286.	15.67	4199.	1129.	377.	29.20

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+       HYDROGRAPH AT
                        E6      1719.   12.75       344.        87.        29.       2.04

+       2 COMBINED AT
                         E      9286.   15.67      4421.      1206.       403.      31.24

+       ROUTED TO
                       ECP      9231.   15.67      4397.      1200.       401.      31.24


 *** NORMAL END OF HEC-1 ***
1****************************************                                  ****************************************
 *                                      *                                  *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                  *   U.S. ARMY CORPS OF ENGINEERS       *
 *             MAY   1991               *                                  *   HYDROLOGIC ENGINEERING CENTER      *
 *           VERSION 4.0.1E             *                                  *         609 SECOND STREET            *
 *                                      *                                  *      DAVIS, CALIFORNIA 95616         *
 *  RUN DATE            TIME            *                                  *        (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

                                        HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   500-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    5.23    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   4.969    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 38           IN      15 01JAN94       0
 39           JD   4.801    20.0
              * 24-hour distribution
 40           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 41           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 42           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 43           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 44           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 45           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 46           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 47           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 48           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 49           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 50           IN      15 01JAN94       0
 51           JD   4.639    40.0
              * 24-hour distribution

                                        HEC-1 INPUT                                                    PAGE  2

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

 52           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
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 54          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62          IN      15 01JAN94       0
 63          JD   4.482    80.0
             * 24-hour distribution
 64          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      R1
 75          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM   L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
 77          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 78          KO       0       0     0.0       1      22
 79          BA  0.2836
 80          LG    0.35    0.35   4.358   0.374   8.387
             * R1
 81          UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
 82          UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

 83          KK     RCP    CNAME       R
 84          KO       0       0     0.0       0      22
 85          RN     RCP

 86          KK      L1
 87          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 88          KM   L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
 89          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 90          KO       0       0     0.0       1      22
 91          BA  3.5462
 92          LG   0.271   0.318   4.357   0.352  16.317
             * L1
 93          UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
 94          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
 95          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
 96          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
 97          UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
 98          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 99          KK   L1-L2    CNAME     L2R
100          KO       0       0     0.0       0      22
101          RS      10    FLOW     0.0     0.0
102          RC   0.046   0.045   0.046 28949.0  0.0147     0.0
             * L1-L2
103          RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
104          RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

105          KK      L2
106          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
107          KM   L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
108          KM   S-GRAPH TYPE=DESERT RANGELAND
109          KO       0       0     0.0       1      22
110          BA  7.3294
111          LG    0.35    0.35   4.202   0.399     0.0
             * L2
112          UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
113          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
114          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
115          UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
116          UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
117          UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
118          UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

119          KK     L3R    CNAME   L2-L3
120          KO       0       0     0.0       0      22
121          RC       2     0.0

122          KK   L2-L3    CNAME     L3R
123          KO       0       0     0.0       0      22
124          RS      17    FLOW     0.0     0.0
125          RC    0.05   0.045    0.06 20567.0  0.0084     0.0
             * L2-L3
126          RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
127          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

128          KK      L3
129          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
130          KM   L=4.75      Lca=2.00      S=44.27      Kn=0.055      LAG=91.0
131          KM   S-GRAPH TYPE=DESERT RANGELAND
132          KO       0       0     0.0       1      22
133          BA  5.8518
134          LG   0.341   0.328    3.98   0.419    1.05
             * L3
135          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
136          UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
137          UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
138          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
139          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
140          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
141          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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142          KK       L   CNAME     LCP
143          KO       0       0     0.0       0      22
144          HC       2     0.0

145          KK     LCP   CNAME       L
146          KO       0       0     0.0       0      22
147          RN     LCP

148          KK      Z1
149          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
150          KM   L=1.70      Lca=0.66      S=47.00      Kn=0.055      LAG=39.0
151          KM   S-GRAPH TYPE=DESERT RANGELAND
152          KO       0       0     0.0       1      22
153          BA  0.6644
154          LG   0.321   0.292   4.004    0.43   2.909
             * Z1
155          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
156          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
157          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

158          KK     ZCP   CNAME       Z
159          KO       0       0     0.0       0      22
160          RN     ZCP

161          KK      M1
162          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
163          KM   L=4.99      Lca=1.81      S=302.46      Kn=0.050      LAG=56.0
164          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
165          KO       0       0     0.0       1      22
166          BA  5.5949
167          LG    0.35    0.35   4.306   0.347  17.122
             * M1
168          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
169          UI  4005.2 2791.27 2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
170          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
171          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
172          UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
173          UI   64.47   64.47     0.0

174          KK   M1-M2   CNAME     M2R
175          KO       0       0     0.0       0      22
176          RS      26    FLOW     0.0     0.0
177          RC    0.04    0.04   0.045 38719.0  0.0133     0.0
             * M1-M2
178          RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
179          RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

180          KK      M2
181          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
182          KM   L=7.60      Lca=3.07      S=88.36      Kn=0.050      LAG=103.0
183          KM   S-GRAPH TYPE=DESERT RANGELAND
184          KO       0       0     0.0       1      22
185          BA  7.5274
186          LG    0.35    0.35   3.952   0.446   0.287
             * M2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

187          UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
188          UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
189          UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
190          UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
191          UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
192          UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
193          UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
194          UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

195          KK       M   CNAME     MCP
196          KO       0       0     0.0       0      22
197          HC       2     0.0

198          KK     MCP   CNAME       M
199          KO       0       0     0.0       0      22
200          RN     MCP

201          KK      O1
202          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
203          KM   L=5.20      Lca=2.79      S=64.07      Kn=0.055      LAG=100.0
204          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
205          KO       0       0     0.0       1      22
206          BA  3.0883
207          LG    0.35    0.35   4.189   0.393   2.105
             * O1
208          UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
209          UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
210          UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
211          UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
212          UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
213          UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
214          UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
215          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
216          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
217          UI   19.93   19.93   19.93     0.0

218          KK     OCP   CNAME       O
219          KO       0       0     0.0       0      22
220          RN     OCP

221          KK      N1
222          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
223          KM   L=2.79      Lca=1.44      S=340.38      Kn=0.050      LAG=40.0
224          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
225          KO       0       0     0.0       1      22
226          BA   1.524
227          LG    0.35    0.35   4.075   0.419    8.38
             * N1
228          UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
229          UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
230          UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
231          UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0
```

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

 232          KK   N1-N2   CNAME     N2R
 233          KO       0       0     0.0       0      22
 234          RS      21    FLOW     0.0     0.0
 235          RC    0.05   0.047    0.05 26511.0  0.0115     0.0
              * N1-N2
 236          RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
 237          RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

 238          KK      N2
 239          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 240          KM   L=5.64     Lca=3.27     S=170.14     Kn=0.055     LAG=91.0
 241          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 242          KO       0       0     0.0       1      22
 243          BA  3.3254
 244          LG    0.35    0.35   4.117   0.405    2.67
              * N2
 245          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
 246          UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
 247          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
 248          UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
 249          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
 250          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
 251          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
 252          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
 253          UI   23.58   23.58   23.58   23.58   23.58

 254          KK       N   CNAME     NCP
 255          KO       0       0     0.0       0      22
 256          HC       2     0.0

 257          KK     NCP   CNAME       N
 258          KO       0       0     0.0       0      22
 259          RN     NCP

 260          KK      P1
 261          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 262          KM   L=6.39     Lca=2.62     S=200.13     Kn=0.055     LAG=85.0
 263          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 264          KO       0       0     0.0       1      22
 265          BA  2.4365
 266          LG    0.35    0.35   4.193   0.396   6.712
              * P1
 267          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
 268          UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
 269          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
 270          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
 271          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
 272          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
 273          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
 274          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 275          KK     PCP   CNAME       P
 276          KO       0       0     0.0       0      22
 277          RN     PCP

 278          KK      Q1
 279          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 280          KM   L=5.23     Lca=2.81     S=228.56     Kn=0.055     LAG=78.0
 281          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 282          KO       0       0     0.0       1      22
 283          BA  2.2336
 284          LG    0.35    0.35   4.203    0.39  12.313
              * Q1
 285          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
 286          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
 287          UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
 288          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
 289          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
 290          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
 291          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
 292          UI   18.48   18.48   18.48

 293          KK     QCP   CNAME       Q
 294          KO       0       0     0.0       0      22
 295          RN     QCP
 296          ZZ
```

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	R1	531.	12.25	53.	14.	5.	0.28		
+	ROUTED TO	RCP	531.	12.28	53.	14.	5.	0.28		
+	HYDROGRAPH AT	L1	3115.	12.75	729.	205.	68.	3.55		
+	ROUTED TO	L1-L2	2565.	13.50	726.	204.	68.	3.55		
+	HYDROGRAPH AT	L2	3857.	13.25	1173.	293.	98.	7.33		
+	2 COMBINED AT	L3R	6128.	13.42	1870.	492.	164.	10.88		
	ROUTED TO									

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+                    L2-L3   5275.  14.67   1832.   491.   164.   10.88
+   HYDROGRAPH AT
+                      L3   3087.  13.25    957.   242.    81.    5.85
+   2 COMBINED AT
+                       L   5861.  14.67   2589.   706.   236.   16.73
+   ROUTED TO
+                     LCP   5861.  14.67   2589.   706.   236.   16.73
+   HYDROGRAPH AT
+                      Z1    787.  12.50    115.    30.    10.    0.66
+   ROUTED TO
+                     ZCP    787.  12.50    115.    30.    10.    0.66
+   HYDROGRAPH AT
+                      M1   5138.  12.67   1139.   322.   108.    5.59
+   ROUTED TO
+                   M1-M2   3602.  14.67   1136.   320.   108.    5.59
+   HYDROGRAPH AT
+                      M2   3375.  13.42   1165.   294.    98.    7.53
+   2 COMBINED AT
+                       M   4842.  14.50   2225.   599.   200.   13.12
+   ROUTED TO
+                     MCP   4842.  14.50   2225.   599.   200.   13.12
+   HYDROGRAPH AT
+                      O1   1657.  13.33    507.   132.    44.    3.09
+   ROUTED TO
+                     OCP   1657.  13.33    507.   132.    44.    3.09
+   HYDROGRAPH AT
+                      N1   1697.  12.50    273.    73.    24.    1.52
+   ROUTED TO
+                   N1-N2   1095.  14.08    273.    73.    24.    1.52
+   HYDROGRAPH AT
+                      N2   1901.  13.17    548.   142.    48.    3.33
+   2 COMBINED AT
+                       N   1969.  13.25    815.   214.    71.    4.85
+   ROUTED TO
+                     NCP   1969.  13.25    815.   214.    71.    4.85
+   HYDROGRAPH AT
+                      P1   1518.  13.08    427.   114.    38.    2.44
+   ROUTED TO
+                     PCP   1518.  13.08    427.   114.    38.    2.44
+   HYDROGRAPH AT
+                      Q1   1551.  13.00    422.   117.    39.    2.23
+   ROUTED TO
+                     QCP   1551.  13.00    422.   117.    39.    2.23
```

```
 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*              MAY  1991            *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************
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*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 551-1748          *
*                                   *
*************************************
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X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X       XXXXX   X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX         XXX
```

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

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

HEC-1 INPUT PAGE 1

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

   1          ID   Buckeye/Sun Valley ADMS - 1 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID   500-year 24-hour
   4          ID   Existing Conditions
   5          ID   FRS #2 (Sub-basins S-U)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
```

```
 9          ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)    Lca(mi)    S(ft/mi)    LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       3
14          IN      15 01JAN94       0
15          JD    5.22    0.01
            * 24-hour distribution
16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
26          IN      15 01JAN94       0
27          JD   4.959    10.0
            * 24-hour distribution
28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

38          KK      S1
39          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
40          KM   L=2.32     Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
41          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
42          KO       0       0     0.0       1      22
43          BA  1.4105
44          LG    0.35    0.35   4.484   0.352   6.918
            * S1
45          UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
46          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
47          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

                                        REC-1 INPUT                                          PAGE  2

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

48          KK     SCP   CNAME       S
49          KO       0       0     0.0       0      22
50          KM     SCP

51          KK      U1
52          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
53          KM   L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
54          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
55          KO       0       0     0.0       1      22
56          BA  1.3705
57          LG    0.35    0.37   5.258   0.233   6.449
            * U1
58          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
59          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
60          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
61          UI    26.8     0.0

62          KK     UCP   CNAME       U
63          KO       0       0     0.0       0      22
64          KM     UCP

65          KK      T1
66          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
67          KM   L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
68          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
69          KO       0       0     0.0       1      22
70          BA  3.0415
71          LG    0.35    0.35   4.644   0.299  11.497
            * T1
72          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
73          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
74          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
75          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
76          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

77          KK     TCP   CNAME       T
78          KO       0       0     0.0       0      22
79          KM     TCP
80          KK
```

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	S1	2030.	12.33	258.	68.	23.	1.41		
+	ROUTED TO	SCP	2030.	12.33	258.	68.	23.	1.41		
+	HYDROGRAPH AT	U1	1887.	12.42	269.	71.	24.	1.37		
+	ROUTED TO	UCP	1887.	12.42	269.	71.	24.	1.37		
+	HYDROGRAPH AT	T1	3007.	12.67	601.	164.	55.	3.04		

```
          ROUTED TO
+                        TCP      3007.   12.67        601.        164.        55.       3.04


 *** NORMAL END OF HEC-1 ***
1*************************************                                                  *************************************
*                                   *                                                  *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                                                  U.S. ARMY CORPS OF ENGINEERS      *
*              MAY  1991            *                                                  HYDROLOGIC ENGINEERING CENTER     *
*           VERSION 4.0.1E          *                                                        609 SECOND STREET           *
*                                   *                                                     DAVIS, CALIFORNIA 95616          *
* RUN DATE            TIME          *                                                        (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

                                        HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   500-year 24-hour
  4           ID   Existing Conditions
  5           ID   FRS #3 (Sub-basins V-Y)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      15 01JAN94       0
 15           JD    5.23    0.01
              * 24-hour distribution
 16           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 17           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 18           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 19           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 20           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 21           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 22           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 23           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 24           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 25           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 26           IN      15 01JAN94       0
 27           JD   4.969    10.0
              * 24-hour distribution
 28           PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 29           PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 30           PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 31           PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 32           PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 33           PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 34           PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 35           PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 36           PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 37           PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 38           KK      V1
 39           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM   L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
 41           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0        0     0.0        1       22
 43           BA  0.6646
 44           LG    0.35     0.35   3.972   0.405  13.864
              * V1
 45           UI     0.0    52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
 46           UI  313.66   281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
 47           UI   74.78    66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
 48           UI   16.36     9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
 49           UI     0.0

                                        HEC-1 INPUT                                                    PAGE  2

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


 50           KK     VCP   CNAME       V
 51           KO       0       0     0.0        0       22
 52           RN     VCP

 53           KK      W1
 54           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 55           KM   L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
 56           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 57           KO       0        0     0.0        1       22
 58           BA   3.894
```

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 59          LG    0.35    0.35   3.976    0.41  15.199
             * M1
 60          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 61          UI  1844.7 1656.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
 62          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
 63          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 64          UI   57.11     0.0

 65          KK   M1-M2   CNAME     M2R
 66          KO       0       0     0.0       0      22
 67          RS       6    FLOW     0.0     0.0
 68          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
             * M1-M2
 69          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 70          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 71          KK      M2
 72          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 73          KM   L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
 74          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 75          KO       0       0     0.0       1      22
 76          BA  2.8478
 77          LG    0.35    0.35   4.081   0.402   3.547
             * M2
 78          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 79          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 80          UI   349.1  278.45  257.45  236.67  189.98  167.07  164.65  106.64  106.64  106.64
 81          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 82          UI   41.77     0.0

 83          KK       W   CNAME     WCP
 84          KO       0       0     0.0       0      22
 85          RC       2     0.0

 86          KK     WCP   CNAME       W
 87          KO       0       0     0.0       0      22
 88          RN     WCP

 89          KK      X1
 90          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM   L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
 92          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 93          KO       0       0     0.0       1      22
 94          BA  0.7867
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 95          LG    0.35    0.35   3.955   0.417  12.555
             * X1
 96          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
 97          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
 98          UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
 99          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

100          KK     XCP   CNAME       X
101          KO       0       0     0.0       0      22
102          RN     XCP

103          KK      Y1
104          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM   L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
106          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
107          KO       0       0     0.0       1      22
108          BA  0.5808
109          LG    0.35    0.35   4.044   0.415  10.947
             * Y1
110          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
111          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

112          KK     YCP   CNAME       Y
113          KO       0       0     0.0       0      22
114          RN     YCP
115          ZZ
```

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	V1	735.	12.50	130.	36.	12.	0.66		
+	ROUTED TO	VCP	735.	12.50	130.	36.	12.	0.66		
+	HYDROGRAPH AT	M1	4159.	12.50	757.	212.	71.	3.89		
+	ROUTED TO	M1-M2	3677.	12.92	757.	212.	71.	3.89		
+	HYDROGRAPH AT	M2	2914.	12.50	484.	125.	42.	2.85		
+	2 COMBINED AT	W	5386.	12.83	1231.	334.	112.	6.74		
+	ROUTED TO	WCP	5386.	12.83	1231.	334.	112.	6.74		
+	HYDROGRAPH AT	X1	902.	12.50	150.	41.	14.	0.79		
+	ROUTED TO	XCP	902.	12.50	150.	41.	14.	0.79		
+	HYDROGRAPH AT	Y1	1158.	12.17	109.	30.	10.	0.59		

```
        ROUTED TO
+                          YCP      1158.   12.17        109.        30.        10.       0.58

 *** NORMAL END OF HEC-1 ***
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E.6.6.bHEC-1 Output File for 500-Year 24-Hour (Future Conditions)

```
1*************************************                    *************************************
*                                   *                    *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *   U.S. ARMY CORPS OF ENGINEERS    *
*             MAY  1991             *                    *  HYDROLOGIC ENGINEERING CENTER    *
*          VERSION 4.0.1E           *                    *        609 SECOND STREET          *
*                                   *                    *     DAVIS, CALIFORNIA 95616       *
*  RUN DATE          TIME           *                    *       (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

                                        HEC-1 INPUT                                          PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   500-year 24-hour
  4           ID   Future Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU District (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      15 01JAN94       0
 15           JD    5.23     0.01
              * 24-hour distribution
 16           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 17           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 18           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 19           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 20           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 21           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 22           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 23           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 24           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 25           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 26           IN      15 01JAN94       0
 27           JD   4.969     10.0
              * 24-hour distribution
 28           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 29           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 30           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 31           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 32           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 33           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 34           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 35           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 36           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 37           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 38           IN      15 01JAN94       0
 39           JD   4.801     20.0
              * 24-hour distribution
 40           PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
 41           PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
 42           PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
 43           PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
 44           PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
 45           PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
 46           PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
 47           PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
 48           PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
 49           PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
 50           IN      15 01JAN94       0
 51           JD   4.639     40.0
              * 24-hour distribution

                                        HEC-1 INPUT                                          PAGE  2

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 52          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 53          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 54          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 55          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 56          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 57          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 58          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 59          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 60          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 61          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
 62          IN      15 01JAN94       0
 63          JD   4.482    80.0
             * 24-hour distribution
 64          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
 65          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
 66          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
 67          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
 68          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
 69          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
 70          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
 71          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
 72          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
 73          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

 74          KK      G1
 75          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM         L=2.38     Lca=1.08     S=33.76     Kn=0.045     LAG=47.0
 77          KM         S-GRAPH TYPE=DESERT RANGELAND
 78          KO       0       0     0.0       1      22
 79          BA  1.1192
 80          LG   0.297   0.297   4.688   0.326  15.814
             * G1
 81          UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 82          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 83          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 84          UI   19.51   19.51   19.51   19.51   19.51     0.0

 85          KK   G1-Do
 86          KO       0       0     0.0       0      22
 87          DT    G1-D    47.0     0.0
             * Curve 1
 88          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 89          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 90          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 91          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 92          KK     GCP    CNAME       G
 93          KO       0       0     0.0       0      22
 94          RN     GCP
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 95          KK      J1
 96          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 97          KM         L=4.09     Lca=1.78     S=70.82     Kn=0.055     LAG=75.0
 98          KM         S-GRAPH TYPE=DESERT RANGELAND
 99          KO       0       0     0.0       1      22
100          BA  1.7341
101          LG    0.28    0.27    3.25   0.657    30.0
             * J1
102          UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
103          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
104          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
105          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
106          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
107          UI   18.95   18.95   18.95   18.95   18.95   18.95

108          KK   J1-Do
109          KO       0       0     0.0       0      22
110          DT    J1-D   102.0     0.0
             * Curve 1
111          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
112          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
113          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
114          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

115          KK   J1-J2    CNAME     J2R
116          KO       0       0     0.0       0      22
117          RS      30    FLOW     0.0     0.0
118          RC   0.055    0.04   0.055 24090.0  0.0086     0.0
             * J1-J2
119          RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
120          RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

121          KK      J2
122          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
123          KM         L=5.18     Lca=2.51     S=45.01     Kn=0.050     LAG=93.0
124          KM         S-GRAPH TYPE=DESERT RANGELAND
125          KO       0       0     0.0       1      22
126          BA  3.6379
127          LG    0.25    0.26   3.623   0.499    30.0
             * J2
128          UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
129          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
130          UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
131          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
132          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
133          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
134          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

135          KK   J2-Do
136          KO       0       0     0.0       0      22
137          DT    J2-D   224.0     0.0
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            * Curve 1
138         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
139         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
140         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
141         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

142         KK    K3RB    CNAME    J2-K3
143         KO       0        0      0.0        0       22
144         RC       2      0.0

145         KK   J2-K3    CNAME     K3RB
146         KO       0        0      0.0        0       22
147         RS       6     FLOW      0.0      0.0
148         RC    0.05    0.048     0.05   4072.0   0.0059      0.0
            * J2-K3
149         RX     0.0    390.0    490.0    502.0    520.0    532.0    632.0   1022.0
150         RY    20.0     14.5     11.5     10.0     10.0     11.5     14.5     20.0

151         KK      K1
152         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
153         KM          L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
154         KM          S-GRAPH TYPE-PHOENIX MOUNTAIN
155         KO       0        0      0.0        1       22
156         BA   1.543
157         LG   0.112    0.255    4.382    0.365    21.06
            * K1
158         UI     0.0   129.88   168.84   442.11   706.31   896.38  1061.91  1457.77  1111.25   821.11
159         UI  726.82   641.11   561.31   488.34   403.67   331.29   304.06   271.41   213.37   169.75
160         UI  154.58   142.25   108.11    99.57    85.17    63.56    63.56    63.56    38.61    24.89
161         UI   24.89    24.89    24.89    24.89    24.89    24.89    24.89      0.0

162         KK   K1-K2    CNAME      K2R
163         KO       0        0      0.0        0       22
164         RS      16     FLOW      0.0      0.0
165         RC   0.048     0.05    0.048  30021.0    0.015      0.0
            * K1-K2
166         RX     0.0     20.0     55.0     85.0    235.0    259.0    289.0    309.0
167         RY    22.0     21.0     20.0     10.0     10.0     20.0     21.0     22.0

168         KK      K2
169         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
170         KM          L=7.3       Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
171         KM          S-GRAPH TYPE-DESERT RANGELAND
172         KO       0        0      0.0        1       22
173         BA   2.365
174         LG   0.272    0.277    4.471    0.382    21.86
            * K2
175         UI     0.0    66.91    66.91    66.91    66.91    66.91   132.91   192.38   234.97   273.87
176         UI  324.09   369.36   410.96   453.67   472.54   532.28   558.99    587.9   605.63   610.31
177         UI  641.26   641.26   641.26   641.26   620.87   601.29   597.45   565.84   516.46   476.06
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

178         UI  460.97   411.12   386.21   359.14   335.65   312.63   290.38   266.75   251.32   236.77
179         UI  209.97    203.8   183.22   181.03   149.42   149.42   135.15   126.15   126.15   109.44
180         UI   102.6    102.6    98.17    70.92    70.92    70.92    70.92    70.92    46.43     45.8
181         UI    45.8     45.8     45.8     45.8     45.8     45.8    16.92    16.29    16.29    16.29
182         UI   16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29
183         UI   16.29    16.29    16.29    16.29    16.29    16.29    16.29    16.29      0.0

184         KK   K2-Do
185         KO       0        0      0.0        0       22
186         DT    K2-D    128.0      0.0
            * Curve 1
187         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
188         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
189         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
190         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

191         KK    K3RA    CNAME    K2-K3
192         KO       0        0      0.0        0       22
193         RC       2    1.543

194         KK   K2-K3    CNAME     K3RA
195         KO       0        0      0.0        0       22
196         RS      20     FLOW      0.0      0.0
197         RC    0.05    0.048     0.05  25950.0   0.0084      0.0
            * K2-K3
198         RX     0.0    390.0    490.0    502.0    520.0    532.0    632.0   1022.0
199         RY    20.0     14.5     11.5     10.0     10.0     11.5     14.5     20.0

200         KK      F1
201         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
202         KM          L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
203         KM          S-GRAPH TYPE-PHOENIX MOUNTAIN
204         KO       0        0      0.0        1       22
205         BA  2.7854
206         LG    0.24     0.27    4.322    0.384   32.052
            * F1
207         UI     0.0   203.88   203.88   570.72   906.57  1255.03  1478.42  1724.35  2318.93  1830.17
208         UI  1348.3  1190.57  1067.92   966.08   849.55   752.02    639.8   527.23   486.03   447.26
209         UI  380.98   319.46   260.51   239.96   223.29   181.76    156.3    156.3   107.68    99.77
210         UI   99.77    99.77    67.24    39.08    39.08    39.08    39.08    39.08    39.08    39.08
211         UI   39.08    39.08    39.08      0.0

212         KK   F1-Do
213         KO       0        0      0.0        0       22
214         DT    F1-D    133.0      0.0
            * Curve 1
215         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
216         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
217         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
218         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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219          KK   F1-F2   CNAME     F2R
220          KO       0       0     0.0       0      22
221          RS       4    FLOW     0.0     0.0
222          RC   0.053   0.045   0.055  8635.0   0.012     0.0
             * F1-F2
223          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
224          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

225          KK      F2
226          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
227          KM          L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
228          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
229          KO       0       0     0.0       1      22
230          BA  2.5261
231          LG    0.25    0.25   4.311   0.436  33.026
             * F2
232          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
233          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
234          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
235          UI  163.43  124.69  114.4   114.4    99.09   73.02   73.02   73.02   73.02   72.49
236          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
237          UI    28.6    28.6    28.6     0.0

238          KK    F2-D
239          KO       0       0     0.0       0      22
240          DT    F2-D   130.0     0.0
             * Curve 1
241          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
242          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
243          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
244          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

245          KK     F3R   CNAME   F2-R3
246          KO       0       0     0.0       0      22
247          RC       2     0.0

248          KK   F2-F3   CNAME     F3R
249          KO       0       0     0.0       0      22
250          RS       5    FLOW     0.0     0.0
251          RC    0.05   0.047   0.048  7059.0    0.01     0.0
             * F2-F3
252          RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
253          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

254          KK      F3
255          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
256          KM          L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
257          KM          S-GRAPH TYPE=DESERT RANGELAND
258          KO       0       0     0.0       1      22
259          BA  0.7363
260          LG    0.25    0.27   3.266   0.656    30.0
             * F3
261          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

262          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
263          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
264          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
265          UI     0.0

266          KK   F3-Do
267          KO       0       0     0.0       0      22
268          DT    F3-D    45.0     0.0
             * Curve 1
269          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
270          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
271          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
272          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

273          KK    E4RB   CNAME   F3-R4
274          KO       0       0     0.0       0      22
275          RC       2     0.0

276          KK   F3-E4   CNAME    E4RB
277          KO       0       0     0.0       0      22
278          RS      21    FLOW     0.0     0.0
279          RC    0.05   0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
280          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
281          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

282          KK      H1
283          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
284          KM          L=2.41      Lca=1.09      S=64.89      Kn=0.055      LAG=51.0
285          KM          S-GRAPH TYPE=DESERT RANGELAND
286          KO       0       0     0.0       1      22
287          BA  1.0659
288          LG    0.25    0.29   2.733   0.945    30.0
             * H1
289          UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
290          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
291          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
292          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

293          KK   H1-Do
294          KO       0       0     0.0       0      22
295          DT    H1-D    60.0     0.0
             * Curve 1
296          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
297          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
298          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
299          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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300          KK   H1-H2   CNAME     H2R
301          KO       0       0     0.0       0      22
302          RS      23    FLOW     0.0     0.0
303          RC   0.053    0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
304          RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
305          RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

306          KK      E1
307          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
308          KM          L=2.51     Lca=1.13     S=178.34     Kn=0.055     LAG=43.0
309          KM          S-GRAPH TYPE-PHOENIX MOUNTAIN
310          KO       0       0     0.0       1      22
311          BA  0.9558
312          LG    0.25    0.25   5.377   0.273   30.69
             * E1
313          UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
314          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
315          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
316          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
317          UI     0.0

318          KK   E1-Do
319          KO       0       0     0.0       0      22
320          DT    E1-D    53.0     0.0
             * Curve 1
321          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
322          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
323          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
324          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

325          KK   E1-E2   CNAME     E2R
326          KO       0       0     0.0       0      22
327          RS       7    FLOW     0.0     0.0
328          RC    0.05   0.047   0.046 11365.0   0.016     0.0
             * E1-E2
329          RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
330          RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

331          KK      E2
332          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
333          KM          L=2.92     Lca=0.80     S=96.39     Kn=0.055     LAG=45.0
334          KM          S-GRAPH TYPE-DESERT RANGELAND
335          KO       0       0     0.0       1      22
336          BA  1.9794
337          LG    0.25    0.25   5.043   0.306    30.0
             * E2
338          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
339          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
340          UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
341          UI   36.05   36.05   36.05   36.05
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

342          KK   E2-Do
343          KO       0       0     0.0       0      22
344          DT    E2-D   118.0     0.0
             * Curve 1
345          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
346          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
347          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
348          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

349          KK     E3R   CNAME   E2-E3
350          KO       0       0     0.0       0      22
351          HC       2     0.0

352          KK   E2-E3   CNAME     E3R
353          KO       0       0     0.0       0      22
354          RS      12    FLOW     0.0     0.0
355          RC   0.052   0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
356          RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
357          RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

358          KK      E3
359          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
360          KM          L=3.87     Lca=1.99     S=49.65     Kn=0.050     LAG=75.0
361          KM          S-GRAPH TYPE-DESERT RANGELAND
362          KO       0       0     0.0       1      22
363          BA  2.4882
364          LG    0.25    0.25   4.358   0.377    30.0
             * E3
365          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
366          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
367          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
368          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
369          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
370          UI   27.19   27.19   27.19   27.19   27.19   27.19

371          KK   E3-Do
372          KO       0       0     0.0       0      22
373          DT    E3-D   152.0     0.0
             * Curve 1
374          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
375          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
376          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
377          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

378          KK    E4RA   CNAME   E3-E4
379          KO       0       0     0.0       0      22
380          HC       2     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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361          KK   E3-E4   CNAME    E4RA
362          KO       0       0     0.0       0      22
363          RS      14    FLOW     0.0     0.0
364          RC   0.056   0.049   0.056 13855.0  0.0048     0.0
             * E3-E4
365          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
366          RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

367          KK      H2
368          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
369          KM          L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
370          KM          S-GRAPH TYPE=DESERT RANGELAND
371          KO       0       0     0.0       1      22
372          BA  1.4003
373          LG    0.25    0.27   3.222   0.664    30.0
             * H2
374          UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
375          UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
376          UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
377          UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
378          UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
379          UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
380          UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

381          KK   H2-Do
382          KO       0       0     0.0       0      22
383          DT    H2-D    88.0     0.0
             * Curve 1
384          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
385          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
386          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
387          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

388          KK      K4
389          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
390          KM          L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
391          KM          S-GRAPH TYPE=DESERT RANGELAND
392          KO       0       0     0.0       1      22
393          BA  3.0419
394          LG    0.25    0.25   3.816   0.441    30.0
             * K4
395          UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
396          UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
397          UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
398          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
399          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
400          UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
401          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
402          UI   24.44   24.44   24.44   24.44   24.44   24.44
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

403          KK   E4-Do
404          KO       0       0     0.0       0      22
405          DT    E4-D   190.0     0.0
             * Curve 1
406          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
407          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
408          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
409          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

410          KK     E5R   CNAME  E4H2E5
411          KO       0       0     0.0       0      22
412          RC       5     0.0

413          KK  E4H2E5   CNAME     E5R
414          KO       0       0     0.0       0      22
415          RS      15    FLOW     0.0     0.0
416          RC    0.06    0.05    0.06 15206.0  0.0051     0.0
             * E4H2-E5
417          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
418          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

419          KK      K3
420          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
421          KM          L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
422          KM          S-GRAPH TYPE=DESERT RANGELAND
423          KO       0       0     0.0       1      22
424          BA  1.6364
425          LG    0.25    0.27   3.421     0.6    30.0
             * K3
426          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
427          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
428          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
429          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
430          UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
431          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
432          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

433          KK   K3-Do
434          KO       0       0     0.0       0      22
435          DT    K3-D   101.0     0.0
             * Curve 1
436          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
437          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
438          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
439          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

440          KK      E5
441          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
442          KM          L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
443          KM          S-GRAPH TYPE=DESERT RANGELAND
444          KO       0       0     0.0       1      22
445          BA  1.3075
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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466          LG    0.25    0.25    3.94   0.473    30.0
             * E5
467          UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
468          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
469          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
470          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
471          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

472          KK   E5-Do
473          KO       0       0     0.0       0      22
474          DT    E5-D    79.0     0.0
             * Curve 1
475          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
476          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
477          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
478          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

479          KK     E6R   CNAME  E5K2E6
480          KO       0       0     0.0       0      22
481          HC       5   1.543

482          KK  E5K2E6   CNAME     E6R
483          KO       0       0     0.0       0      22
484          RS       5    FLOW     0.0     0.0
485          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
             * E5K3-E6
486          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
487          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

488          KK      E6
489          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
490          KM          L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
491          KM          S-GRAPH TYPE=DESERT RANGELAND
492          KO       0       0     0.0       1      22
493          BA  2.0375
494          LG   0.289   0.289   4.356   0.392  18.293
             * E6
495          UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
496          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
497          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
498          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
499          UI   29.29   29.29     0.0

500          KK   E6-Do
501          KO       0       0     0.0       0      22
502          DT    E6-D   100.0     0.0
             * Curve 1
503          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
504          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
505          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
506          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

507          KK       E   CNAME     ECP
508          KO       0       0     0.0       0      22
509          HC       2   1.543

510          KK     ECP   CNAME       E
511          KO       0       0     0.0       0      22
512          RN     ECP
513          ZZ
```

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	G1	1238.	12.58	235.	66.	22.	1.12		
+	DIVERSION TO	G1-D	1075.	12.42	88.	24.	8.	1.12		
+	HYDROGRAPH AT	G1-Do	1229.	12.67	160.	42.	14.	1.12		
+	ROUTED TO	GCP	1229.	12.67	160.	42.	14.	1.12		
+	HYDROGRAPH AT	J1	1240.	13.00	379.	115.	39.	1.73		
+	DIVERSION TO	J1-D	1219.	12.92	184.	51.	17.	1.73		
+	HYDROGRAPH AT	J1-Do	1207.	13.17	231.	64.	21.	1.73		
+	ROUTED TO	J1-J2	708.	15.42	224.	64.	21.	1.73		
+	HYDROGRAPH AT	J2	2269.	13.33	821.	249.	83.	3.64		
+	DIVERSION TO	J2-D	2259.	13.25	408.	113.	38.	3.64		
+	HYDROGRAPH AT	J2-Do	2211.	13.42	496.	137.	46.	3.64		
+	2 COMBINED AT	K3RB	2201.	13.42	706.	199.	66.	5.37		

+	ROUTED TO	J2-K3	2032.	13.83	701.	199.	66.	5.37
+	HYDROGRAPH AT	K1	1922.	12.50	342.	98.	33.	1.54
+	ROUTED TO	K1-K2	1248.	13.75	341.	98.	33.	1.54
+	HYDROGRAPH AT	K2	1170.	13.67	503.	148.	50.	2.37
+	DIVERSION TO	K2-D	1160.	13.58	237.	65.	22.	2.37
+	HYDROGRAPH AT	K2-Do	1153.	13.83	311.	84.	28.	2.37
+	2 COMBINED AT	K3RA	2358.	13.83	652.	183.	61.	1.54
+	ROUTED TO	K2-K3	1775.	15.42	642.	183.	61.	1.54
+	HYDROGRAPH AT	F1	3182.	12.58	666.	201.	67.	2.79
+	DIVERSION TO	F1-D	2605.	12.42	233.	67.	22.	2.79
+	HYDROGRAPH AT	F1-Do	3182.	12.58	496.	135.	45.	2.79
+	ROUTED TO	F1-F2	2848.	12.83	490.	135.	45.	2.79
+	HYDROGRAPH AT	F2	2448.	12.75	600.	183.	61.	2.53
+	DIVERSION TO	F2-D	2133.	12.58	230.	66.	22.	2.53
+	HYDROGRAPH AT	F2-D	2448.	12.75	430.	118.	39.	2.53
+	2 COMBINED AT	F3R	5100.	12.83	911.	250.	83.	5.31
+	ROUTED TO	F2-F3	4226.	13.17	902.	250.	83.	5.31
+	HYDROGRAPH AT	F3	697.	12.75	162.	49.	16.	0.74
+	DIVERSION TO	F3-D	695.	12.67	82.	23.	8.	0.74
+	HYDROGRAPH AT	F3-Do	676.	12.83	96.	27.	9.	0.74
+	2 COMBINED AT	E4RB	4646.	13.17	993.	276.	92.	6.05
+	ROUTED TO	F3-E4	3293.	14.83	957.	276.	92.	6.05
+	HYDROGRAPH AT	H1	977.	12.67	219.	67.	22.	1.07
+	DIVERSION TO	H1-D	952.	12.58	108.	30.	10.	1.07
+	HYDROGRAPH AT	H1-Do	915.	12.83	134.	37.	12.	1.07
+	ROUTED TO	H1-M2	469.	14.50	123.	37.	12.	1.07
+	HYDROGRAPH AT	E1	1197.	12.50	238.	71.	24.	0.96
+	DIVERSION TO	E1-D	1092.	12.42	95.	27.	9.	0.96
+	HYDROGRAPH AT	E1-Do	1173.	12.58	163.	44.	15.	0.96
+	ROUTED TO	E1-E2	866.	13.00	161.	44.	15.	0.96
+	HYDROGRAPH AT	E2	2416.	12.58	481.	143.	48.	1.98
+	DIVERSION TO	E2-D	2328.	12.50	213.	59.	20.	1.98
+	HYDROGRAPH AT	E2-Do	2367.	12.67	309.	84.	28.	1.98
+	2 COMBINED AT	E3R	2364.	12.67	465.	127.	42.	2.94
+	ROUTED TO	E2-E3	2037.	13.58	449.	127.	42.	2.94
+	HYDROGRAPH AT	E3	1948.	13.00	589.	176.	59.	2.49
+	DIVERSION TO	E3-D	1915.	12.92	276.	77.	26.	2.49
+	HYDROGRAPH AT	E3-Do	1895.	13.17	366.	100.	33.	2.49

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          2 COMBINED AT
+                    E4RA    3327.  13.50     804.     225.     75.    5.42
          ROUTED TO
+                   E3-E4    2717.  14.58     784.     225.     75.    5.42
          HYDROGRAPH AT
+                      H2     869.  13.25     305.      93.     31.    1.40
          DIVERSION TO
+                    H2-D     869.  13.25     160.      44.     15.    1.40
          HYDROGRAPH AT
+                   H2-Do     806.  13.50     176.      49.     16.    1.40
          HYDROGRAPH AT
+                      E4    1800.  13.42     699.     212.     71.    3.04
          DIVERSION TO
+                    E4-D    1779.  13.33     346.      96.     32.    3.04
          HYDROGRAPH AT
+                   E4-Do    1759.  13.58     425.     117.     39.    3.04
          5 COMBINED AT
+                     E5R    6803.  14.67    2266.     658.    219.   16.98
          ROUTED TO
+                  E4H2E5    6109.  15.83    2247.     658.    219.   16.98
          HYDROGRAPH AT
+                      K3     981.  13.33     359.     110.     37.    1.64
          DIVERSION TO
+                    K3-D     974.  13.25     184.      51.     17.    1.64
          HYDROGRAPH AT
+                   K3-Do     946.  13.50     213.      59.     20.    1.64
          HYDROGRAPH AT
+                      E5    1108.  12.92     302.      91.     30.    1.31
          DIVERSION TO
+                    E5-D    1104.  12.83     143.      40.     13.    1.31
          HYDROGRAPH AT
+                   E5-Do    1086.  13.00     187.      51.     17.    1.31
          5 COMBINED AT
+                     E6R    9679.  15.67    4068.    1210.    404.    1.54
          ROUTED TO
+                  E5K2E6    9414.  16.00    4055.    1210.    404.    1.54
          HYDROGRAPH AT
+                      E6    1875.  12.75     424.     120.     40.    2.04
          DIVERSION TO
+                    E6-D    1841.  12.67     186.      50.     17.    2.04
          HYDROGRAPH AT
+                   E6-Do    1852.  12.83     264.      70.     23.    2.04
          2 COMBINED AT
+                       E    9449.  16.00    4152.    1281.    428.    1.54
          ROUTED TO
+                     ECP    9449.  16.00    4152.    1281.    428.    1.54

 *** NORMAL END OF HEC-1 ***
1*************************************                    *************************************
 *                                   *                    *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                    *   U.S. ARMY CORPS OF ENGINEERS    *
 *             MAY   1991            *                    *   HYDROLOGIC ENGINEERING CENTER   *
 *           VERSION 4.0.1E          *                    *         609 SECOND STREET         *
 *                                   *                    *      DAVIS, CALIFORNIA 95616      *
 *  RUN DATE            TIME         *                    *          (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 HEC1KN.

          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   Buckeye/Sun Valley ADMS - 23 March 2004
            2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
            3           ID   500-year 24-hour
            4           ID   Future Conditions
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 5          ID   FRS #1 (Sub-basins L-R)
 6          ID   Rainfall Loss Method - Green & Ampt
 7          ID   Unit Hydrograph Method - FCDMC S-Graph
 8          ID   Channel Routing Method - Normal Depth
 9          ID   Land Use - Town of Buckeye LU Districts (2003)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       0
14          IN      15 01JAN94       0
15          JD    5.23     0.01
            * 24-hour distribution
16          PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
17          PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
18          PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
19          PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
20          PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
21          PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
22          PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
23          PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
24          PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
25          PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
26          IN      15 01JAN94       0
27          JD   4.969     10.0
            * 24-hour distribution
28          PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
29          PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
30          PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
31          PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
32          PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
33          PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
34          PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
35          PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
36          PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
37          PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
38          IN      15 01JAN94       0
39          JD   4.801     20.0
            * 24-hour distribution
40          PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
41          PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
42          PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
43          PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
44          PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
45          PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
46          PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
47          PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
48          PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
49          PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
50          IN      15 01JAN94       0
51          JD   4.639     40.0
            * 24-hour distribution
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

52          PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
53          PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
54          PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
55          PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
56          PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
57          PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
58          PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
59          PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
60          PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
61          PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0
62          IN      15 01JAN94       0
63          JD   4.482     80.0
            * 24-hour distribution
64          PC     0.0    0.002    0.005    0.008    0.011    0.014    0.017     0.02    0.023    0.026
65          PC   0.029    0.032    0.035    0.038    0.041    0.044    0.048    0.052    0.056     0.06
66          PC   0.064    0.068    0.072    0.076     0.08    0.085     0.09    0.095      0.1    0.105
67          PC    0.11    0.115     0.12    0.126    0.133     0.14    0.147    0.155    0.163    0.172
68          PC   0.181    0.191    0.203    0.218    0.236    0.257    0.283    0.387    0.663    0.707
69          PC   0.735    0.758    0.776    0.791    0.804    0.815    0.825    0.834    0.842    0.849
70          PC   0.856    0.863    0.869    0.875    0.881    0.887    0.893    0.898    0.903    0.908
71          PC   0.913    0.918    0.922    0.926     0.93    0.934    0.938    0.942    0.946     0.95
72          PC   0.953    0.956    0.959    0.962    0.965    0.968    0.971    0.974    0.977     0.98
73          PC   0.983    0.986    0.989    0.992    0.995    0.998      1.0

74          KK      R1
75          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
76          KM         L=1.01     Lca=0.46     S=213.31     Kn=0.050     LAG=19.0
77          KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
78          KO       0        0      0.0        1       22
79          BA  0.2836
80          LG   0.181    0.282    4.358    0.474   62.581
            * R1
81          UI     0.0    62.13   235.96   401.77   464.88   281.67   216.06    150.6   113.69    76.27
82          UI   57.54    39.69    27.52    24.53     9.63     9.63     9.63     9.63      0.0

83          KK   R1-Do
84          KO       0        0      0.0        0       22
85          DT    R1-D     24.0      0.0
            * Curve 1
86          DI     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
87          DI   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0
            * Curve 1
88          DQ     0.0   2500.0   5000.0   7500.0  10000.0  12500.0  15000.0  17500.0  20000.0  22500.0
89          DQ   25000.  27500.0  30000.0  32500.0  35000.0  37500.0  40000.0  42500.0  45000.0  47500.0

90          KK     RCP    CNAME       R
91          KO       0        0      0.0        0       22
92          RM     RCP

93          KK      L1
94          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
95          KM         L=4.93     Lca=2.29     S=308.27     Kn=0.050     LAG=61.0
96          KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
97          KO       0        0      0.0        1       22
98          BA  3.5462
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 99         LG   0.271   0.318   4.357   0.352  16.317
            * L1
100         UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
101         UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
102         UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
103         UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
104         UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
105         UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

106         KK   L1-L2   CNAME     L2R
107         KO       0       0     0.0       0      22
108         RS      10    FLOW     0.0     0.0
109         RC   0.046   0.045   0.046 28949.0  0.0147     0.0
            * L1-L2
110         RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
111         RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

112         KK      L2
113         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
114         KM          L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
115         KM          S-GRAPH TYPE=DESERT RANGELAND
116         KO       0       0     0.0       1      22
117         BA  7.3294
118         LG    0.24   0.257   4.202   0.462  33.542
            * L2
119         UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
120         UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
121         UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
122         UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
123         UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
124         UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
125         UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

126         KK   L2-Do
127         KO       0       0     0.0       0      22
128         DT    L2-D   475.0     0.0
            * Curve 1
129         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
130         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
131         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
132         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

133         KK     L3R   CNAME   L2-L3
134         KO       0       0     0.0       0      22
135         HC       2     0.0

136         KK   L2-L3   CNAME     L3R
137         KO       0       0     0.0       0      22
138         RS      20    FLOW     0.0     0.0
139         RC    0.05   0.045    0.06 20567.0  0.0084     0.0
            * L2-L3
140         RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
141         RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

142         KK      L3
143         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
144         KM          L=4.75      Lca=2.00      S=44.27      Kn=0.055      LAG=91.0
145         KM          S-GRAPH TYPE=DESERT RANGELAND
146         KO       0       0     0.0       1      22
147         BA  5.8518
148         LG   0.205   0.257    3.98   0.449  45.272
            * L3
149         UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
150         UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
151         UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
152         UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
153         UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
154         UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
155         UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

156         KK   L3-Do
157         KO       0       0     0.0       0      22
158         DT    L3-D   456.9     0.0
            * Curve 2
159         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
160         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
161         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
162         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

163         KK       L   CNAME     LCF
164         KO       0       0     0.0       0      22
165         HC       2     0.0

166         KK     LCF   CNAME       L
167         KO       0       0     0.0       0      22
168         RN     LCF

169         KK      Z1
170         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
171         KM          L=1.70      Lca=0.66      S=47.00      Kn=0.055      LAG=39.0
172         KM          S-GRAPH TYPE=DESERT RANGELAND
173         KO       0       0     0.0       1      22
174         BA  0.6644
175         LG   0.168   0.277   4.004   0.499  58.182
            * Z1
176         UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
177         UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
178         UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

179         KK   Z1-Do
180         KO       0       0     0.0       0      22
181         DT    Z1-D    58.0     0.0
            * Curve 1
182         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
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183        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
184        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
                                        HEC-1 INPUT                                          PAGE  5

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

185        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

186        KK     ZCP   CNAME       Z
187        KO       0       0     0.0       0      22
188        RN     ZCP

189        KK      M1
190        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
191        KM          L=4.99      Lca=1.81      S=302.46      Kn=0.050      LAG=56.0
192        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
193        KO       0       0     0.0       1      22
194        BA  5.5949
195        LG   0.349   0.349   4.306   0.348  17.433
           * M1
196        UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
197        UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
198        UI  946.29  845.54  753.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
199        UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
200        UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
201        UI   64.47   64.47     0.0

202        KK   M1-Do
203        KO       0       0     0.0       0      22
204        DT    M1-D   170.0     0.0
           * Curve 1
205        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
206        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
207        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
208        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

209        KK   M1-M2   CNAME     M2R
210        KO       0       0     0.0       0      22
211        RS      29    FLOW     0.0     0.0
212        RC    0.04    0.04   0.045 38719.0  0.0133     0.0
           * M1-M2
213        RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
214        RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

215        KK      M2
216        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
217        KM          L=7.60      Lca=3.07      S=88.36      Kn=0.050      LAG=103.0
218        KM          S-GRAPH TYPE=DESERT RANGELAND
219        KO       0       0     0.0       1      22
220        BA  7.5274
221        LG   0.205   0.255   3.952   0.547  45.552
           * M2
222        UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
223        UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
224        UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0 1393.0 1284.99
225        UI  1178.7  1088.0  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
226        UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
227        UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
228        UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
229        UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0
                                        HEC-1 INPUT                                          PAGE  6

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

230        KK   M2-Do
231        KO       0       0     0.0       0      22
232        DT    M2-D   585.0     0.0
           * Curve 1
233        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
234        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
235        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
236        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

237        KK       M   CNAME     MCP
238        KO       0       0     0.0       0      22
239        RC       2     0.0

240        KK     MCP   CNAME       M
241        KO       0       0     0.0       0      22
242        RN     MCP

243        KK      O1
244        KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
245        KM          L=5.20      Lca=2.79      S=64.07      Kn=0.055      LAG=100.0
246        KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
247        KO       0       0     0.0       1      22
248        BA  3.0883
249        LG   0.252   0.252   4.189   0.443  31.44
           * O1
250        UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
251        UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
252        UI   785.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
253        UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
254        UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
255        UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
256        UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
257        UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
258        UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
259        UI   19.93   19.93   19.93     0.0

260        KK   O1-Do
261        KO       0       0     0.0       0      22
262        DT    O1-D   150.0     0.0
           * Curve 1
263        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
264        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
265        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
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266          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

267          KK     OCP   CNAME      O
268          KO       0       0    0.0       0      22
269          RN     OCP
                                        HEC-1 INPUT                                          PAGE  7

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


270          KK      N1
271          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
272          KM          L=2.79      Lca=1.44      S=340.38      Kn=0.050      LAG=40.0
273          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
274          KO       0       0    0.0       1      22
275          BA   1.524
276          LG   0.289   0.289   4.075   0.469  26.648
             * N1
277          UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
278          UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
279          UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
280          UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

281          KK   N1-Do
282          KO       0       0    0.0       0      22
283          DT    N1-D    65.0    0.0
             * Curve 1
284          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
285          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
286          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
287          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

288          KK   N1-N2   CNAME     N2R
289          KO       0       0    0.0       0      22
290          RS      24    FLOW    0.0     0.0
291          RC    0.05   0.047   0.05 26511.0  0.0115     0.0
             * N1-N2
292          RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
293          RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

294          KK      N2
295          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
296          KM          L=5.64      Lca=3.27      S=170.14      Kn=0.055      LAG=91.0
297          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
298          KO       0       0    0.0       1      22
299          BA  3.3254
300          LG   0.268   0.268   4.117   0.446  27.305
             * N2
301          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
302          UI  796.44  869.05  928.55  980.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
303          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
304          UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
305          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
306          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
307          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
308          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
309          UI   23.58   23.58   23.58   23.58   23.58
                                        HEC-1 INPUT                                          PAGE  8

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


310          KK   N2-Do
311          KO       0       0    0.0       0      22
312          DT    N2-D   150.0    0.0
             * Curve 1
313          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
314          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
315          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
316          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

317          KK       N   CNAME     NCP
318          KO       0       0    0.0       0      22
319          NC       2     0.0

320          KK     NCP   CNAME       N
321          KO       0       0    0.0       0      22
322          RN     NCP

323          KK      P1
324          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
325          KM          L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
326          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
327          KO       0       0    0.0       1      22
328          BA  2.4365
329          LG   0.312   0.312   4.193   0.424    18.0
             * P1
330          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
331          UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
332          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
333          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
334          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
335          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
336          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
337          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0

338          KK   P1-Do
339          KO       0       0    0.0       0      22
340          DT    P1-D    85.0    0.0
             * Curve 1
341          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
342          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
343          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
344          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

345          KK     PCP   CNAME       P
346          KO       0       0    0.0       0      22
347          RN     PCP
```

```
                                        HEC-1 INPUT                                                    PAGE  9

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

   348          KK      Q1
   349          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
   350          KM         L=5.23     Lca=2.81     S=228.56     Kn=0.055     LAG=78.0
   351          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
   352          KO       0       0     0.0       1      22
   353          BA  2.2336
   354          LG   0.338    0.34   4.203   0.396  15.896
                * Q1
   355          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
   356          UI  711.02  763.10  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
   357          UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
   358          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
   359          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
   360          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
   361          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
   362          UI   18.48   18.48   18.48

   363          KK   Q1-Do
   364          KO       0       0     0.0       0      22
   365          DT    Q1-D    71.5     0.0
                * Curve 1
   366          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
   367          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
                * Curve 1
   368          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
   369          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

   370          KK     QCP   CNAME       Q
   371          KO       0       0     0.0       0      22
   372          KM     QCP
   373          ZZ
```

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	R1	602.	12.25	86.	29.	10.	0.28		
+	DIVERSION TO	R1-D	467.	12.08	41.	12.	4.	0.28		
+	HYDROGRAPH AT	R1-Do	602.	12.25	58.	17.	6.	0.28		
+	ROUTED TO	RCP	602.	12.25	58.	17.	6.	0.28		
+	HYDROGRAPH AT	L1	3115.	12.75	729.	205.	68.	3.55		
+	ROUTED TO	L1-L2	2565.	13.50	726.	204.	68.	3.55		
+	HYDROGRAPH AT	L2	4792.	13.25	1708.	524.	176.	7.33		
+	DIVERSION TO	L2-D	4738.	13.17	658.	239.	80.	7.33		
+	HYDROGRAPH AT	L2-Do	4640.	13.42	1032.	287.	96.	7.33		
+	2 COMBINED AT	L3R	7023.	13.42	1718.	484.	162.	10.88		
+	ROUTED TO	L2-L3	5048.	15.00	1662.	484.	162.	10.88		
+	HYDROGRAPH AT	L3	4072.	13.25	1523.	485.	163.	5.85		
+	DIVERSION TO	L3-D	4072.	13.25	812.	230.	77.	5.85		
+	HYDROGRAPH AT	L3-Do	3969.	13.50	906.	258.	86.	5.85		
+	2 COMBINED AT	L	5811.	15.08	2367.	707.	236.	16.73		
+	ROUTED TO	LCP	5811.	15.08	2367.	707.	236.	16.73		
+	HYDROGRAPH AT	E1	945.	12.50	194.	64.	21.	0.66		
+	DIVERSION TO	E1-D	915.	12.42	101.	29.	10.	0.66		
+	HYDROGRAPH AT	E1-Do	920.	12.58	121.	35.	12.	0.66		
+	ROUTED TO	ECP	920.	12.58	121.	35.	12.	0.66		
+	HYDROGRAPH AT	M1	5144.	12.67	1143.	324.	108.	5.59		
+	DIVERSION TO	M1-D	3839.	12.42	306.	86.	29.	5.59		
+	HYDROGRAPH AT	M1-Do	5144.	12.67	906.	239.	80.	5.59		

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+        ROUTED TO
                          M1-M2    3047.   14.92      866.      239.      80.      5.59
+        HYDROGRAPH AT
                            M2     4590.   13.42     1698.      613.     205.      7.53
+        DIVERSION TO
                          M2-D     4590.   13.42     1040.      295.      98.      7.53
+        HYDROGRAPH AT
                          M2-Do    4423.   13.67     1123.      321.     107.      7.53
+        2 COMBINED AT
                             M     4790.   14.75     1911.      542.     181.     13.12
+        ROUTED TO
                           MCP     4790.   14.75     1911.      542.     181.     13.12
+        HYDROGRAPH AT
                            O1     1980.   13.33      703.      218.      73.      3.09
+        DIVERSION TO
                          O1-D     1696.   13.08      267.       76.      25.      3.09
+        HYDROGRAPH AT
                          O1-Do    1980.   13.33      518.      143.      48.      3.09
+        ROUTED TO
                           OCP     1980.   13.33      518.      143.      48.      3.09
+        HYDROGRAPH AT
                            N1     1823.   12.50      335.      100.      33.      1.52
+        DIVERSION TO
                          N1-D     1486.   12.33      115.       33.      11.      1.52
+        HYDROGRAPH AT
                          N1-Do    1823.   12.50      249.       67.      22.      1.52
+        ROUTED TO
                          N1-N2     964.   14.33      240.       67.      22.      1.52
+        HYDROGRAPH AT
                            N2     2209.   13.17      729.      221.      74.      3.33
+        DIVERSION TO
                          N2-D     1873.   13.00      269.       76.      25.      3.33
+        HYDROGRAPH AT
                          N2-Do    2209.   13.17      536.      146.      49.      3.33
+        2 COMBINED AT
                             N     2201.   13.17      767.      212.      71.      4.85
+        ROUTED TO
                           NCP     2201.   13.17      767.      212.      71.      4.85
+        HYDROGRAPH AT
                            P1     1615.   13.08      485.      140.      47.      2.44
+        DIVERSION TO
                          P1-D     1319.   12.83      155.       43.      14.      2.44
+        HYDROGRAPH AT
                          P1-Do    1615.   13.08      367.       98.      33.      2.44
+        ROUTED TO
                           PCP     1615.   13.08      367.       98.      33.      2.44
+        HYDROGRAPH AT
                            Q1     1582.   13.00      439.      125.      42.      2.23
+        DIVERSION TO
                          Q1-D     1250.   12.75      131.       36.      12.      2.23
+        HYDROGRAPH AT
                          Q1-Do    1582.   13.00      337.       89.      30.      2.23
+        ROUTED TO
                           QCP     1582.   13.00      337.       89.      30.      2.23

 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*            MAY  1991              *
*          VERSION 4.0.1E           *
*                                   *
*  RUN DATE            TIME         *
*                                   *
*************************************

*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*          (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
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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   Buckeye/Sun Valley ADMS - 23 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID   500-year 24-hour
   4          ID   Future Conditions
   5          ID   FRS #2 (Sub-basins S-U)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - Town of Buckeye LU Districts (2003)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       0
  14          IN      15 01JAN94       0
  15          JD    5.22    0.01
              * 24-hour distribution
  16          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  17          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  18          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  19          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  20          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  21          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  22          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  23          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  24          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  25          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
  26          IN      15 01JAN94       0
  27          JD   4.959    10.0
              * 24-hour distribution
  28          PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
  29          PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
  30          PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
  31          PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
  32          PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
  33          PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
  34          PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
  35          PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
  36          PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
  37          PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

  38          KK      S1
  39          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  40          KM          L=2.32     Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
  41          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
  42          KO       0       0     0.0       1      22
  43          BA  1.4105
  44          LG   0.289   0.313   4.485   0.392  25.978
              * S1
  45          UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
  46          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
  47          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

                                        HEC-1 INPUT                                                    PAGE  2

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

  48          KK   S1-Do
  49          KO       0       0     0.0       0      22
  50          DT    S1-D    61.0     0.0
              * Curve 1
  51          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  52          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  53          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  54          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  55          KK     SCP   CNAME       S
  56          KO       0       0     0.0       0      22
  57          RN     SCP

  58          KK      U1
  59          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  60          KM          L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
  61          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
  62          KO       0       0     0.0       1      22
  63          BA  1.3705
  64          LG   0.316   0.329   5.226   0.254  17.067
              * U1
  65          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
  66          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
  67          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
  68          UI    26.8     0.0

  69          KK   U1-Do
  70          KO       0       0     0.0       0      22
  71          DT    U1-D    47.0     0.0
              * Curve 1
  72          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  73          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  74          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  75          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  76          KK     UCP   CNAME       U
  77          KO       0       0     0.0       0      22
  78          RN     UCP

  79          KK      T1
  80          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  81          KM          L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
  82          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
  83          KO       0       0     0.0       1      22
  84          BA  3.0415
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 85          LG   0.327   0.327   4.641   0.316    18.7
             * T1
 86          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.63 2359.26
 87          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  753.63  697.43  590.13  511.99
 88          UI  476.04  440.92  366.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 89          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 90          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49
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HEC-1 INPUT PAGE 3

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

 91          KK   T1-Do
 92          KO       0       0     0.0       0      22
 93          DT    T1-D   103.0     0.0
             * Curve 2
 94          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 95          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 96          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 97          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 98          KK     TCP   CNAME       T
 99          KO       0       0     0.0       0      22
100          RM     TCP
101          ZZ
```

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	S1	2140.	12.33	314.	93.	31.	1.41		
+	DIVERSION TO	S1-D	1561.	12.17	108.	31.	10.	1.41		
+	HYDROGRAPH AT	S1-Do	2140.	12.33	231.	62.	21.	1.41		
+	ROUTED TO	SCP	2140.	12.33	231.	62.	21.	1.41		
+	HYDROGRAPH AT	U1	1939.	12.42	298.	84.	28.	1.37		
+	DIVERSION TO	U1-D	1291.	12.17	86.	24.	8.	1.37		
+	HYDROGRAPH AT	U1-Do	1939.	12.42	229.	60.	20.	1.37		
+	ROUTED TO	UCP	1939.	12.42	229.	60.	20.	1.37		
+	HYDROGRAPH AT	T1	3080.	12.67	645.	184.	61.	3.04		
+	DIVERSION TO	T1-D	2446.	12.42	186.	52.	17.	3.04		
+	HYDROGRAPH AT	T1-Do	3080.	12.67	499.	132.	44.	3.04		
+	ROUTED TO	TCP	3080.	12.67	499.	132.	44.	3.04		

```
*** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY  1991              *
*          VERSION 4.0.1E           *
*                                   *
* RUN DATE            TIME          *
*                                   *
*************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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

HEC-1 INPUT PAGE 1

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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
ID   Buckeye/Sun Valley ADMS - 23 March 2004
ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
ID   500-year 24-hour
ID   Future Conditions
ID   FRS #3 (Sub-basins V-Y)
ID   Rainfall Loss Method - Green & Ampt
ID   Unit Hydrograph Method - FCDMC S-Graph
ID   Channel Routing Method - Normal Depth
ID   Land Use - Town of Buckeye LU Districts (2003)
ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
*DIAGRAM
IT       5  1JAN94       0    2000
IO       0
IN      15 01JAN94       0
JD    5.23    0.01
* 24-hour distribution
PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0
IN      15 01JAN94       0
JD   4.969    10.0
* 24-hour distribution
PC     0.0   0.002   0.005   0.008   0.011   0.014   0.017    0.02   0.023   0.026
PC   0.029   0.032   0.035   0.038   0.041   0.044   0.048   0.052   0.056    0.06
PC   0.064   0.068   0.072   0.076    0.08   0.085    0.09   0.095     0.1   0.105
PC    0.11   0.115    0.12   0.126   0.133    0.14   0.147   0.155   0.163   0.172
PC   0.181   0.191   0.203   0.218   0.236   0.257   0.283   0.387   0.663   0.707
PC   0.735   0.758   0.776   0.791   0.804   0.815   0.825   0.834   0.842   0.849
PC   0.856   0.863   0.869   0.875   0.881   0.887   0.893   0.898   0.903   0.908
PC   0.913   0.918   0.922   0.926    0.93   0.934   0.938   0.942   0.946    0.95
PC   0.953   0.956   0.959   0.962   0.965   0.968   0.971   0.974   0.977    0.98
PC   0.983   0.986   0.989   0.992   0.995   0.998     1.0

KK      V1
KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM         L=2.86      Lca=1.75      S=344.82      Kn=0.050      LAG=43.0
KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
KO       0       0     0.0       1      22
BA  0.6646
LG   0.335   0.335   3.971   0.405  18.644
* V1
UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
UI     0.0
```

HEC-1 INPUT PAGE 2

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

KK   V1-Do
KO       0       0     0.0       0      22
DT    V1-D    23.0     0.0
* Curve 3
DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
* Curve 1
DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

KK     VCP   CNAME       V
KO       0       0     0.0       0      22
RN     VCP

KK      W1
KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM         L=3.46      Lca=1.78      S=486.28      Kn=0.050      LAG=44.0
KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
KO       0       0     0.0       1      22
BA   3.894
LG    0.35    0.35   3.975    0.41  15.228
* W1
UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
UI   57.11     0.0

KK   W1-W2   CNAME     W2R
KO       0       0     0.0       0      22
RS       6    FLOW     0.0     0.0
RC   0.050    0.05    0.06 11249.0  0.0189     0.0
* W1-W2
RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

KK      W2
KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM         L=3.25      Lca=1.19      S=178.54      Kn=0.050      LAG=44.0
KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
KO       0       0     0.0       1      22
BA  2.8478
LG   0.321   0.321   4.063   0.409  12.128
* W2
UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
UI   41.77     0.0
```

HEC-1 INPUT PAGE 3

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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
 90          KK   W2-Do
 91          KO       0       0     0.0       0      22
 92          DT    W2-D   130.0     0.0
             * Curve 1
 93          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 94          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 2
 95          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 96          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 97          KK       W    CNAME     WCP
 98          KO       0        0     0.0       0      22
 99          HC       2      0.0

100          KK     WCP    CNAME       W
101          KO       0        0     0.0       0      22
102          RN     WCP

103          KK      X1
104          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM          L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
106          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
107          KO       0        0     0.0       1      22
108          BA  0.7867
109          LG    0.35     0.35   3.947   0.418  12.841
             * X1
110          UI     0.0    66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
111          UI  370.57   326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
112          UI   78.81    72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
113          UI   12.69    12.69   12.69   12.69   12.69   12.69   12.69     0.0

114          KK     XCP    CNAME       X
115          KO       0        0     0.0       0      22
116          RN     XCP

117          KK      Y1
118          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
119          KM          L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
120          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
121          KO       0        0     0.0       1      22
122          BA  0.5808
123          LG    0.35     0.35   4.051   0.415  10.599
             * Y1
124          UI     0.0   162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
125          UI   88.57    57.25   43.55   22.05   22.05   22.05     0.0

126          KK     YCP    CNAME       Y
127          KO       0        0     0.0       0      22
128          RN     YCP
129          ZZ
```

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	V1	753.	12.50	138.	39.	13.	0.66		
+	DIVERSION TO	V1-D	602.	12.33	41.	12.	4.	0.66		
+	HYDROGRAPH AT	V1-Do	753.	12.50	105.	28.	9.	0.66		
+	ROUTED TO	VCP	753.	12.50	105.	28.	9.	0.66		
+	HYDROGRAPH AT	W1	4160.	12.50	758.	212.	71.	3.89		
+	ROUTED TO	W1-W2	3678.	12.92	757.	212.	71.	3.89		
+	HYDROGRAPH AT	W2	3047.	12.50	543.	149.	50.	2.85		
+	DIVERSION TO	W2-D	3047.	12.50	248.	66.	22.	2.85		
+	HYDROGRAPH AT	W2-Do	2726.	12.67	319.	84.	28.	2.85		
+	2 COMBINED AT	W	5513.	12.83	1062.	293.	98.	6.74		
+	ROUTED TO	WCP	5513.	12.83	1062.	293.	98.	6.74		
+	HYDROGRAPH AT	X1	902.	12.50	151.	42.	14.	0.79		
+	ROUTED TO	XCP	902.	12.50	151.	42.	14.	0.79		
+	HYDROGRAPH AT	Y1	1157.	12.17	109.	30.	10.	0.58		
+	ROUTED TO	YCP	1157.	12.17	109.	30.	10.	0.58		

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

E.6.7 ..... HEC-1 Output File PMP 6-Hour

E.6.7.a HEC-1 Output File for PMP 6-Hour (Exisiting Conditions)

```
1*************************************
*                                   *
*  FLOOD HYDROGRAPH PACKAGE  (HEC-1) *
*            MAY  1991              *
*         VERSION 4.0.1E            *
*                                   *
* RUN DATE          TIME            *
*                                   *
*************************************

*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*  HYDROLOGIC ENGINEERING CENTER    *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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

                                    HEC-1 INPUT                                          PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   PMP 6-hour
  4           ID   Existing Conditions
  5           ID   Area 3 - Sub-basins A-C
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: maq_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN       5 01JAN94       0
 15           JD     8.5    0.01
              * PMP 6-hour
 16           PI   0.018   0.018   0.018   0.019   0.019    0.02    0.02    0.02   0.021   0.021
 17           PI   0.021   0.022   0.027   0.027   0.027   0.027   0.027   0.027   0.028   0.029
 18           PI   0.031   0.033   0.036   0.038    0.07   0.071   0.072   0.074   0.077    0.08
 19           PI   0.081   0.092   0.096   0.105   0.117   0.134   1.843    1.07   0.773   0.476
 20           PI   0.416   0.357   0.184   0.178   0.172   0.166   0.158   0.152   0.067   0.062
 21           PI   0.058   0.054   0.051   0.049   0.046   0.045   0.042   0.042   0.041   0.039
 22           PI   0.027   0.027   0.026   0.026   0.026   0.025   0.024   0.024   0.024   0.023
 23           PI   0.023   0.023

 24           KK      C1
 25           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 26           KM   L=3.99      Lca=2.01      S=387.22      Kn=0.050      LAG=51.0
 27           KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 28           KO       0       0     0.0       1      22
 29           BA  3.5862
 30           LG   0.215   0.296   3.933   0.407  21.409
              * C1
 31           UI     0.0  236.76  236.76  527.08  911.83 1306.09 1576.15 1799.13  2131.6 2781.78
 32           UI  2038.2 1574.43 1396.84 1275.29 1154.27 1044.98  935.76  822.33  695.81  603.68
 33           UI  561.29  519.88  455.15  388.96  307.02  297.68   259.3   259.3  183.85  181.51
 34           UI  181.51  121.77  115.86  115.86  115.86  107.68   45.38   45.38   45.38   45.38
 35           UI   45.38   45.38   45.38   45.38   45.38   45.38   45.38   45.38

 36           KK   C1-C2   CNAME     C2R
 37           KO       0       0     0.0       0      22
 38           RS       5    FLOW     0.0     0.0
 39           RC    0.05   0.044    0.05 18437.0  0.0176     0.0
              * C1-C2
 40           RX     0.0    35.0    90.0   138.0   159.0   209.0   264.0   309.0
 41           RY    21.0    19.0    16.0    10.0    10.0    15.0    20.0    24.0

 42           KK      C2
 43           KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 44           KM   L=3.69      Lca=1.53      S=105.29      Kn=0.055      LAG=63.0
 45           KM   S-GRAPH TYPE=DESERT RANGELAND
 46           KO       0       0     0.0       1      22
 47           BA  1.9204
 48           LG    0.35    0.35    3.92   0.436     0.0
              * C2

                                    HEC-1 INPUT                                          PAGE  2

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
 49          UI     0.0  102.63  102.63  122.26  304.94  432.24  556.99  679.25  778.73  881.69
 50          UI   929.5  983.56  983.56  952.35  904.47  807.23  701.83  605.44  531.11  463.45
 51          UI  404.15  349.94  303.68  267.04  229.18  194.49  177.79  157.37  130.91  108.78
 52          UI  108.78   77.56   70.25   70.25   70.25   44.14   24.98   24.98   24.98   24.98
 53          UI   24.98   24.98   24.98   24.98   24.98   24.98   24.98     0.0

 54          KK     C3R   CNAME   C2-C3
 55          KO       0       0     0.0       0      22
 56          BC       2     0.0

 57          KK   C2-C3   CNAME     C3R
 58          KO       0       0     0.0       0      22
 59          RS       8    FLOW     0.0     0.0
 60          RC   0.046    0.05  0.0462 23418.0  0.0107     0.0
             * C2-C3
 61          RX     0.0    60.0   125.0   140.0   172.0   232.0   292.0   352.0
 62          RY    26.0    25.0    23.0    10.0    10.0    16.0    20.0    23.0

 63          KK      C3
 64          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 65          KM   L=4.44      Lca=2.51      S=56.33      Kn=0.050      LAG=84.0
 66          KM   S-GRAPH TYPE-DESERT RANGELAND
 67          KO       0       0     0.0       1      22
 68          BA  3.7859
 69          LG   0.345   0.345   4.357   0.372     0.0
             * C3
 70          UI     0.0  151.75  151.75  151.75  190.44  436.28  559.26  700.12  855.69  975.52
 71          UI  1073.3 1242.28 1321.31 1364.94 1436.99 1454.26 1454.26 1418.19 1372.63 1299.19
 72          UI  1161.9 1057.64   941.4  855.14  770.03  694.14  628.58  566.66   510.9  460.18
 73          UI   415.5   362.4  338.86  288.07  286.08  237.34  232.68  204.46  160.84  160.84
 74          UI  160.84  118.28  103.88  103.88  103.88  103.88   97.02   36.93   36.93   36.93
 75          UI   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93
 76          UI   36.93   36.93     0.0

 77          KK     C4R   CNAME   C3-C4
 78          KO       0       0     0.0       0      22
 79          BC       2     0.0

 80          KK      C4
 81          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 82          KM   L=2.18      Lca=0.88      S=44.31      Kn=0.045      LAG=40.0
 83          KM   S-GRAPH TYPE-DESERT RANGELAND
 84          KO       0       0     0.0       1      22
 85          BA  1.4001
 86          LG   0.327   0.327   4.737    0.29     0.0
             * C4
 87          UI     0.0  117.85  153.21  406.59  642.02   848.8 1023.51 1108.81 1120.37 1044.08
 88          UI  868.12  694.78   559.8  452.89  361.01  288.88  232.67  190.33  149.01  124.91
 89          UI    88.1   80.67   73.19   28.68   28.68   28.68   28.68   28.68   28.68   28.68
 90          UI     0.0
```



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

 91          KK       C   CNAME     CCP
 92          KO       0       0     0.0       0      22
 93          BC       2     0.0

 94          KK     CCP   CNAME       C
 95          KO       0       0     0.0       0      22
 96          RN     CCP

 97          KK      B1
 98          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 99          KM   L=2.52      Lca=1.19      S=227.45      Kn=0.050      LAG=38.0
100          KM   S-GRAPH TYPE-PHOENIX MOUNTAIN
101          KO       0       0     0.0       1      22
102          BA  0.5559
103          LG    0.35    0.35   3.733    0.47   6.272
             * B1
104          UI     0.0   49.25   72.53  179.11  283.42  353.86  433.69  556.28  354.96  293.83
105          UI  258.29  226.62  196.88  163.69   131.5  117.02  105.83   83.39    66.1   58.84
106          UI   53.95   40.03   37.76   29.84    24.1    24.1   23.99    9.44    9.44    9.44
107          UI    9.44    9.44    9.44    9.44    9.44    9.44

108          KK   B1-B2   CNAME     B2R
109          KO       0       0     0.0       0      22
110          RS       6    FLOW     0.0     0.0
111          RC   0.055   0.042   0.055 11334.0  0.0137     0.0
             * B1-B2
112          RX     0.0    75.0   140.0   167.0   193.0   226.0   296.0   371.0
113          RY    20.0    17.0    14.0    10.0    10.0    13.0    17.0    22.0

114          KK      B2
115          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
116          KM   L=2.21      Lca=0.98      S=84.6      Kn=0.050      LAG=45.0
117          KM   S-GRAPH TYPE-DESERT RANGELAND
118          KO       0       0     0.0       1      22
119          BA  0.4888
120          LG    0.35    0.35   3.617   0.513     0.0
             * B2
121          UI     0.0   36.57   36.57   108.2  170.94  233.37  285.41   325.0  349.22  347.33
122          UI  325.56  278.29   231.3  188.32  156.44  128.94  105.91   86.03   71.02   59.44
123          UI   49.34   38.76   32.78   25.03   25.03   18.39     8.9     8.9     8.9     8.9
124          UI     8.9     8.9     8.9     8.9

125          KK     B3R   CNAME   B2-B3
126          KO       0       0     0.0       0      22
127          BC       2     0.0

128          KK   B2-B3   CNAME     B3R
129          KO       0       0     0.0       0      22
130          RS      16    FLOW     0.0     0.0
131          RC    0.05   0.025    0.05 19622.0  0.0121     0.0
             * B2-B3
132          RX     0.0   120.0   278.0   285.0   301.5   312.5   446.5   529.5
133          RY    13.5    10.0    11.6    10.1    10.1    11.5    10.8    12.6
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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134          KK      B3
135          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
136          KM   L=3.72     Lca=1.65     S=63.31     Kn=0.045     LAG=59.0
137          KM   S-GRAPH TYPE=DESERT RANGELAND
138          KO       0        0     0.0       1      22
139          BA   1.987
140          LG   0.331   0.331   4.284   0.389     0.0
             * B3
141          UI     0.0  113.39  113.39   174.2  365.68  513.62  667.08  787.09   935.3 1014.02
142          UI  1066.6 1086.67 1065.15 1007.46  902.78  777.14  664.54  576.28  502.42  427.51
143          UI  369.72  321.51  269.65  233.59  211.46  173.87  158.42  120.18  120.18   89.23
144          UI   77.62   77.62   77.62   39.48    27.6    27.6    27.6    27.6    27.6    27.6
145          UI    27.6    27.6    27.6    27.6     0.0

146          KK       B   CNAME     BCP
147          KO       0       0     0.0       0      22
148          RC       2     0.0

149          KK     BCP   CNAME       B
150          KO       0       0     0.0       0      22
151          RN     BCP

152          KK      A1
153          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
154          KM   L=2.20     Lca=0.86     S=322.08     Kn=0.050     LAG=30.0
155          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
156          KO       0       0     0.0       1      22
157          BA  1.1067
158          LG    0.35    0.35   4.058   0.417   9.677
             * A1
159          UI     0.0  124.21  285.26  628.48  880.99 1178.37 1187.81  769.89  652.53  550.24
160          UI  454.03  347.39  294.06  245.68   184.1  150.55  131.95   95.22   84.89   60.78
161          UI   60.78   43.03   23.81   23.81   23.81   23.81   23.81   23.81     0.0

162          KK   A1-A2   CNAME     A2R
163          KO       0       0     0.0       0      22
164          RS       6    FLOW     0.0     0.0
165          RC   0.045   0.045   0.045 15153.0  0.0134     0.0
             * A1-A2
166          RX     0.0    75.0   125.0   185.0   190.0   220.0   280.0   340.0
167          RY    27.0    23.0    19.0    10.0    10.0    20.0    26.0    32.0

168          KK      A2
169          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
170          KM   L=3.34     Lca=1.28     S=94.61     Kn=0.055     LAG=57.0
171          KM   S-GRAPH TYPE=DESERT RANGELAND
172          KO       0       0     0.0       1      22
173          BA  1.6622
174          LG    0.35    0.35   4.547   0.339     0.0
             * A2
175          UI     0.0   98.18   98.18  167.77   329.1  468.89  598.13  713.32   831.1   883.8
176          UI  940.94  940.94  897.33  847.41  719.99  625.76  533.26  458.89  397.46   336.4
177          UI  288.45   247.3  210.36   185.1  155.06  143.14  104.07  104.07    78.8   67.21
178          UI   67.21   67.21   30.17    23.9    23.9    23.9    23.9    23.9    23.9    23.9
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

179          UI    23.9    23.9     0.0

180          KK     A3R   CNAME   A2-A3
181          KO       0       0     0.0       0      22
182          RC       2   2.769

183          KK   A2-A3   CNAME     A3R
184          KO       0       0     0.0       0      22
185          RS       8    FLOW     0.0     0.0
186          RC    0.05   0.043    0.05 18190.0  0.0116     0.0
             * A2-A3
187          RX     0.0    20.0    30.0   165.0   186.0   346.0   361.0   381.0
188          RY    20.0    19.0    18.0    10.0    10.0    20.0    21.0    22.0

189          KK      A3
190          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
191          KM   L=3.92     Lca=1.89     S=58.21     Kn=0.045     LAG=64.0
192          KM   S-GRAPH TYPE=DESERT RANGELAND
193          KO       0       0     0.0       1      22
194          BA  3.7294
195          LG    0.35    0.35    4.23   0.405     0.0
             * A3
196          UI     0.0   196.2   196.2   216.8  570.49  813.36 1043.19 1275.51 1464.32 1668.95
197          UI  1757.8 1876.99 1880.23 1841.12 1751.54 1592.99 1387.91 1202.84 1048.95  919.72
198          UI  805.43  710.05  606.86  538.24  447.15  397.83  367.89  300.84  290.73  207.95
199          UI  207.95  183.56   134.3   134.3   134.3  131.67   47.75   47.75   47.75   47.75
200          UI   47.75   47.75   47.75   47.75   47.75   47.75   47.75   47.75

201          KK       A   CNAME     ACP
202          KO       0       0     0.0       0      22
203          RC       2   6.498

204          KK     ACP   CNAME       A
205          KO       0       0     0.0       0      22
206          RN     ACP
207          ZZ
```

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	C1	10568.	3.83	2342.	589.	196.	3.59		
+	ROUTED TO	C1-C2	9615.	4.25	2336.	589.	196.	3.59		
+									17.80	4.25
	HYDROGRAPH AT									

```
+                          C2     4607.   4.25      1084.      271.      90.     1.92
          2 COMBINED AT
+                          C3R   14222.   4.25      3420.      860.     287.     5.51
          ROUTED TO
+                        C2-C3   13252.   4.75      3406.      860.     287.     5.51
+                                                                                      21.26      4.75
          HYDROGRAPH AT
+                          C3     7270.   4.58      2187.      547.     182.     3.79
          2 COMBINED AT
+                          C4R   20394.   4.67      5572.     1407.     469.     9.29
          HYDROGRAPH AT
+                          C4     4975.   3.83       849.      212.      71.     1.40
          2 COMBINED AT
+                           C    21853.   4.67      6418.     1619.     540.    10.69
          ROUTED TO
+                         CCP   21853.   4.67      6418.     1619.     540.    10.69
          HYDROGRAPH AT
+                          B1     1912.   3.67       323.       81.      27.     0.56
          ROUTED TO
+                        B1-B2    1694.   4.08       322.       81.      27.     0.56
+                                                                                      13.71      4.08
          HYDROGRAPH AT
+                          B2     1506.   3.92       269.       67.      22.     0.49
          2 COMBINED AT
+                          B3R    3109.   4.00       591.      148.      49.     1.04
          ROUTED TO
+                        B2-B3    2471.   5.08       587.      148.      49.     1.04
+                                                                                      12.25      5.08
          HYDROGRAPH AT
+                          B3     5110.   4.17      1146.      286.      95.     1.99
          2 COMBINED AT
+                           B     5110.   4.17      1726.      434.     145.     3.03
          ROUTED TO
+                         BCP     5110.   4.17      1726.      434.     145.     3.03
          HYDROGRAPH AT
+                          A1     4428.   3.58       664.      166.      55.     1.11
          ROUTED TO
+                        A1-A2    3855.   4.00       663.      166.      55.     1.11
+                                                                                      18.33      4.00
          HYDROGRAPH AT
+                          A2     4415.   4.17       972.      243.      81.     1.66
          2 COMBINED AT
+                          A3R    8152.   4.00      1634.      409.     136.     2.77
          ROUTED TO
+                        A2-A3    7533.   4.50      1631.      409.     136.     2.77
+                                                                                      16.61      4.50
          HYDROGRAPH AT
+                          A3     8894.   4.25      2122.      530.     177.     3.73
          2 COMBINED AT
+                           A    15421.   4.42      3749.      940.     313.     6.50
          ROUTED TO
+                         ACP    15421.   4.42      3749.      940.     313.     6.50
```

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 *** NORMAL END OF HEC-1 ***
1****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*             MAY  1991                *
*           VERSION 4.0.1E             *
*                                      *
*  RUN DATE          TIME              *
*                                      *
****************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
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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

HEC-1 INPUT PAGE 1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lenue & Wen Chen
  3           ID   PMP 6-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: maq_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN       5 01JAN94       0
 15           JD     9.8    0.01
              * PMP 6-hour FRS1
 16           PI   0.021   0.021   0.021   0.022   0.022   0.023   0.023   0.023   0.024   0.025
 17           PI   0.025   0.025   0.031   0.031   0.031   0.031   0.032   0.032   0.032   0.034
 18           PI   0.036   0.038   0.041   0.044   0.081   0.082   0.083   0.086   0.088   0.092
 19           PI   0.093   0.106   0.111   0.121   0.135   0.155   2.124   1.234   0.891   0.548
 20           PI    0.48   0.411   0.212   0.206   0.199   0.192   0.182   0.175   0.077   0.071
 21           PI   0.066   0.062   0.059   0.056   0.053   0.051   0.049   0.048   0.047   0.045
 22           PI   0.031   0.031    0.03   0.029   0.029   0.029   0.028   0.028   0.027   0.027
 23           PI   0.027   0.026

 24           KK      J1
 25           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 26           KM      L=4.09      Lca=1.78      S=70.82      Kn=0.055      LAG=75.0
 27           KM      S-GRAPH TYPE=DESERT RANGELAND
 28           KO       0        0      0.0        1       22
 29           BA  1.7341
 30           LG    0.35     0.35     3.25   0.652     0.0
              * J1
 31           UI     0.0    77.85    77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
 32           UI  644.32   684.11   713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
 33           UI  468.25   415.23   374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
 34           UI  146.76   131.28   119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
 35           UI   53.29     52.6    18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
 36           UI   18.95    18.95    18.95   18.95   18.95   18.95

 37           KK   J1-J2    CNAME     J2R
 38           KO       0        0      0.0        0       22
 39           RS      16     FLOW      0.0      0.0
 40           RC   0.055     0.04    0.055 24090.0  0.0086     0.0
              * J1-J2
 41           RX     0.0    161.0    247.0   254.0   271.0   279.0   393.0   660.0
 42           RY    17.0     12.5     12.2    10.8    10.0    12.1    12.9    17.0

 43           KK      J2
 44           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 45           KM      L=5.18      Lca=2.51      S=45.01      Kn=0.050      LAG=93.0
 46           KM      S-GRAPH TYPE=DESERT RANGELAND
 47           KO       0        0      0.0        1       22
 48           BA  3.6379
```



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

 49           LG   0.349    0.348    3.623   0.495   0.281
              * J2
 50           UI     0.0   131.71   131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
 51           UI  857.31   932.01  1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18 1218.5
 52           UI  1189.1  1123.15  1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
 53           UI  484.42   440.99   403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
 54           UI  201.95    172.6    139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
 55           UI   90.16    79.42    32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
 56           UI   32.06    32.06    32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

 57           KK    K3RB    CNAME    J2-K3
 58           KO       0        0      0.0        0       22
 59           HC       2      0.0

 60           KK   J2-K3    CNAME     K3RB
 61           KO       0        0      0.0        0       22
 62           RS       3     FLOW      0.0      0.0
 63           RC    0.05    0.048     0.05  4072.0  0.0059     0.0
              * J2-K3
 64           RX     0.0    390.0    490.0   502.0   520.0   532.0   632.0  1022.0
 65           RY    20.0     14.5     11.5    10.0    10.0    11.5    14.5    20.0

 66           KK      K1
 67           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 68           KM      L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
 69           KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 70           KO       0        0      0.0        1       22
 71           BA   1.343
 72           LG   0.112    0.255    4.382   0.365   21.06
              * K1
 73           UI     0.0   129.88   168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
 74           UI  726.82   641.11   561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
 75           UI  154.58   142.25   108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
 76           UI   24.89    24.89    24.89   24.89   24.89   24.89   24.89     0.0

 77           KK   K1-K2    CNAME     K2R
 78           KO       0        0      0.0        0       22
 79           RS       9     FLOW      0.0      0.0
 80           RC   0.048     0.05    0.048 30021.0  0.015     0.0
              * K1-K2
 81           RX     0.0     20.0     55.0    85.0   235.0   259.0   289.0   309.0
 82           RY    22.0     21.0     20.0    10.0    10.0    20.0    21.0    22.0

 83           KK      K2
 84           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 85           KM      L=7.3      Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
 86           KM      S-GRAPH TYPE=DESERT RANGELAND
 87           KO       0        0      0.0        1       22
 88           BA   2.365
 89           LG   0.341    0.346    4.471   0.348   1.018
              * K2
```

```
 90        UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
 91        UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
 92        UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
 93        UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
                                        HEC-1 INPUT                                          PAGE  3
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
 94        UI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
 95        UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
 96        UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
 97        UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
 98        UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0
 99        KK    K3RA   CNAME   K2-K3
100        KO       0       0     0.0       0      22
101        HC       2     0.0
102        KK   K2-K3   CNAME    K3RA
103        KO       0       0     0.0       0      22
104        RS      19    FLOW     0.0     0.0
105        RC    0.05   0.048    0.05 25950.0  0.0084     0.0
           * K2-K3
106        RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
107        RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0
108        KK      F1
109        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
110        KM      L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
111        KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
112        KO       0       0     0.0       1      22
113        BA  2.7854
114        LG   0.299    0.33   4.322   0.361  14.271
           * F1
115        UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
116        UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
117        UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
118        UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
119        UI   39.08   39.08   39.08     0.0
120        KK   F1-F2   CNAME    F2R
121        KO       0       0     0.0       0      22
122        RS       3    FLOW     0.0     0.0
123        RC   0.053   0.045   0.055  8635.0   0.012     0.0
           * F1-F2
124        RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
125        RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0
126        KK      F2
127        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
128        KM      L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
129        KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
130        KO       0       0     0.0       1      22
131        BA  2.5261
132        LG    0.35    0.35   4.311   0.375   3.026
           * F2
133        UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
134        UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
135        UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
136        UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
137        UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
138        UI    28.6    28.6    28.6     0.0
                                        HEC-1 INPUT                                          PAGE  4
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
139        KK     F3R   CNAME   F2-F3
140        KO       0       0     0.0       0      22
141        HC       2     0.0
142        KK   F2-F3   CNAME     F3R
143        KO       0       0     0.0       0      22
144        RS       4    FLOW     0.0     0.0
145        RC    0.05   0.047   0.048  7059.0    0.01     0.0
           * F2-F3
146        RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
147        RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0
148        KK      F3
149        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
150        KM      L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
151        KM      S-GRAPH TYPE=DESERT RANGELAND
152        KO       0       0     0.0       1      22
153        BA  0.7363
154        LG    0.35    0.35   3.266   0.647     0.0
           * F3
155        UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
156        UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
157        UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
158        UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
159        UI     0.0
160        KK    E4RB   CNAME   F3-E4
161        KO       0       0     0.0       0      22
162        RC       2     0.0
163        KK   F3-E4   CNAME    E4RB
164        KO       0       0     0.0       0      22
165        RS      16    FLOW     0.0     0.0
166        RC    0.05   0.044    0.05 27656.0  0.0072     0.0
           * F3-E4
167        RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
168        RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0
169        KK      H1
170        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
171        KM      L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
172        KM      S-GRAPH TYPE=DESERT RANGELAND
173        KO       0       0     0.0       1      22
174        BA  1.0659
175        LG    0.35    0.35   2.733   0.945     0.0
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            * H1
 176        UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
 177        UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
 178        UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
 179        UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0
                                          HEC-1 INPUT                                          PAGE  5

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


 180        KK   H1-H2   CNAME     H2R
 181        KO       0       0     0.0       0      22
 182        RS      16    FLOW     0.0     0.0
 183        RC   0.053    0.05   0.053 21738.0  0.0082     0.0
            * H1-H2
 184        RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
 185        RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

 186        KK      E1
 187        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 188        KM      L=2.51     Lca=1.13     S=178.34     Kn=0.055     LAG=43.0
 189        KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 190        KO       0       0     0.0       1      22
 191        BA  0.9558
 192        LG    0.35   0.378   5.377   0.222    0.69
            * E1
 193        UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
 194        UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
 195        UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
 196        UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
 197        UI     0.0

 198        KK   E1-E2   CNAME     E2R
 199        KO       0       0     0.0       0      22
 200        RS       5    FLOW     0.0     0.0
 201        RC    0.05   0.047   0.046 11365.0   0.016     0.0
            * E1-E2
 202        RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
 203        RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

 204        KK      E2
 205        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 206        KM      L=2.92     Lca=0.80     S=96.39     Kn=0.055     LAG=45.0
 207        KM      S-GRAPH TYPE=DESERT RANGELAND
 208        KO       0       0     0.0       1      22
 209        BA  1.9794
 210        LG    0.35    0.36   5.043   0.256     0.0
            * E2
 211        UI     0.0   148.1   148.1   438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
 212        UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
 213        UI  199.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
 214        UI   36.05   36.05   36.05   36.05

 215        KK     E3R   CNAME    E2-E3
 216        KO       0       0     0.0       0      22
 217        HC       2     0.0

 218        KK   E2-E3   CNAME     E3R
 219        KO       0       0     0.0       0      22
 220        RS       8    FLOW     0.0     0.0
 221        RC   0.052   0.046   0.052 19626.0  0.0088     0.0
            * E2-E3
 222        RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
 223        RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0
                                          HEC-1 INPUT                                          PAGE  6

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


 224        KK      E3
 225        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 226        KM      L=3.87     Lca=1.99     S=49.65     Kn=0.050     LAG=75.0
 227        KM      S-GRAPH TYPE=DESERT RANGELAND
 228        KO       0       0     0.0       1      22
 229        BA  2.4882
 230        LG    0.35    0.35   4.358   0.347     0.0
            * E3
 231        UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
 232        UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
 233        UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
 234        UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
 235        UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
 236        UI   27.19   27.19   27.19   27.19   27.19   27.19

 237        KK    E4RA   CNAME    E3-E4
 238        KO       0       0     0.0       0      22
 239        HC       2     0.0

 240        KK   E3-E4   CNAME    E4RA
 241        KO       0       0     0.0       0      22
 242        RS       9    FLOW     0.0     0.0
 243        RC   0.056   0.049   0.056 13855.0  0.0048     0.0
            * E3-E4
 244        RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
 245        RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

 246        KK      H2
 247        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 248        KM      L=4.41     Lca=2.60     S=44.71     Kn=0.050     LAG=89.0
 249        KM      S-GRAPH TYPE=DESERT RANGELAND
 250        KO       0       0     0.0       1      22
 251        BA  1.4003
 252        LG    0.35    0.35   3.222   0.664     0.0
            * H2
 253        UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.93  274.77  319.65
 254        UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
 255        UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
 256        UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
 257        UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
 258        UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
 259        UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0
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 260          KK      E4
 261          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 262          KM      L=5.36      Lca=2.01      S=38.26      Kn=0.050      LAG=102.0
 263          KM      S-GRAPH TYPE=DESERT RANGELAND
 264          KO       0       0     0.0       1      22
 265          BA  3.0419
 266          LG    0.35    0.35   3.816   0.439     0.0
              * E4
 267          UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
 268          UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
 269          UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
                                                  HEC-1 INPUT                                          PAGE  7

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

 270          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
 271          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
 272          UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
 273          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
 274          UI   24.44   24.44   24.44   24.44   24.44   24.44

 275          KK     E5R   CNAME  E4H2E5
 276          KO       0       0     0.0       0      22
 277          HC       5     0.0

 278          KK  E4H2E5   CNAME     E5R
 279          KO       0       0     0.0       0      22
 280          RS       9    FLOW     0.0     0.0
 281          RC    0.06    0.05    0.06 15206.0  0.0051     0.0
              * E4H2-E5
 282          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
 283          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

 284          KK      K3
 285          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 286          KM      L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
 287          KM      S-GRAPH TYPE=DESERT RANGELAND
 288          KO       0       0     0.0       1      22
 289          BA  1.6364
 290          LG    0.35    0.35   3.421   0.582     0.0
              * K3
 291          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
 292          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
 293          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
 294          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
 295          UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
 296          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
 297          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

 298          KK      E5
 299          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 300          KM      L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
 301          KM      S-GRAPH TYPE=DESERT RANGELAND
 302          KO       0       0     0.0       1      22
 303          BA  1.3075
 304          LG   0.347   0.344    3.94   0.429   0.968
              * E5
 305          UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
 306          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
 307          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
 308          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
 309          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

 310          KK     E6R   CNAME  E5K2E6
 311          KO       0       0     0.0       0      22
 312          HC       5     0.0
                                                  HEC-1 INPUT                                          PAGE  8

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

 313          KK  E5K2E6   CNAME     E6R
 314          KO       0       0     0.0       0      22
 315          RS       4    FLOW     0.0     0.0
 316          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
              * E5K3-E6
 317          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
 318          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

 319          KK      E6
 320          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 321          KM      L=3.04      Lca=1.06      S=34.17      Kn=0.050      LAG=57.0
 322          KM      S-GRAPH TYPE=DESERT RANGELAND
 323          KO       0       0     0.0       1      22
 324          BA  2.0375
 325          LG   0.343   0.336   4.356   0.367   0.711
              * E6
 326          UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
 327          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
 328          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
 329          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
 330          UI   29.29   29.29     0.0

 331          KK       E   CNAME     ECP
 332          KO       0       0     0.0       0      22
 333          HC       2     0.0

 334          KK     ECP   CNAME       E
 335          KO       0       0     0.0       0      22
 336          RN     ECP

 337          KK      G1
 338          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 339          KM      L=2.38      Lca=1.08      S=33.76      Kn=0.045      LAG=47.0
 340          KM      S-GRAPH TYPE=DESERT RANGELAND
 341          KO       0       0     0.0       1      22
 342          BA  1.1192
 343          LG    0.35    0.35   4.688   0.298     0.0
              * G1
 344          UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 345          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 346          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
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347          UI   19.51   19.51   19.51   19.51   19.51     0.0

348          KK     GCP   CNAME       G
349          KO       0       0     0.0       0      22
350          RN     GCP
351          ZZ
```

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	J1	4090.	4.42	1105.	276.	92.	1.73		
+	ROUTED TO	J1-J2	3547.	5.67	1101.	276.	92.	1.73		
+									14.80	5.67
+	HYDROGRAPH AT	J2	7410.	4.67	2436.	610.	203.	3.64		
+	2 COMBINED AT	K3RB	7691.	5.42	3526.	886.	295.	5.37		
+	ROUTED TO	J2-K3	7594.	5.58	3520.	886.	295.	5.37		
+									17.11	5.58
+	HYDROGRAPH AT	K1	6266.	3.75	1229.	308.	103.	1.54		
+	ROUTED TO	K1-K2	4912.	4.58	1215.	308.	103.	1.54		
+									13.68	4.58
+	HYDROGRAPH AT	K2	4031.	5.00	1650.	420.	140.	2.37		
+	2 COMBINED AT	K3RA	8400.	4.58	2851.	728.	243.	3.91		
+	ROUTED TO	K2-K3	7696.	5.92	2832.	728.	243.	3.91		
+									16.77	5.92
+	HYDROGRAPH AT	F1	10195.	3.83	2102.	528.	176.	2.79		
+	ROUTED TO	F1-F2	9757.	4.00	2100.	528.	176.	2.79		
+									22.16	4.00
+	HYDROGRAPH AT	F2	7826.	4.00	1783.	447.	149.	2.53		
+	2 COMBINED AT	F3R	17583.	4.00	3883.	974.	325.	5.31		
+	ROUTED TO	F2-F3	16518.	4.25	3882.	974.	325.	5.31		
+									18.44	4.25
+	HYDROGRAPH AT	F3	2279.	4.08	469.	117.	39.	0.74		
+	2 COMBINED AT	E4RB	18583.	4.25	4351.	1091.	364.	6.05		
+	ROUTED TO	F3-E4	15312.	5.42	4334.	1091.	364.	6.05		
+									18.10	5.42
+	HYDROGRAPH AT	H1	3278.	4.00	632.	158.	53.	1.07		
+	ROUTED TO	H1-H2	2659.	5.25	627.	158.	53.	1.07		
+									14.11	5.25
+	HYDROGRAPH AT	E1	3742.	3.75	716.	179.	60.	0.96		
+	ROUTED TO	E1-E2	3363.	4.08	716.	179.	60.	0.96		
+									16.79	4.08
+	HYDROGRAPH AT	E2	7614.	3.92	1462.	365.	122.	1.98		
+	2 COMBINED AT	E3R	10614.	4.00	2178.	545.	182.	2.94		
+	ROUTED TO	E2-E3	9511.	4.58	2171.	545.	182.	2.94		
+									19.48	4.58
+	HYDROGRAPH AT	E3	6325.	4.42	1760.	440.	147.	2.49		
+	2 COMBINED AT	E4RA	15715.	4.50	3926.	985.	328.	5.42		
+	ROUTED TO	E3-E4	14181.	5.25	3911.	985.	328.	5.42		
+									18.84	5.25
+	HYDROGRAPH AT	H2	2836.	4.58	889.	222.	74.	1.40		

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                HYDROGRAPH AT
+                          E4      5792.   4.75      2064.      519.      173.      3.04
                5 COMBINED AT
+                          E5R    37770.   5.33     11760.     2976.      992.     16.98
                ROUTED TO
+                       E4H2E5    34789.   6.00     11737.     2976.      992.     16.98
+                                                                                          23.52       6.00
                HYDROGRAPH AT
+                          K3      3219.   4.67      1063.      266.       89.      1.64
                HYDROGRAPH AT
+                          E5      3618.   4.25       899.      225.       75.      1.31
                5 COMBINED AT
+                          E6R    50380.   6.00     19763.     5081.     1694.     29.20
                ROUTED TO
+                       E5K2E6    49700.   6.17     19701.     5081.     1694.     29.20
+                                                                                          22.17       6.17
                HYDROGRAPH AT
+                          E6      6400.   4.17      1434.      359.      120.      2.04
                2 COMBINED AT
+                           E     49972.   6.17     20856.     5439.     1813.     31.24
                ROUTED TO
+                         ECP     49972.   6.17     20856.     5439.     1813.     31.24
                HYDROGRAPH AT
+                          G1      4114.   3.92       810.      203.       68.      1.12
                ROUTED TO
+                         GCP      4114.   3.92       810.      203.       68.      1.12

 *** NORMAL END OF HEC-1 ***
1*************************************                                  *************************************
*                                   *                                  *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                                  *   U.S. ARMY CORPS OF ENGINEERS    *
*            MAY  1991              *                                  *   HYDROLOGIC ENGINEERING CENTER   *
*          VERSION 4.0.1E           *                                  *         609 SECOND STREET         *
*                                   *                                  *      DAVIS, CALIFORNIA 95616      *
*  RUN DATE            TIME         *                                  *         (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

                                                HEC-1 INPUT                                                PAGE  1

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

    1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
    2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
    3           ID   PMP 6-hour
    4           ID   Existing Conditions
    5           ID   FRS #1 (Sub-basins L-R)
    6           ID   Rainfall Loss Method - Green & Ampt
    7           ID   Unit Hydrograph Method - FCDMC S-Graph
    8           ID   Channel Routing Method - Normal Depth
    9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
   10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
   11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                *DIAGRAM
   12           IT       5  1JAN94       0    2000
   13           IO       3
   14           IN       5 01JAN94       0
   15           JD     9.8    0.01
                * PMP 6-hour FRS1
   16           PI   0.021   0.021   0.021   0.022   0.022   0.023   0.023   0.023   0.024   0.025
   17           PI   0.025   0.025   0.031   0.031   0.031   0.031   0.032   0.032   0.032   0.034
   18           PI   0.036   0.038   0.041   0.044   0.081   0.082   0.083   0.086   0.088   0.092
   19           PI   0.093   0.106   0.111   0.121   0.135   0.155   2.124   1.234   0.891   0.548
   20           PI    0.48   0.411   0.212   0.206   0.199   0.192   0.182   0.175   0.077   0.071
   21           PI   0.066   0.062   0.059   0.056   0.053   0.051   0.049   0.048   0.047   0.045
   22           PI   0.031   0.031    0.03   0.029   0.029   0.029   0.028   0.028   0.027   0.027
   23           PI   0.027   0.026

   24           KK      Q1
   25           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
   26           KM      L=5.23     Lca=2.81     S=228.56     Km=0.055     LAG=78.0
   27           KM      S-GRAPH TYPE-PHOENIX MOUNTAIN
   28           KO      0       0     0.0       1      22
   29           BA  2.2336
   30           LG    0.35    0.35   4.203    0.39  12.313
                * Q1
   31           UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
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 32          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
 33          UI  505.03  473.57  449.52  412.98  385.87  360.62  325.28  298.43  254.89  242.17
 34          UI  233.02  221.76  208.77   201.6  161.51   156.4  132.21   123.2   123.2  106.72
 35          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
 36          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
 37          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
 38          UI   18.48   18.48   18.48

 39          KK     OCP    CNAME       Q
 40          KO       0        0     0.0       0      22
 41          RN     OCP

 42          KK      P1
 43          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 44          KM      L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
 45          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 46          KO       0        0     0.0       1      22
 47          BA  2.4365
 48          LG    0.35     0.35   4.193   0.396   6.712
             * P1
                                          HEC-1 INPUT                                          PAGE  2

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

 49          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
 50          UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
 51          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
 52          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
 53          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
 54          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
 55          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
 56          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0

 57          KK     PCP    CNAME       F
 58          KO       0        0     0.0       0      22
 59          RN     PCP

 60          KK      N1
 61          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 62          KM      L=2.79      Lca=1.44      S=340.38      Kn=0.050      LAG=40.0
 63          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 64          KO       0        0     0.0       1      22
 65          BA   1.524
 66          LG    0.35     0.35   4.075   0.419    8.38
             * N1
 67          UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
 68          UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
 69          UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
 70          UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

 71          KK   N1-N2    CNAME     N2R
 72          KO       0        0     0.0       0      22
 73          RS      17     FLOW     0.0     0.0
 74          RC    0.05    0.047    0.05 26511.0  0.0115     0.0
             * N1-N2
 75          RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
 76          RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

 77          KK      N2
 78          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 79          KM      L=5.66      Lca=3.27      S=370.14      Kn=0.055      LAG=91.0
 80          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 81          KO       0        0     0.0       1      22
 82          BA  3.3254
 83          LG    0.35     0.35   4.117   0.405    2.67
             * N2
 84          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
 85          UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
 86          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
 87          UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
 88          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
 89          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
 90          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
 91          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
 92          UI   23.58   23.58   23.58   23.58   23.58
                                          HEC-1 INPUT                                          PAGE  3

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

 93          KK       N    CNAME     NCP
 94          KO       0        0     0.0       0      22
 95          RC       2      0.0

 96          KK     NCP    CNAME       N
 97          KO       0        0     0.0       0      22
 98          RN     NCP

 99          KK      O1
100          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
101          KM      L=5.20      Lca=2.79      S=64.07      Kn=0.055      LAG=100.0
102          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
103          KO       0        0     0.0       1      22
104          BA  3.0883
105          LG    0.35     0.35   4.169   0.393   2.105
             * O1
106          UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
107          UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77 1242.7  887.05
108          UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
109          UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
110          UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
111          UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
112          UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
113          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
114          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
115          UI   19.93   19.93   19.93     0.0

116          KK     OCP    CNAME       O
117          KO       0        0     0.0       0      22
118          RN     OCP

119          KK      M1
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120     KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
121     KM      L=4.99      Lca=1.81      S=302.46      Kn=0.050      LAG=56.0
122     KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
123     KO       0        0     0.0        1      22
124     BA  5.5949
125     LG    0.35     0.35   4.306    0.347  17.122
        * M1
126     UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
127     UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
128     UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
129     UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
130     UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
131     UI   64.47   64.47     0.0

132     KK   M1-M2    CNAME     M2R
133     KO       0        0     0.0        0      22
134     RS      20     FLOW     0.0      0.0
135     RC    0.04     0.04   0.045 38719.0  0.0133     0.0
        * M1-M2
136     RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
137     RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5
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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

138     KK      M2
139     KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
140     KM      L=7.60      Lca=3.07      S=88.36      Kn=0.050      LAG=103.0
141     KM      S-GRAPH TYPE=DESERT RANGELAND
142     KO       0        0     0.0        1      22
143     BA  7.5274
144     LG    0.35     0.35   3.952    0.446   0.287
        * M2
145     UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
146     UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
147     UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
148     UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
149     UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
150     UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
151     UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
152     UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

153     KK       M    CNAME     MCP
154     KO       0        0     0.0        0      22
155     RC       2      0.0

156     KK     MCP    CNAME       M
157     KO       0        0     0.0        0      22
158     RN     MCP

159     KK      Z1
160     KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
161     KM      L=1.70      Lca=0.66      S=47.00      Kn=0.055      LAG=39.0
162     KM      S-GRAPH TYPE=DESERT RANGELAND
163     KO       0        0     0.0        1      22
164     BA  0.6644
165     LG   0.321    0.292   4.004    0.43   2.909
        * Z1
166     UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
167     UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
168     UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

169     KK     ZCP    CNAME       Z
170     KO       0        0     0.0        0      22
171     RN     ZCP

172     KK      L1
173     KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
174     KM      L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
175     KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
176     KO       0        0     0.0        1      22
177     BA  3.5462
178     LG   0.271    0.318   4.357    0.352  16.317
        * L1
179     UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
180     UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
181     UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
182     UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
183     UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
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LINE    ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

184     UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

185     KK   L1-L2    CNAME     L2R
186     KO       0        0     0.0        0      22
187     RS      10     FLOW     0.0      0.0
188     RC   0.046    0.045   0.046 28949.0  0.0147     0.0
        * L1-L2
189     RX     0.0     80.0   165.0   200.0   215.0   255.0   340.0   420.0
190     RY    19.0     17.0    14.0    10.0    10.0    14.0    18.0    22.0

191     KK      L2
192     KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
193     KM      L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
194     KM      S-GRAPH TYPE=DESERT RANGELAND
195     KO       0        0     0.0        1      22
196     BA  7.3294
197     LG    0.35     0.35   4.202    0.399     0.0
        * L2
198     UI     0.0    274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
199     UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
200     UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
201     UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
202     UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
203     UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
204     UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

205     KK     L3R    CNAME   L2-L3
206     KO       0        0     0.0        0      22
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 207          MC      2     0.0

 208          KK   L2-L3   CNAME     L3R
 209          KO      0       0     0.0       0      22
 210          RS     11    FLOW     0.0     0.0
 211          RC   0.05   0.045    0.06 20567.0  0.0084     0.0
              * L2-L3
 212          RX    0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
 213          RY   18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

 214          KK      L3
 215          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 216          KM      L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
 217          KM      S-GRAPH TYPE=DESERT RANGELAND
 218          KO      0       0     0.0       1      22
 219          BA  5.8518
 220          LG   0.341   0.328    3.98   0.419    1.05
              * L3
 221          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   859.0 1098.31 1266.31
 222          UI  1460.0 1557.79 1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
 223          UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
 224          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
 225          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
 226          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
 227          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0
```



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

 228          KK       L   CNAME     LCP
 229          KO       0       0     0.0       0      22
 230          RC       2     0.0

 231          KK     LCP   CNAME       L
 232          KO       0       0     0.0       0      22
 233          RN     LCP

 234          KK      R1
 235          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 236          KM      L=1.01     Lca=0.46     S=213.31     Kn=0.050     LAG=19.0
 237          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 238          KO      0       0     0.0       1      22
 239          BA  0.2836
 240          LG    0.35    0.35   4.358   0.374   8.387
              * R1
 241          UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
 242          UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

 243          KK     RCP   CNAME       R
 244          KO       0       0     0.0       0      22
 245          RN     RCP
 246          ZZ
```

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	O1	5816.	4.25	1624.	412.	137.	2.23		
+	ROUTED TO	OCP	5816.	4.25	1624.	412.	137.	2.23		
+	HYDROGRAPH AT	P1	5837.	4.33	1717.	436.	145.	2.44		
+	ROUTED TO	PCP	5837.	4.33	1717.	436.	145.	2.44		
+	HYDROGRAPH AT	N1	5936.	3.75	1087.	272.	91.	1.52		
+	ROUTED TO	N1-N2	4349.	5.08	1085.	272.	91.	1.52		
+									15.06	5.08
+	HYDROGRAPH AT	N2	7496.	4.42	2287.	581.	194.	3.33		
+	2 COMBINED AT	N	9242.	5.00	3369.	853.	284.	4.85		
+	ROUTED TO	NCP	9242.	5.00	3369.	853.	284.	4.85		
+	HYDROGRAPH AT	O1	6584.	4.58	2113.	540.	180.	3.09		
+	ROUTED TO	OCP	6584.	4.58	2113.	540.	180.	3.09		
+	HYDROGRAPH AT	M1	18370.	3.92	4262.	1073.	358.	5.59		
+	ROUTED TO	M1-M2	13673.	5.58	4244.	1073.	358.	5.59		
+									14.20	5.58
+	HYDROGRAPH AT	M2	14132.	4.83	5078.	1278.	426.	7.53		
+	2 COMBINED AT	M	23749.	5.42	9264.	2350.	783.	13.12		
+	ROUTED TO	MCP	23749.	5.42	9264.	2350.	783.	13.12		

```
                HYDROGRAPH AT
+                         Z1     2775.   3.83        468.        117.        39.       0.66
                ROUTED TO
+                        ZCP     2775.   3.83        468.        117.        39.       0.66
                HYDROGRAPH AT
+                         L1    11153.   4.00       2713.        684.       228.       3.55
                ROUTED TO
+                      L1-L2     9356.   4.75       2706.        684.       228.       3.55
+                                                                                   17.74       4.75
                HYDROGRAPH AT
+                         L2    25687.   4.58       5051.       1264.       421.       7.33
                2 COMBINED AT
+                        L3R    24861.   4.75       7746.       1948.       649.      10.88
                ROUTED TO
+                      L2-L3    22680.   5.58       7621.       1948.       649.      10.88
+                                                                                   16.48       5.58
                HYDROGRAPH AT
+                         L3    12449.   4.58       4056.       1016.       339.       5.85
                2 COMBINED AT
+                          L    29264.   5.50      11459.       2963.       988.      16.73
                ROUTED TO
+                        LCP    29264.   5.50      11459.       2963.       988.      16.73
                HYDROGRAPH AT
+                         R1     1716.   3.42        205.         51.        17.       0.28
                ROUTED TO
+                        RCP     1716.   3.42        205.         51.        17.       0.28

 *** NORMAL END OF HEC-1 ***
1*****************************************                    ****************************************
*                                         *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)     *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*              MAY  1991                  *                    *   HYDROLOGIC ENGINEERING CENTER      *
*            VERSION 4.0.1E               *                    *          609 SECOND STREET           *
*                                         *                    *       DAVIS, CALIFORNIA 95616        *
*  RUN DATE              TIME             *                    *          (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

                                                  HEC-1 INPUT                                                  PAGE  1

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

          1           ID   Buckeye/Sun Valley ADMS - 1 March 2004
          2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
          3           ID   PMP 6-hour
          4           ID   Existing Conditions
          5           ID   FRS #2 (Sub-basins S-U)
          6           ID   Rainfall Loss Method - Green & Ampt
          7           ID   Unit Hydrograph Method - FCDMC S-Graph
          8           ID   Channel Routing Method - Normal Depth
          9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
         10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
         11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                      *DIAGRAM
         12           IT       5  1JAN94       0    2000
         13           IO       3
         14           IN       5 01JAN94       0
         15           JD    13.6    0.01
                      * PMP 6-hour FRS2
         16           PI   0.029   0.029   0.029    0.03    0.03   0.031   0.032   0.032   0.033   0.034
         17           PI   0.034   0.035   0.043   0.043   0.043   0.043   0.044   0.044   0.045   0.047
         18           PI   0.049   0.053   0.057   0.061   0.112   0.114   0.115   0.119   0.123   0.127
         19           PI   0.129   0.147   0.154   0.168   0.187   0.215   2.948   1.712   1.236   0.761
         20           PI   0.666   0.571   0.295   0.285   0.276   0.266   0.252   0.243   0.107   0.099
         21           PI   0.092   0.087   0.082   0.078   0.073   0.071   0.068   0.067   0.066   0.063
         22           PI   0.043   0.043   0.042   0.041   0.041    0.04   0.039   0.039   0.038   0.037
         23           PI   0.037   0.036

         24           KK      T1
         25           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
         26           KM      L=4.34      Lca=1.58     S=274.89     Kn=0.030     LAG=51.0
         27           KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
         28           KO       0       0     0.0       1      22
         29           BA  3.0415
         30           LG    0.35    0.35   4.644   0.299  11.497
                      * T1
         31           UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
```

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 32          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
 33          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 34          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 35          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

 36          KK     TCP   CNAME       T
 37          KO       0       0     0.0       0      22
 38          RN     TCP

 39          KK      U1
 40          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 41          KM      L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
 42          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 43          KO       0       0     0.0       1      22
 44          BA  1.3705
 45          LG    0.35    0.37   5.258   0.233   6.449
             * U1
 46          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
 47          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
 48          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 49          UI    26.8     0.0

 50          KK     UCP   CNAME       U
 51          KO       0       0     0.0       0      22
 52          RN     UCP

 53          KK      S1
 54          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 55          KM      L=2.32    Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
 56          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 57          KO       0       0     0.0       1      22
 58          BA  1.4105
 59          LG    0.35    0.35   4.484   0.352   6.918
             * S1
 60          UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
 61          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
 62          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

 63          KK     SCP   CNAME       S
 64          KO       0       0     0.0       0      22
 65          RN     SCP
 66          ZZ
```

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	T1	15022.	3.83	3473.	872.	291.	3.04		
+	ROUTED TO	TCP	15022.	3.83	3473.	872.	291.	3.04		
+	HYDROGRAPH AT	U1	8841.	3.58	1579.	395.	132.	1.37		
+	ROUTED TO	UCP	8841.	3.58	1579.	395.	132.	1.37		
+	HYDROGRAPH AT	S1	9642.	3.58	1556.	389.	130.	1.41		
+	ROUTED TO	SCP	9642.	3.58	1556.	389.	130.	1.41		

```
 *** NORMAL END OF HEC-1 ***
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
 *              MAY  1991            *
 *           VERSION 4.0.1E          *
 *                                   *
 *  RUN DATE            TIME         *
 *                                   *
 *************************************
```

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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*          (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

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

  1         ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2         ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3         ID   PMP 6-hour
  4         ID   Existing Conditions
  5         ID   FRS #3 (Sub-basins V-Y)
  6         ID   Rainfall Loss Method - Green & Ampt
  7         ID   Unit Hydrograph Method - FCDMC S-Graph
  8         ID   Channel Routing Method - Normal Depth
  9         ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10         ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11         ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
 12         IT       5  1JAN94       0    2000
 13         IO       3
 14         IN       5 01JAN94       0
 15         JD    12.8    0.01
            * PMP 6-hour FR83
 16         PI   0.027   0.027   0.028   0.029   0.029    0.03    0.03    0.03   0.031   0.032
 17         PI   0.032   0.033    0.04    0.04    0.04    0.04   0.041   0.041   0.042   0.044
 18         PI   0.047    0.05   0.054   0.057   0.106   0.107   0.108   0.112   0.115    0.12
 19         PI   0.122   0.139   0.145   0.158   0.176   0.202   2.775   1.611   1.164   0.716
 20         PI   0.627   0.537   0.277   0.269    0.26   0.251   0.237   0.228     0.1   0.093
 21         PI   0.087   0.081   0.077   0.073   0.069   0.067   0.064   0.063   0.062   0.059
 22         PI    0.04    0.04   0.039   0.038   0.038   0.038   0.037   0.037   0.036   0.035
 23         PI   0.035   0.034

 24         KK      Y1
 25         KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 26         KM      L=1.37      Lca=0.53      S=771.84      Kn=0.050      LAG=17.0
 27         KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 28         KO       0       0     0.0       1      22
 29         BA  0.5808
 30         LG    0.35    0.35   4.044   0.415  10.947
            * Y1
 31         UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
 32         UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

 33         KK     YCP   CNAME       Y
 34         KO       0       0     0.0       0      22
 35         RN     YCP

 36         KK      X1
 37         KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 38         KM      L=2.60      Lca=1.44      S=288.89      Kn=0.050      LAG=40.0
 39         KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 40         KO       0       0     0.0       1      22
 41         BA  0.7867
 42         LG    0.35    0.35   3.955   0.417  12.555
            * X1
 43         UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
 44         UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
 45         UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
 46         UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0
```



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

 47         KK     XCP   CNAME       X
 48         KO       0       0     0.0       0      22
 49         RN     XCP

 50         KK      W1
 51         KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 52         KM      L=3.46      Lca=1.78      S=486.28      Kn=0.050      LAG=44.0
 53         KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 54         KO       0       0     0.0       1      22
 55         BA   3.894
 56         LG    0.35    0.35   3.976    0.41  15.199
            * W1
 57         UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 58         UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
 59         UI  477.35  380.74  352.03  326.35  259.78  228.45  223.14  145.82  145.82  145.82
 60         UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
 61         UI   57.11     0.0

 62         KK   W1-W2   CNAME     W2R
 63         KO       0       0     0.0       0      22
 64         RS       6    FLOW     0.0     0.0
 65         RC   0.050    0.05    0.06 11249.0  0.0189     0.0
            * W1-W2
 66         RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
 67         RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

 68         KK      W2
 69         KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 70         KM      L=3.25      Lca=1.19      S=178.54      Kn=0.050      LAG=44.0
 71         KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 72         KO       0       0     0.0       1      22
 73         BA  2.8478
 74         LG    0.35    0.35   4.081   0.402   3.547
            * W2
 75         UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 76         UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
 77         UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
 78         UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
 79         UI   41.77     0.0

 80         KK       W   CNAME     WCP
 81         KO       0       0     0.0       0      22
 82         HC       2     0.0

 83         KK     WCP   CNAME       W
 84         KO       0       0     0.0       0      22
 85         RN     WCP

 86         KK      V1
 87         KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 88         KM      L=2.86      Lca=1.75      S=344.82      Kn=0.050      LAG=43.0
 89         KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 90         KO       0       0     0.0       1      22
```

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  91          BA  0.6646

                                        HEC-1 INPUT                                                    PAGE  3

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

  92          LG    0.35    0.35   3.972   0.405  13.864
              * V1
  93          UI     0.0   52.04   84.19  166.27  256.03  338.03  396.86  456.51  578.99  373.13
  94          UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
  95          UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
  96          UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
  97          UI     0.0

  98          KK     VCP   CNAME       V
  99          KO       0       0     0.0       0      22
 100          RM     VCP
 101          ZZ
```

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	Y1	4868.	3.42	591.	148.	49.	0.58		
+	ROUTED TO	YCP	4868.	3.42	591.	148.	49.	0.58		
+	HYDROGRAPH AT	X1	4163.	3.75	806.	202.	67.	0.79		
+	ROUTED TO	XCP	4163.	3.75	806.	202.	67.	0.79		
+	HYDROGRAPH AT	W1	19969.	3.75	4039.	1013.	338.	3.89		
+	ROUTED TO	W1-W2	17807.	4.17	4036.	1013.	338.	3.89		
+									16.57	4.17
+	HYDROGRAPH AT	W2	14439.	3.75	2835.	709.	236.	2.85		
+	2 COMBINED AT	W	28690.	4.08	6868.	1723.	574.	6.74		
+	ROUTED TO	WCP	28690.	4.08	6868.	1723.	574.	6.74		
+	HYDROGRAPH AT	V1	3462.	3.75	687.	172.	57.	0.66		
+	ROUTED TO	VCP	3462.	3.75	687.	172.	57.	0.66		

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

E.6.7.bHEC-1 Output File for PMP 6-Hour (Future Conditions)

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY  1991              *
*         VERSION 4.0.1E            *
*                                   *
* RUN DATE          TIME            *
*                                   *
*************************************
```

```
*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*         (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

```
                                        HEC-1 INPUT                                                    PAGE  1

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

   1          ID   Buckeye/Sun Valley ADMS - 23 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
```

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 3          ID   PMP 6-hour
 4          ID   Future Conditions
 5          ID   FRS #1 (Sub-basins E-K)
 6          ID   Rainfall Loss Method - Green & Ampt
 7          ID   Unit Hydrograph Method - FCDMC S-Graph
 8          ID   Channel Routing Method - Normal Depth
 9          ID   Land Use - Town of Buckeye LU District (2003)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       0
14          IN       5 01JAN94       0
15          JD     9.8    0.01
            * PMP 6-hour FRS1
16          PI   0.021   0.021   0.021   0.022   0.022   0.023   0.023   0.023   0.024   0.025
17          PI   0.025   0.025   0.031   0.031   0.031   0.031   0.032   0.032   0.032   0.034
18          PI   0.036   0.038   0.041   0.044   0.081   0.082   0.083   0.086   0.088   0.092
19          PI   0.093   0.106   0.111   0.121   0.135   0.155   2.124   1.234   0.891   0.548
20          PI    0.48   0.411   0.212   0.206   0.199   0.192   0.182   0.175   0.077   0.071
21          PI   0.066   0.062   0.059   0.056   0.053   0.051   0.049   0.048   0.047   0.045
22          PI   0.031   0.031    0.03   0.029   0.029   0.029   0.028   0.028   0.027   0.027
23          PI   0.027   0.026

24          KK      G1
25          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
26          KM          L=2.38     Lca=1.08     S=33.76     Kn=0.045     LAG=47.0
27          KM          S-GRAPH TYPE=DESERT RANGELAND
28          KO       0       0     0.0       1      22
29          BA  1.1192
30          LG   0.297   0.297   4.688   0.326  15.814
            * G1
31          UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
32          UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
33          UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
34          UI   19.51   19.51   19.51   19.51   19.51     0.0

35          KK   G1-Do
36          KO       0       0     0.0       0      22
37          DT    G1-D    47.0     0.0
            * Curve 1
38          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
39          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
40          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
41          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

42          KK     GCP    CNAME       G
43          KO       0       0     0.0       0      22
44          RN     GCP
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

45          KK      J1
46          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
47          KM          L=4.09     Lca=1.78     S=70.82     Kn=0.055     LAG=75.0
48          KM          S-GRAPH TYPE=DESERT RANGELAND
49          KO       0       0     0.0       1      22
50          BA  1.7341
51          LG    0.25    0.27    3.25   0.657    30.0
            * J1
52          UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
53          UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
54          UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
55          UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
56          UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
57          UI   18.95   18.95   18.95   18.95   18.95   18.95

58          KK   J1-Do
59          KO       0       0     0.0       0      22
60          DT    J1-D   102.0     0.0
            * Curve 1
61          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
62          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
63          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
64          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

65          KK   J1-J2   CNAME     J2R
66          KO       0       0     0.0       0      22
67          RS      17    FLOW     0.0     0.0
68          RC   0.055    0.04   0.055 24090.0  0.0086     0.0
            * J1-J2
69          RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
70          RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

71          KK      J2
72          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
73          KM          L=5.18     Lca=2.51     S=45.01     Kn=0.050     LAG=93.0
74          KM          S-GRAPH TYPE=DESERT RANGELAND
75          KO       0       0     0.0       1      22
76          BA  3.6379
77          LG    0.25    0.26   3.623   0.499    30.0
            * J2
78          UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
79          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
80          UI 1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
81          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
82          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
83          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
84          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

85          KK   J2-Do
86          KO       0       0     0.0       0      22
87          DT    J2-D   224.0     0.0
            * Curve 1
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 88          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 89          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 90          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 91          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 92          KK    K3RB   CNAME   J2-K3
 93          KO       0       0     0.0       0      22
 94          HC       2     0.0

 95          KK   J2-K3   CNAME    K3RB
 96          KO       0       0     0.0       0      22
 97          RS       4    FLOW     0.0     0.0
 98          RC    0.05   0.048    0.05  4072.0  0.0059     0.0
             * J2-K3
 99          RX     0.0    390.0   490.0   502.0   520.0   532.0   632.0  1022.0
100          RY    20.0     14.5    11.5    10.0    10.0    11.5    14.5    20.0

101          KK      K1
102          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
103          KM          L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
104          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
105          KO       0       0     0.0       1      22
106          BA   1.543
107          LG   0.112   0.255   4.382   0.365   21.06
             * K1
108          UI     0.0  129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
109          UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
110          UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
111          UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0

112          KK   K1-K2   CNAME     K2R
113          KO       0       0     0.0       0      22
114          RS      11    FLOW     0.0     0.0
115          RC   0.048    0.05   0.048 30021.0   0.015     0.0
             * K1-K2
116          RX     0.0    20.0    55.0    85.0   235.0   259.0   289.0   309.0
117          RY    22.0    21.0    20.0    10.0    10.0    20.0    21.0    22.0

118          KK      K2
119          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
120          KM          L=7.3       Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
121          KM          S-GRAPH TYPE=DESERT RANGELAND
122          KO       0       0     0.0       1      22
123          BA   2.365
124          LG   0.272   0.277   4.471   0.382   21.86
             * K2
125          UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
126          UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
127          UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

128          UI  460.97  411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
129          OI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
130          OI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
131          OI    45.8    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29
132          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
133          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

134          KK   K2-Do
135          KO       0       0     0.0       0      22
136          DT    K2-D   128.0     0.0
             * Curve 1
137          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
138          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
139          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
140          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

141          KK    K3RA   CNAME   K2-K3
142          KO       0       0     0.0       0      22
143          HC       2   1.543

144          KK   K2-K3   CNAME    K3RA
145          KO       0       0     0.0       0      22
146          RS      18    FLOW     0.0     0.0
147          RC    0.05   0.048    0.05 25950.0  0.0084     0.0
             * K2-K3
148          RX     0.0    390.0   490.0   502.0   520.0   532.0   632.0  1022.0
149          RY    20.0     14.5    11.5    10.0    10.0    11.5    14.5    20.0

150          KK      F1
151          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
152          KM          L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
153          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
154          KO       0       0     0.0       1      22
155          BA   2.7854
156          LG    0.24    0.27   4.322   0.384   32.052
             * F1
157          UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
158          UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
159          UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
160          UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
161          UI   39.08   39.08   39.08     0.0

162          KK   F1-Do
163          KO       0       0     0.0       0      22
164          DT    F1-D   133.0     0.0
             * Curve 1
165          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
166          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
167          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
168          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

169          KK   F1-F2   CNAME     F2R
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170          KO       0       0     0.0       0      22
171          RS       3    FLOW     0.0     0.0
172          RC   0.053   0.045   0.055  8635.0   0.012     0.0
             * F1-F2
173          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
174          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

175          KK      F2
176          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
177          KM          L=3.88     Lca=1.76     S=161.6     Kn=0.050     LAG=57.0
178          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
179          KO       0       0     0.0       1      22
180          BA  2.5261
181          LG    0.25    0.25   4.311   0.436  33.026
             * F2
182          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
183          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
184          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
185          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
186          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
187          UI    28.6    28.6    28.6     0.0

188          KK    F2-D
189          KO       0       0     0.0       0      22
190          DT    F2-D   130.0     0.0
             * Curve 1
191          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
192          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
193          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
194          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

195          KK     F3R   CNAME   F2-F3
196          KO       0       0     0.0       0      22
197          HC       2     0.0

198          KK   F2-F3   CNAME     F3R
199          KO       0       0     0.0       0      22
200          RS       4    FLOW     0.0     0.0
201          RC    0.05   0.047   0.048  7059.0    0.01     0.0
             * F2-F3
202          RX     0.0   350.0   425.0   455.0   472.0   499.0   569.0   900.0
203          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0

204          KK      F3
205          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
206          KM          L=2.71     Lca=1.26     S=81.34     Kn=0.055     LAG=54.0
207          KM          S-GRAPH TYPE=DESERT RANGELAND
208          KO       0       0     0.0       1      22
209          BA  0.7363
210          LG    0.25    0.27   3.266   0.656    30.0
             * F3
211          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
```



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

212          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
213          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
214          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
215          UI     0.0

216          KK   F3-Do
217          KO       0       0     0.0       0      22
218          DT    F3-D    45.0     0.0
             * Curve 1
219          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
220          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
221          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
222          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

223          KK    E4RB   CNAME   F3-E4
224          KO       0       0     0.0       0      22
225          HC       2     0.0

226          KK   F3-E4   CNAME    E4RB
227          KO       0       0     0.0       0      22
228          RS      16    FLOW     0.0     0.0
229          RC    0.05   0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
230          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
231          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

232          KK      H1
233          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
234          KM          L=2.41     Lca=1.09     S=64.59     Kn=0.055     LAG=51.0
235          KM          S-GRAPH TYPE=DESERT RANGELAND
236          KO       0       0     0.0       1      22
237          BA  1.0659
238          LG    0.25    0.29   2.733   0.945    30.0
             * H1
239          UI     0.0   70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
240          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
241          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
242          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

243          KK   H1-Do
244          KO       0       0     0.0       0      22
245          DT    H1-D    60.0     0.0
             * Curve 1
246          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
247          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
248          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
249          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

250          KK   H1-H2   CNAME     H2R
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251          KO       0       0     0.0       0      22
252          RS      17    FLOW     0.0     0.0
253          RC   0.053    0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
254          RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
255          RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

256          KK      E1
257          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
258          KM          L=2.51     Lca=1.13     S=178.34     Kn=0.055     LAG=43.0
259          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
260          KO       0       0     0.0       1      22
261          BA  0.9558
262          LG    0.25    0.25   5.377   0.273   30.69
             * E1
263          UI     0.0   74.84   77.93  239.12  368.21  486.34  570.74  714.05  832.68  536.61
264          UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
265          UI  107.54   95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
266          UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
267          UI     0.0

268          KK   E1-Do
269          KO       0       0     0.0       0      22
270          DT    E1-D    53.0     0.0
             * Curve 1
271          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
272          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
273          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
274          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

275          KK   E1-E2   CNAME     E2R
276          KO       0       0     0.0       0      22
277          RS       5    FLOW     0.0     0.0
278          RC    0.05   0.047   0.046 11365.0   0.016     0.0
             * E1-E2
279          RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
280          RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

281          KK      E2
282          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
283          KM          L=2.92     Lca=0.80     S=96.39     Kn=0.055     LAG=45.0
284          KM          S-GRAPH TYPE=DESERT RANGELAND
285          KO       0       0     0.0       1      22
286          BA  1.9794
287          LG    0.25    0.25   5.043   0.306    30.0
             * E2
288          UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1405.52
289          UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
290          UI  199.01  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
291          UI   36.05   36.05   36.05   36.05
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

292          KK   E2-Do
293          KO       0       0     0.0       0      22
294          DT    E2-D   118.0     0.0
             * Curve 1
295          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
296          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
297          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
298          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

299          KK     E3R   CNAME   E2-E3
300          KO       0       0     0.0       0      22
301          HC       2     0.0

302          KK   E2-E3   CNAME     E3R
303          KO       0       0     0.0       0      22
304          RS       8    FLOW     0.0     0.0
305          RC   0.052   0.046   0.052 19626.0  0.0088     0.0
             * E2-E3
306          RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
307          RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

308          KK      E3
309          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
310          KM          L=3.87     Lca=1.99     S=49.65     Kn=0.050     LAG=75.0
311          KM          S-GRAPH TYPE=DESERT RANGELAND
312          KO       0       0     0.0       1      22
313          BA  2.4882
314          LG    0.25    0.25   4.358   0.377    30.0
             * E3
315          UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
316          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
317          UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
318          UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
319          UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
320          UI   27.19   27.19   27.19   27.19   27.19   27.19

321          KK   E3-Do
322          KO       0       0     0.0       0      22
323          DT    E3-D   152.0     0.0
             * Curve 1
324          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
325          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
326          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
327          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

328          KK    E4RA   CNAME   E3-E4
329          KO       0       0     0.0       0      22
330          HC       2     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

331          KK   E3-E4   CNAME    E4RA
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332          KO       0       0     0.0       0      22
333          RS       9    FLOW     0.0     0.0
334          RC   0.056   0.049   0.056 13855.0  0.0048     0.0
             * E3-E4
335          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
336          RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

337          KK      H2
338          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
339          KM          L=4.41     Lca=2.60     S=44.71     Kn=0.050     LAG=89.0
340          KM          S-GRAPH TYPE=DESERT RANGELAND
341          KO       0       0     0.0       1      22
342          BA  1.4003
343          LG    0.25    0.27   3.222   0.664    30.0
             * H2
344          UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
345          UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
346          UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
347          UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
348          UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
349          UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
350          UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

351          KK   H2-Do
352          KO       0       0     0.0       0      22
353          DT    H2-D    88.0     0.0
             * Curve 1
354          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
355          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
356          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
357          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

358          KK      E4
359          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
360          KM          L=5.36     Lca=2.81     S=38.26     Kn=0.050     LAG=102.0
361          KM          S-GRAPH TYPE=DESERT RANGELAND
362          KO       0       0     0.0       1      22
363          BA  3.0419
364          LG    0.25    0.25   3.816   0.441    30.0
             * E4
365          UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
366          UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
367          UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
368          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
369          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
370          UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
371          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
372          UI   24.44   24.44   24.44   24.44   24.44   24.44
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

373          KK   E4-Do
374          KO       0       0     0.0       0      22
375          DT    E4-D   190.0     0.0
             * Curve 1
376          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
377          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
378          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
379          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

380          KK     E5R   CNAME  E4H2E5
381          KO       0       0     0.0       0      22
382          HC       5     0.0

383          KK  E4H2E5   CNAME     E5R
384          KO       0       0     0.0       0      22
385          RS       9    FLOW     0.0     0.0
386          RC    0.06    0.05    0.06 15206.0  0.0051     0.0
             * E4H2-E5
387          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
388          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

389          KK      K3
390          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
391          KM          L=4.92     Lca=2.65     S=44.16     Kn=0.050     LAG=94.0
392          KM          S-GRAPH TYPE=DESERT RANGELAND
393          KO       0       0     0.0       1      22
394          BA  1.6364
395          LG    0.25    0.27   3.421     0.6    30.0
             * K3
396          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
397          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
398          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
399          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
400          UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
401          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
402          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

403          KK   K3-Do
404          KO       0       0     0.0       0      22
405          DT    K3-D   101.0     0.0
             * Curve 1
406          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
407          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
408          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
409          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

410          KK      E5
411          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
412          KM          L=3.01     Lca=1.41     S=28.56     Kn=0.050     LAG=66.0
413          KM          S-GRAPH TYPE=DESERT RANGELAND
414          KO       0       0     0.0       1      22
415          BA  1.3075
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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416          LG    0.25    0.25    3.94   0.473    30.0
             * E5
417          UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
418          UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
419          UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
420          UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
421          UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

422          KK   E5-Do
423          KO       0       0     0.0       0      22
424          DT    E5-D    79.0     0.0
             * Curve 1
425          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
426          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
427          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
428          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

429          KK     E6R   CNAME  E5K2E6
430          KO       0       0     0.0       0      22
431          RC       5   1.543

432          KK  E5K2E6   CNAME     E6R
433          KO       0       0     0.0       0      22
434          RS       3    FLOW     0.0     0.0
435          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
             * E5K3-E6
436          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
437          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

438          KK      E6
439          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
440          KM          L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
441          KM          S-GRAPH TYPE=DESERT RANGELAND
442          KO       0       0     0.0       1      22
443          BA  2.0375
444          LG   0.289   0.289   4.356   0.392  18.293
             * E6
445          UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
446          UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
447          UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
448          UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
449          UI   29.29   29.29     0.0

450          KK   E6-Do
451          KO       0       0     0.0       0      22
452          DT     E6-D   100.0     0.0
             * Curve 1
453          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
454          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
455          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
456          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

457          KK       E   CNAME     ECP
458          KO       0       0     0.0       0      22
459          RC       2   1.543

460          KK     ECP   CNAME       E
461          KO       0       0     0.0       0      22
462          RN     ECP
463          ZZ
```

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	G1	4202.	3.92	868.	217.	72.	1.12		
+	DIVERSION TO	G1-D	4202.	3.92	775.	194.	65.	1.12		
+	HYDROGRAPH AT	G1-Do	4202.	3.92	775.	194.	65.	1.12		
+	ROUTED TO	GCP	4202.	3.92	775.	194.	65.	1.12		
+	HYDROGRAPH AT	J1	4485.	4.42	1326.	335.	112.	1.73		
+	DIVERSION TO	J1-D	4485.	4.42	1135.	284.	95.	1.73		
+	HYDROGRAPH AT	J1-Do	4485.	4.42	1135.	284.	95.	1.73		
+	ROUTED TO	J1-J2	3783.	5.75	1130.	284.	95.	1.73		
+									14.89	5.75
+	HYDROGRAPH AT	J2	8107.	4.67	2850.	726.	242.	3.64		
+	DIVERSION TO	J2-D	8107.	4.67	2451.	613.	204.	3.64		
+	HYDROGRAPH AT	J2-Do	8107.	4.67	2451.	613.	204.	3.64		
+	2 COMBINED AT	K3RB	8108.	4.67	3577.	897.	299.	5.37		

+	ROUTED TO	J2-K3	8042.	4.83	3572.	897.	299.	5.37	17.24	4.83
+										
+	HYDROGRAPH AT	K1	6266.	3.75	1229.	308.	103.	1.54		
+	ROUTED TO	K1-K2	5088.	4.50	1217.	308.	103.	1.54	13.76	4.50
+										
+	HYDROGRAPH AT	K2	4263.	5.00	1806.	465.	155.	2.37		
+	DIVERSION TO	K2-D	4263.	5.00	1592.	400.	133.	2.37		
+	HYDROGRAPH AT	K2-Do	4263.	5.00	1592.	400.	133.	2.37		
+	2 COMBINED AT	K3RA	8776.	4.58	2807.	709.	236.	1.54		
+	ROUTED TO	K2-K3	7812.	6.00	2770.	709.	236.	1.54	16.80	6.00
+										
+	HYDROGRAPH AT	F1	10473.	3.83	2279.	574.	191.	2.79		
+	DIVERSION TO	F1-D	10473.	3.83	2026.	507.	169.	2.79		
+	HYDROGRAPH AT	F1-Do	10473.	3.83	2026.	507.	169.	2.79		
+	ROUTED TO	F1-F2	10031.	4.00	2026.	507.	169.	2.79	22.33	4.00
+										
+	HYDROGRAPH AT	F2	8230.	4.00	2041.	516.	172.	2.53		
+	DIVERSION TO	F2-D	8230.	4.00	1802.	450.	150.	2.53		
+	HYDROGRAPH AT	F2-D	8230.	4.00	1802.	450.	150.	2.53		
+	2 COMBINED AT	F3R	18261.	4.00	3827.	957.	319.	5.31		
+	ROUTED TO	F2-F3	17110.	4.25	3824.	957.	319.	5.31	18.53	4.25
+										
+	HYDROGRAPH AT	F3	2456.	4.08	565.	142.	47.	0.74		
+	DIVERSION TO	F3-D	2456.	4.08	478.	119.	40.	0.74		
+	HYDROGRAPH AT	F3-Do	2456.	4.08	478.	119.	40.	0.74		
+	2 COMBINED AT	E4RB	19350.	4.25	4302.	1076.	359.	6.05		
+	ROUTED TO	F3-E4	15266.	5.50	4273.	1076.	359.	6.05	18.09	5.50
+										
+	HYDROGRAPH AT	H1	3584.	4.00	783.	197.	66.	1.07		
+	DIVERSION TO	H1-D	3584.	4.00	666.	167.	56.	1.07		
+	HYDROGRAPH AT	H1-Do	3584.	4.00	666.	167.	56.	1.07		
+	ROUTED TO	H1-H2	2837.	5.33	660.	167.	56.	1.07	14.21	5.33
+										
+	HYDROGRAPH AT	E1	3877.	3.75	805.	202.	67.	0.96		
+	DIVERSION TO	E1-D	3877.	3.75	703.	176.	59.	0.96		
+	HYDROGRAPH AT	E1-Do	3877.	3.75	703.	176.	59.	0.96		
+	ROUTED TO	E1-E2	3457.	4.08	703.	176.	59.	0.96	16.86	4.08
+										
+	HYDROGRAPH AT	E2	7892.	3.92	1652.	415.	138.	1.98		
+	DIVERSION TO	E2-D	7892.	3.92	1420.	355.	118.	1.98		
+	HYDROGRAPH AT	E2-Do	7892.	3.92	1420.	355.	118.	1.98		
+	2 COMBINED AT	E3R	10852.	4.00	2123.	531.	177.	2.94		
+	ROUTED TO	E2-E3	9549.	4.58	2115.	531.	177.	2.94	19.49	4.58
+										

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+          HYDROGRAPH AT
                          E3      6737.   4.42     2025.     512.     171.    2.49
+          DIVERSION TO
                          E3-D    6737.   4.42     1739.     435.     145.    2.49
+          HYDROGRAPH AT
                          E3-Do   6737.   4.42     1739.     435.     145.    2.49
+          2 COMBINED AT
                          E4RA   15936.   4.58     3853.     966.     322.    5.42
+          ROUTED TO
                          E3-E4  14226.   5.25     3834.     966.     322.    5.42
+                                                                          18.85     5.25
+          HYDROGRAPH AT
                          H2      3145.   4.58     1063.     270.      90.    1.40
+          DIVERSION TO
                          H2-D    3145.   4.58      903.     226.      75.    1.40
+          HYDROGRAPH AT
                          H2-Do   3145.   4.58      903.     226.      75.    1.40
+          HYDROGRAPH AT
                          E4      6357.   4.75     2409.     617.     206.    3.04
+          DIVERSION TO
                          E4-D    6357.   4.75     2082.     521.     174.    3.04
+          HYDROGRAPH AT
                          E4-Do   6357.   4.75     2082.     521.     174.    3.04
+          5 COMBINED AT
                          E5R    38156.   5.42    11726.    2956.     985.   16.98
+          ROUTED TO
                          E4H2E5 34900.   6.08    11689.    2956.     985.   16.98
+                                                                          23.53     6.08
+          HYDROGRAPH AT
                          K3      3544.   4.67     1252.     319.     106.    1.64
+          DIVERSION TO
                          K3-D    3544.   4.67     1073.     268.      89.    1.64
+          HYDROGRAPH AT
                          K3-Do   3544.   4.67     1073.     268.      89.    1.64
+          HYDROGRAPH AT
                          E5      3843.   4.25     1040.     262.      87.    1.31
+          DIVERSION TO
                          E5-D    3843.   4.25      889.     222.      74.    1.31
+          HYDROGRAPH AT
                          E5-Do   3843.   4.25      889.     222.      74.    1.31
+          5 COMBINED AT
                          E6R    51233.   6.08    19704.    5051.    1684.    1.54
+          ROUTED TO
                          E5K2E6 50140.   6.25    19616.    5051.    1684.    1.54
+                                                                          22.21     6.25
+          HYDROGRAPH AT
                          E6      6594.   4.08     1559.     391.     130.    2.04
+          DIVERSION TO
                          E6-D    6594.   4.08     1363.     341.     114.    2.04
+          HYDROGRAPH AT
                          E6-Do   6594.   4.08     1363.     341.     114.    2.04
+          2 COMBINED AT
                          E      50490.   6.25    20643.    5392.    1797.    1.54
+          ROUTED TO
                          ECP    50490.   6.25    20643.    5392.    1797.    1.54
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*** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY  1991              *
*          VERSION 4.0.1E           *
*                                   *
*  RUN DATE          TIME           *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
*************************************
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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

                                    HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Leaue & Wen Chen
  3           ID   PMP 6-hour
  4           ID   Future Conditions
  5           ID   FRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN       5 01JAN94       0
 15           JD     9.8    0.01
              * PMP 6-hour FRS1
 16           PI   0.021   0.021   0.021   0.022   0.022   0.023   0.023   0.023   0.024   0.025
 17           PI   0.025   0.025   0.031   0.031   0.031   0.031   0.032   0.032   0.032   0.034
 18           PI   0.036   0.038   0.041   0.044   0.081   0.082   0.083   0.086   0.088   0.092
 19           PI   0.093   0.106   0.111   0.121   0.135   0.155   2.124   1.234   0.891   0.548
 20           PI    0.48   0.411   0.212   0.206   0.199   0.192   0.182   0.175   0.077   0.071
 21           PI   0.066   0.062   0.059   0.056   0.053   0.051   0.049   0.048   0.047   0.045
 22           PI   0.031   0.031    0.03   0.029   0.029   0.029   0.028   0.028   0.027   0.027
 23           PI   0.027   0.026

 24           KK      R1
 25           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 26           KM         L=1.01      Lca=0.46      S=213.31      Kn=0.050      LAG=19.0
 27           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 28           KO       0       0     0.0       1      22
 29           BA  0.2836
 30           LG   0.181   0.282   4.358   0.474  62.581
              * R1
 31           UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
 32           UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

 33           KK   R1-Do
 34           KO       0       0     0.0       0      22
 35           DT    R1-D    24.0     0.0
              * Curve 1
 36           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 37           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 38           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 39           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 40           KK     RCF    CNAME       R
 41           KO       0       0     0.0       0      22
 42           RN     RCF

                                    HEC-1 INPUT                                                    PAGE  2

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

 43           KK      L1
 44           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 45           KM         L=4.93      Lca=2.29      S=308.27      Kn=0.050      LAG=61.0
 46           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 47           KO       0       0     0.0       1      22
 48           BA  3.5462
 49           LG   0.271   0.318   4.357   0.352  16.317
              * L1
 50           UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
 51           UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
 52           UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
 53           UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
 54           UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
 55           UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

 56           KK   L1-L2    CNAME     L2R
 57           KO       0       0     0.0       0      22
 58           RS      10    FLOW     0.0     0.0
 59           RC   0.046   0.045   0.046 28949.0  0.0147     0.0
              * L1-L2
 60           RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
 61           RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

 62           KK      L2
 63           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 64           KM         L=5.21      Lca=2.40      S=82.13      Kn=0.055      LAG=90.0
 65           KM         S-GRAPH TYPE=DESERT RANGELAND
 66           KO       0       0     0.0       1      22
 67           BA  7.3294
 68           LG   0.24   0.257   4.202   0.462  33.542
              * L2
 69           UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
 70           UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
 71           UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
 72           UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
 73           UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
 74           UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
 75           UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

 76           KK   L2-Do
 77           KO       0       0     0.0       0      22
 78           DT    L2-D   475.0     0.0
              * Curve 1
 79           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 80           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 81           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 82           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

                                    HEC-1 INPUT                                                    PAGE  3
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 83           KK     L3R   CNAME   L2-L3
 84           KO       0       0     0.0       0      22
 85           HC       2     0.0

 86           KK   L2-L3   CNAME     L3R
 87           KO       0       0     0.0       0      22
 88           RS      20    FLOW     0.0     0.0
 89           RC    0.05   0.045    0.06 20567.0  0.0084     0.0
              * L2-L3
 90           RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
 91           RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

 92           KK      L3
 93           KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 94           KM          L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
 95           KM          S-GRAPH TYPE=DESERT RANGELAND
 96           KO       0       0     0.0       1      22
 97           BA  5.8518
 98           LG   0.205   0.257    3.98   0.449  45.272
              * L3
 99           UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
100           UI  1460.0 1557.79 1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
101           UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
102           UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
103           UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
104           UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
105           UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

106           KK   L3-Do
107           KO       0       0     0.0       0      22
108           DT    L3-D   456.9     0.0
              * Curve 2
109           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
110           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
111           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
112           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

113           KK       L   CNAME     LCP
114           KO       0       0     0.0       0      22
115           HC       2     0.0

116           KK     LCP   CNAME       L
117           KO       0       0     0.0       0      22
118           RM     LCP

119           KK      Z1
120           KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
121           KM          L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
122           KM          S-GRAPH TYPE=DESERT RANGELAND
123           KO       0       0     0.0       1      22
124           BA  0.6644
125           LG   0.168   0.277   4.004   0.499  58.182
              * Z1
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

126           UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
127           UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
128           UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

129           KK   Z1-Do
130           KO       0       0     0.0       0      22
131           DT    Z1-D    58.0     0.0
              * Curve 1
132           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
133           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
134           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
135           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

136           KK     ZCP   CNAME       Z
137           KO       0       0     0.0       0      22
138           RM     ZCP

139           KK      M1
140           KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
141           KM          L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
142           KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
143           KO       0       0     0.0       1      22
144           BA  5.5949
145           LG   0.349   0.349   4.306   0.348  17.433
              * M1
146           UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
147           UI  4005.2 2791.27 2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
148           UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
149           UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
150           UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
151           UI   64.47   64.47     0.0

152           KK   M1-Do
153           KO       0       0     0.0       0      22
154           DT    M1-D   170.0     0.0
              * Curve 1
155           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
156           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
157           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
158           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

159           KK   M1-M2   CNAME     M2R
160           KO       0       0     0.0       0      22
161           RS      28    FLOW     0.0     0.0
162           RC    0.04    0.04   0.045 38719.0  0.0133     0.0
              * M1-M2
163           RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
164           RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5
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                                        HEC-1 INPUT                                                                    PAGE  5

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

  165         KK      M2
  166         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  167         KM         L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
  168         KM         S-GRAPH TYPE-DESERT RANGELAND
  169         KO       0       0     0.0       1      22
  170         BA   7.5274
  171         LG   0.205   0.255   3.952   0.547  45.552
              * M2
  172         UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
  173         UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
  174         UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
  175         UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
  176         UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
  177         UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
  178         UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
  179         UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

  180         KK   M2-Do
  181         KO       0       0     0.0       0      22
  182         DT    M2-D   585.0     0.0
              * Curve 1
  183         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  184         DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  185         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  186         DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  187         KK       M   CNAME     MCP
  188         KO       0       0     0.0       0      22
  189         RC       2     0.0

  190         KK     MCP   CNAME       M
  191         KO       0       0     0.0       0      22
  192         RN     MCP

  193         KK      O1
  194         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  195         KM         L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
  196         KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
  197         KO       0       0     0.0       1      22
  198         BA   3.0883
  199         LG   0.252   0.252   4.189   0.443   31.44
              * O1
  200         UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
  201         UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
  202         UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
  203         UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
  204         UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
  205         UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
  206         UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
  207         UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
  208         UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
  209         UI   19.93   19.93   19.93     0.0

                                        HEC-1 INPUT                                                                    PAGE  6

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

  210         KK   O1-Do
  211         KO       0       0     0.0       0      22
  212         DT    O1-D   150.0     0.0
              * Curve 1
  213         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  214         DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  215         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  216         DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  217         KK     OCP   CNAME       O
  218         KO       0       0     0.0       0      22
  219         RN     OCP

  220         KK      N1
  221         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  222         KM         L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
  223         KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
  224         KO       0       0     0.0       1      22
  225         BA   1.524
  226         LG   0.289   0.289   4.075   0.469  26.648
              * N1
  227         UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
  228         UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
  229         UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
  230         UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

  231         KK   N1-Do
  232         KO       0       0     0.0       0      22
  233         DT    N1-D    65.0     0.0
              * Curve 1
  234         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  235         DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  236         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  237         DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  238         KK   N1-N2   CNAME     N2R
  239         KO       0       0     0.0       0      22
  240         RS      23    FLOW     0.0     0.0
  241         RC    0.05   0.047    0.05 26511.0  0.0115     0.0
              * N1-N2
  242         RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
  243         RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

  244         KK      N2
  245         KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  246         KM         L=5.64     Lca=3.27     S=170.14     Kn=0.055     LAG=91.0
  247         KM         S-GRAPH TYPE-PHOENIX MOUNTAIN
  248         KO       0       0     0.0       1      22
```

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 249          BA  3.3254
 250          LG   0.268   0.268   4.117   0.446  27.305
              * N2
 251          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85

                                        HEC-1 INPUT                                                PAGE  7

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

 252          UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
 253          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
 254          UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
 255          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
 256          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
 257          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
 258          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
 259          UI   23.58   23.58   23.58   23.58   23.58

 260          KK   N2-Do
 261          KO       0       0     0.0       0      22
 262          DT    N2-D   150.0     0.0
              * Curve 1
 263          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 264          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 265          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 266          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 267          KK       N   CNAME     NCP
 268          KO       0       0     0.0       0      22
 269          HC       2     0.0

 270          KK     NCP   CNAME       N
 271          KO       0       0     0.0       0      22
 272          RN     NCP

 273          KK      P1
 274          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 275          KM          L=6.39     Lca=2.62     S=200.13     Kn=0.055     LAG=85.0
 276          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 277          KO       0       0     0.0       1      22
 278          BA  2.4365
 279          LG   0.312   0.312   4.193   0.424    18.0
              * P1
 280          UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
 281          UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
 282          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
 283          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
 284          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
 285          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
 286          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
 287          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0

 288          KK   P1-Do
 289          KO       0       0     0.0       0      22
 290          DT    P1-D    85.0     0.0
              * Curve 1
 291          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 292          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 293          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 294          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

                                        HEC-1 INPUT                                                PAGE  8

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

 295          KK     PCP   CNAME       P
 296          KO       0       0     0.0       0      22
 297          RN     PCP

 298          KK      Q1
 299          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 300          KM          L=5.23     Lca=2.81     S=228.56     Kn=0.055     LAG=78.0
 301          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 302          KO       0       0     0.0       1      22
 303          BA  2.2336
 304          LG   0.338    0.34   4.203   0.396  15.896
              * Q1
 305          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.16  585.93  645.92
 306          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
 307          UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
 308          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
 309          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
 310          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
 311          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
 312          UI   18.48   18.48   18.48

 313          KK   Q1-Do
 314          KO       0       0     0.0       0      22
 315          DT    Q1-D    71.5     0.0
              * Curve 1
 316          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 317          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 318          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 319          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 320          KK     QCP   CNAME       Q
 321          KO       0       0     0.0       0      22
 322          RN     QCP
 323          ZZ


                                        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
```

```
+                    R1      1795.  3.42    258.    65.    22.   0.28
+   DIVERSION TO     R1-D    1795.  3.42    211.    53.    18.   0.28
+   HYDROGRAPH AT    R1-Do   1795.  3.42    211.    53.    18.   0.28
+   ROUTED TO        RCP     1795.  3.42    211.    53.    18.   0.28
+   HYDROGRAPH AT    L1      11153. 4.00   2713.   684.   228.   3.55
+   ROUTED TO        L1-L2   9356.  4.75   2706.   684.   228.   3.55
+                                                                   17.74    4.75
+   HYDROGRAPH AT    L2      16946. 4.58   5857.  1491.   497.   7.33
+   DIVERSION TO     L2-D    16946. 4.58   5005.  1252.   417.   7.33
+   HYDROGRAPH AT    L2-Do   16946. 4.58   5005.  1252.   417.   7.33
+   2 COMBINED AT    L3R     26096. 4.75   7710.  1935.   645.  10.88
+   ROUTED TO        L2-L3   24879. 5.58   7612.  1935.   645.  10.88
+                                                                   16.68    5.58
+   HYDROGRAPH AT    L3      13797. 4.58   4925.  1259.   420.   5.85
+   DIVERSION TO     L3-D    13797. 4.58   4112.  1028.   343.   5.85
+   HYDROGRAPH AT    L3-Do   13797. 4.58   4112.  1028.   343.   5.85
+   2 COMBINED AT    L       32778. 5.50  11595.  2964.   988.  16.73
+   ROUTED TO        LCP     32778. 5.50  11595.  2964.   988.  16.73
+   HYDROGRAPH AT    Z1      2957.  3.83    592.   149.    50.   0.66
+   DIVERSION TO     Z1-D    2957.  3.83    479.   120.    40.   0.66
+   HYDROGRAPH AT    Z1-Do   2957.  3.83    479.   120.    40.   0.66
+   ROUTED TO        ZCP     2957.  3.83    479.   120.    40.   0.66
+   HYDROGRAPH AT    M1      18377. 3.92   4267.  1074.   358.   5.59
+   DIVERSION TO     M1-D    18377. 3.92   3952.   988.   329.   5.59
+   HYDROGRAPH AT    M1-Do   18377. 3.92   3952.   988.   329.   5.59
+   ROUTED TO        M1-M2   14084. 5.58   3918.   988.   329.   5.59
+                                                                   14.24    5.58
+   HYDROGRAPH AT    M2      15810. 4.75   6182.  1592.   531.   7.53
+   DIVERSION TO     M2-D    15810. 4.75   5183.  1297.   432.   7.53
+   HYDROGRAPH AT    M2-Do   15810. 4.75   5183.  1297.   432.   7.53
+   2 COMBINED AT    M       25268. 5.50   9087.  2285.   762.  13.12
+   ROUTED TO        MCP     25268. 5.50   9087.  2285.   762.  13.12
+   HYDROGRAPH AT    O1      7023.  4.58   2406.   626.   209.   3.09
+   DIVERSION TO     O1-D    7023.  4.58   2174.   551.   184.   3.09
+   HYDROGRAPH AT    O1-Do   7023.  4.58   2174.   551.   184.   3.09
+   ROUTED TO        OCP     7023.  4.58   2174.   551.   184.   3.09
+   HYDROGRAPH AT    N1      6090.  3.75   1184.   297.    99.   1.52
+   DIVERSION TO     N1-D    6090.  3.75   1059.   265.    88.   1.52
+   HYDROGRAPH AT    N1-Do   6090.  3.75   1059.   265.    88.   1.52
+   ROUTED TO        N1-N2   4551.  5.08   1055.   265.    88.   1.52
+                                                                   15.13    5.08
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          HYDROGRAPH AT
+                        N2      7913.   4.42      2555.      660.      220.     3.33
          DIVERSION TO
+                      N2-D      7913.   4.42      2321.      584.      195.     3.33
          HYDROGRAPH AT
+                     N2-Do      7913.   4.42      2321.      584.      195.     3.33
          2 COMBINED AT
+                         N      9694.   5.08      3375.      849.      283.     4.85
          ROUTED TO
+                       NCP      9694.   5.08      3375.      849.      283.     4.85
          HYDROGRAPH AT
+                        P1      5967.   4.33      1800.      460.      153.     2.44
          DIVERSION TO
+                      P1-D      5967.   4.33      1666.      417.      139.     2.44
          HYDROGRAPH AT
+                     P1-Do      5967.   4.33      1666.      417.      139.     2.44
          ROUTED TO
+                       PCP      5967.   4.33      1666.      417.      139.     2.44
          HYDROGRAPH AT
+                        Q1      5856.   4.25      1649.      419.      140.     2.23
          DIVERSION TO
+                      Q1-D      5856.   4.25      1531.      383.      128.     2.23
          HYDROGRAPH AT
+                     Q1-Do      5856.   4.25      1531.      383.      128.     2.23
          ROUTED TO
+                       QCF      5856.   4.25      1531.      383.      128.     2.23

 *** NORMAL END OF HEC-1 ***
1****************************************                    ****************************************
*                                        *                    *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)    *                    *   U.S. ARMY CORPS OF ENGINEERS       *
*              MAY  1991                 *                    *   HYDROLOGIC ENGINEERING CENTER      *
*           VERSION 4.0.1E               *                    *         609 SECOND STREET            *
*                                        *                    *      DAVIS, CALIFORNIA 95616         *
*  RUN DATE            TIME              *                    *          (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 HEC1KM.

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   Buckeye/Sun Valley ADMS - 23 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID   PMP 6-hour
   4          ID   Future Conditions
   5          ID   FRS #2 (Sub-basins S-U)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - Town of Buckeye LU Districts (2003)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       0
  14          IN       5 01JAN94       0
  15          JD    13.6    0.01
              * PMP 6-hour FRS#2
  16          PI   0.029   0.029   0.029    0.03    0.03   0.031   0.032   0.032   0.033   0.034
  17          PI   0.034   0.035   0.043   0.043   0.043   0.043   0.044   0.044   0.045   0.047
  18          PI   0.049   0.053   0.057   0.061   0.112   0.114   0.115   0.119   0.123   0.127
  19          PI   0.129   0.147   0.154   0.168   0.187   0.215   2.948   1.712   1.236   0.761
  20          PI   0.666   0.571   0.295   0.285   0.276   0.266   0.252   0.243   0.107   0.099
  21          PI   0.092   0.087   0.082   0.078   0.073   0.071   0.068   0.067   0.066   0.063
  22          PI   0.043   0.043   0.042   0.041   0.041    0.04   0.039   0.039   0.038   0.037
  23          PI   0.037   0.036

  24          KK      S1
  25          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  26          KM         L=2.32    Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
  27          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
  28          KO       0       0     0.0       1      22
  29          BA  1.4103
  30          LG   0.289   0.313   4.485   0.392  25.978
              * S1
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 31          UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
 32          UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
 33          UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

 34          KK   S1-Do
 35          KO       0       0     0.0       0      22
 36          DT    S1-D    61.0     0.0
             * Curve 1
 37          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 38          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 39          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 40          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 41          KK     SCP   CNAME       S
 42          KO       0       0     0.0       0      22
 43          RN     SCP
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HEC-1 INPUT PAGE 2

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

 44          KK      U1
 45          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 46          KM          L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
 47          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 48          KO       0       0     0.0       1      22
 49          BA  1.3705
 50          LG   0.316   0.329   5.226   0.254  17.067
             * U1
 51          UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
 52          UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
 53          UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
 54          UI    26.8     0.0

 55          KK   U1-Do
 56          KO       0       0     0.0       0      22
 57          DT    U1-D    47.0     0.0
             * Curve 1
 58          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 59          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 60          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 61          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 62          KK     UCP   CNAME       U
 63          KO       0       0     0.0       0      22
 64          RN     UCP

 65          KK      T1
 66          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 67          KM          L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
 68          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 69          KO       0       0     0.0       1      22
 70          BA  3.0415
 71          LG   0.327   0.327   4.641   0.316    18.7
             * T1
 72          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
 73          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
 74          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 75          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 76          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

 77          KK   T1-Do
 78          KO       0       0     0.0       0      22
 79          DT     T1-D   103.0     0.0
             * Curve 2
 80          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 81          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 82          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 83          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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HEC-1 INPUT PAGE 3

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

 84          KK     TCP   CNAME       T
 85          KO       0       0     0.0       0      22
 86          RN     TCP
 87          ZZ
```

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	S1	9757.	3.58	1649.	413.	138.	1.41		
+	DIVERSION TO	S1-D	9757.	3.58	1530.	383.	128.	1.41		
+	HYDROGRAPH AT	S1-Do	9757.	3.58	1530.	383.	128.	1.41		
+	ROUTED TO	SCP	9757.	3.58	1530.	383.	128.	1.41		
+	HYDROGRAPH AT	U1	8898.	3.58	1623.	407.	136.	1.37		
+	DIVERSION TO	U1-D	8898.	3.58	1533.	383.	128.	1.37		
+	HYDROGRAPH AT	U1-Do	8898.	3.58	1533.	383.	128.	1.37		

```
          ROUTED TO
+                          UCP      8898.    3.58        1533.        383.        128.       1.37

          HYDROGRAPH AT
+                           T1     15109.    3.83        3539.        890.        297.       3.04

          DIVERSION TO
+                         T1-D     15109.    3.83        3351.        838.        279.       3.04

          HYDROGRAPH AT
+                        T1-Do     15109.    3.83        3351.        838.        279.       3.04

          ROUTED TO
+                          TCP     15109.    3.83        3351.        838.        279.       3.04


 *** NORMAL END OF HEC-1 ***
1*************************************                                                  ************************************
 *                                   *                                                  *                                  *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                               *   U.S. ARMY CORPS OF ENGINEERS   *
 *             MAY  1991             *                                                  *   HYDROLOGIC ENGINEERING CENTER  *
 *           VERSION 4.0.1E          *                                                  *         609 SECOND STREET        *
 *                                   *                                                  *      DAVIS, CALIFORNIA 95616     *
 *  RUN DATE            TIME         *                                                  *        (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

                                                  HEC-1 INPUT                                                    PAGE  1

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

       1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
       2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
       3           ID   PMP 6-hour
       4           ID   Future Conditions
       5           ID   FRS #3 (Sub-basins V-Y)
       6           ID   Rainfall Loss Method - Green & Ampt
       7           ID   Unit Hydrograph Method - FCDMC S-Graph
       8           ID   Channel Routing Method - Normal Depth
       9           ID   Land Use - Town of Buckeye LU Districts (2003)
      10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
      11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
                   *DIAGRAM
      12           IT       5  1JAN94       0    2000
      13           IO       6
      14           IN       5 01JAN94       0
      15           JD    12.8    0.01
                   * PMP 6hr - FRS3
      16           PI   0.027   0.027   0.028   0.029   0.029    0.03    0.03    0.03   0.031   0.032
      17           PI   0.032   0.033    0.04    0.04    0.04    0.04   0.041   0.041   0.042   0.044
      18           PI   0.047    0.05   0.054   0.057   0.106   0.107   0.108   0.112   0.115    0.12
      19           PI   0.122   0.139   0.145   0.158   0.176   0.202   2.775   1.611   1.164   0.716
      20           PI   0.627   0.537   0.277   0.269    0.26   0.251   0.237   0.228     0.1   0.093
      21           PI   0.087   0.081   0.077   0.073   0.069   0.067   0.064   0.063   0.062   0.059
      22           PI    0.04    0.04   0.039   0.038   0.038   0.038   0.037   0.037   0.036   0.035
      23           PI   0.035   0.034

      24           KK      V1
      25           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
      26           KM         L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
      27           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
      28           KO       0       0     0.0       1      22
      29           BA  0.6646
      30           LG   0.335   0.335   3.971   0.405  18.644
                   * V1
      31           UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
      32           UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
      33           UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
      34           UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
      35           UI     0.0

      36           KK   V1-Do
      37           KO       0       0     0.0       0      22
      38           DT    V1-D    23.0     0.0
                   * Curve 3
      39           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
      40           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
                   * Curve 1
      41           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
      42           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

                                                  HEC-1 INPUT                                                    PAGE  2

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


      43           KK     VCP   CNAME       V
      44           KO       0       0     0.0       0      22
      45           KM     VCP
```

```
 46          KK      W1
 47          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 48          KM         L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
 49          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 50          KO       0        0      0.0        1       22
 51          BA   3.894
 52          LG    0.35     0.35    3.975     0.41   15.228
             * W1
 53          UI     0.0   297.97   297.97   920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
 54          UI  1844.7 1658.52 1479.19 1314.83 1166.02   980.71    816.4   720.69    665.9   577.11
 55          UI  477.35   380.74   352.03   326.35   259.78   228.45   225.14   145.82   145.82   145.82
 56          UI  145.82    65.63    57.11    57.11    57.11    57.11    57.11    57.11    57.11    57.11
 57          UI   57.11      0.0

 58          KK   W1-W2   CNAME     W2R
 59          KO       0        0      0.0        0       22
 60          RS       6     FLOW      0.0      0.0
 61          RC   0.050     0.05     0.06 11249.0   0.0189      0.0
             * W1-W2
 62          RX     0.0    350.0    372.0    384.0    472.0    489.0    525.0   1005.0
 63          RY    17.5     11.5     11.6     10.0     11.2     13.4     13.8     17.5

 64          KK      W2
 65          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 66          KM         L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
 67          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 68          KO       0        0      0.0        1       22
 69          BA  2.8478
 70          LG   0.321    0.321    4.063    0.409   12.128
             * W2
 71          UI     0.0   217.92   217.92   673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
 72          UI  1349.1 1212.93 1081.78   961.58   852.74   717.22   597.06   527.06   486.99   422.06
 73          UI   349.1   278.45   257.45   238.67   189.98   167.07   164.65   106.64   106.64   106.64
 74          UI  106.64     48.0    41.77    41.77    41.77    41.77    41.77    41.77    41.77    41.77
 75          UI   41.77      0.0

 76          KK   W2-Do
 77          KO       0        0      0.0        0       22
 78          DT    W2-D    130.0      0.0
             * Curve 1
 79          DI     0.0   2500.0   5000.0   7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 80          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 2
 81          DQ     0.0   2500.0   5000.0   7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 82          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 83          KK       W    CNAME     WCF
 84          KO       0        0      0.0        0       22
 85          RC       2      0.0

 86          KK     WCP    CNAME       W
 87          KO       0        0      0.0        0       22
 88          RN     WCP

 89          KK      X1
 90          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 91          KM         L=2.60     Lca=1.44     S=288.89     Kn=0.050     LAG=40.0
 92          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 93          KO       0        0      0.0        1       22
 94          BA  0.7867
 95          LG    0.35     0.35    3.947    0.418   12.841
             * X1
 96          UI     0.0    66.22    86.09   225.41   360.12   457.02   541.42   743.25   566.57   418.64
 97          UI  370.57   326.87   286.18   248.98   205.81   168.91   155.03   138.38   108.79    86.55
 98          UI   78.81    72.53    55.12    50.77    43.42    32.41    32.41    32.41    19.79    12.69
 99          UI   12.69    12.69    12.69    12.69    12.69    12.69    12.69      0.0

100          KK     XCP    CNAME       X
101          KO       0        0      0.0        0       22
102          RN     XCP

103          KK      Y1
104          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
105          KM         L=1.37     Lca=0.53     S=771.84     Kn=0.050     LAG=17.0
106          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
107          KO       0        0      0.0        1       22
108          BA  0.5808
109          LG    0.35     0.35    4.051    0.415   10.599
             * Y1
110          UI     0.0   162.05   614.46  1087.12    811.3   562.72   397.42   272.87   186.43    132.2
111          UI   88.57    57.25    43.55    22.05    22.05    22.05      0.0

112          KK     YCP    CNAME       Y
113          KO       0        0      0.0        0       22
114          RN     YCP
115          ZZ
```

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	V1	3483.	3.75	702.	176.	59.	0.66		
+	DIVERSION TO	V1-D	3483.	3.75	658.	165.	55.	0.66		
+	HYDROGRAPH AT	V1-Do	3483.	3.75	658.	165.	55.	0.66		
+	ROUTED TO	VCF	3483.	3.75	658.	165.	55.	0.66		

```
          HYDROGRAPH AT
+                    W1    19970.   3.75      4040.      1013.      338.      3.69
          ROUTED TO
+                  W1-W2   17608.   4.17      4036.      1013.      338.      3.69
+                                                                          16.57      4.17
          HYDROGRAPH AT
+                    W2    14599.   3.75      2940.       737.      246.      2.85
          DIVERSION TO
+                  W2-D    14599.   3.75      2687.       672.      224.      2.85
          HYDROGRAPH AT
+                  W2-Do   14599.   3.75      2687.       672.      224.      2.85
          2 COMBINED AT
+                     W    28839.   4.08      6722.      1685.      562.      6.74
          ROUTED TO
+                   WCP    28604.   4.08      6722.      1685.      562.      6.74
          HYDROGRAPH AT
+                    X1     4164.   3.75       807.       202.       67.      0.79
          ROUTED TO
+                   XCP     4164.   3.75       807.       202.       67.      0.79
          HYDROGRAPH AT
+                    Y1     4867.   3.42       590.       148.       49.      0.58
          ROUTED TO
+                   YCP     4867.   3.42       590.       148.       49.      0.58

*** NORMAL END OF HEC-1 ***
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E.6.8 ..... HEC-1 Output File PMP 72-Hour

E.6.8.a HEC-1 Output File for PMP 72-Hour (Existing Conditions)

```
1*************************************                    *************************************
*                                   *                    *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                    *   U.S. ARMY CORPS OF ENGINEERS    *
*           MAY  1991               *                    *   HYDROLOGIC ENGINEERING CENTER   *
*         VERSION 4.0.1E            *                    *        609 SECOND STREET          *
*                                   *                    *     DAVIS, CALIFORNIA 95616       *
* RUN DATE          TIME            *                    *        (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 26 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   Buckeye/Sun Valley ADMS - 01 March 2004
   2          ID   PB54J - Modelers: Jacob Lesue & Wen Chen
   3          ID   PMP 72-hour
   4          ID   Existing Conditions
   5          ID   Area 3 - Sub-basins A-C
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - FCDMC GIS Data: maq_landuse (2000)
  10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
  11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
  12          IT       5  1JAN94       0    2000
  13          IO       3
  14          IN      20 01JAN94       0
  15          JD    15.5    0.01
              * PMP 72-hour
  16          PI   0.003   0.003   0.003   0.003   0.003   0.003   0.004   0.004   0.004   0.004
  17          PI   0.005   0.005   0.005   0.005   0.006   0.006   0.006   0.007   0.007   0.007
  18          PI   0.007   0.008   0.008   0.008   0.008   0.009   0.009   0.009   0.009    0.01
  19          PI    0.01    0.01    0.01    0.01    0.01    0.01   0.019    0.02    0.02   0.021
  20          PI   0.021   0.021   0.022   0.022   0.022   0.023   0.023   0.023   0.024   0.024
  21          PI   0.024   0.024   0.024   0.024   0.024   0.025   0.025   0.025   0.025   0.025
  22          PI   0.026   0.026   0.026   0.026   0.027   0.027   0.027   0.027   0.027   0.028
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 23          PI   0.028   0.028   0.036   0.036   0.036   0.036   0.036   0.036   0.037   0.037
 24          PI   0.037   0.037   0.037   0.038   0.039    0.04   0.042   0.044   0.046   0.049
 25          PI   0.051   0.051   0.052   0.053   0.054   0.055   0.057   0.057   0.059   0.061
 26          PI   0.063   0.065   0.067    0.07   0.073   0.077    0.08   0.084   3.083   0.483
 27          PI   0.464   0.445   0.423   0.407   0.388   0.368   0.368   0.349    0.33   0.311
 28          PI   0.292   0.273   0.252   0.236   0.215   0.196   0.177   0.159   0.145   0.133
 29          PI   0.125   0.118   0.111   0.106   0.103   0.099   0.097   0.094   0.092   0.091
 30          PI    0.09   0.089   0.088   0.087   0.037   0.036   0.036   0.035   0.035   0.034
 31          PI   0.034   0.034   0.033   0.033   0.033   0.032   0.032   0.032   0.032   0.031
 32          PI   0.031   0.031   0.031    0.03    0.03    0.03    0.03    0.03    0.03    0.03
 33          PI    0.03    0.03   0.029   0.029   0.029   0.029   0.029   0.029   0.028   0.028
 34          PI   0.019   0.019   0.019   0.018   0.018   0.018   0.017   0.017   0.017   0.017
 35          PI   0.017   0.017   0.017   0.017   0.016   0.016   0.016   0.015   0.015   0.015
 36          PI   0.015   0.014   0.014   0.014   0.014   0.013   0.013   0.013   0.013   0.012
 37          PI   0.012   0.012   0.011   0.011   0.011   0.011

 38          KK      C1
 39          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40          KM   L=3.99      Lca=2.01      S=387.22      Kn=0.050      LAG=51.0
 41          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
 42          KO       0       0     0.0       1      22
 43          BA  3.5862
 44          LG   0.215   0.296   3.933   0.407  21.409
             * C1
 45          UI     0.0  236.76  236.76  527.08  911.83 1306.09 1576.15 1799.13  2131.6 2781.78
 46          UI  2038.2 1574.43 1396.84 1275.29 1154.27 1044.98  935.76  822.33  695.81  603.68
 47          UI  561.29  519.88  455.15  388.96  307.02  297.68   259.3   259.3  183.85  181.51
 48          UI  181.51  121.77  115.86  115.86  115.86  107.68   45.38   45.38   45.38   45.38
 49          UI   45.38   45.38   45.38   45.38   45.38   45.38   45.38   45.38
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 50          KK   C1-C2   CNAME     C2R
 51          KO       0       0     0.0       0      22
 52          RS       5    FLOW     0.0     0.0
 53          RC    0.05   0.044    0.05 18437.0  0.0176     0.0
             * C1-C2
 54          RX     0.0    35.0    90.0   138.0   159.0   209.0   264.0   309.0
 55          RY    21.0    19.0    16.0    10.0    10.0    15.0    20.0    24.0

 56          KK      C2
 57          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 58          KM   L=3.69      Lca=1.53      S=105.29      Kn=0.055      LAG=63.0
 59          KM   S-GRAPH TYPE=DESERT RANGELAND
 60          KO       0       0     0.0       1      22
 61          BA  1.9204
 62          LG    0.35    0.35    3.92   0.436     0.0
             * C2
 63          UI     0.0  102.63  102.63  122.26  304.94  432.24  556.99  679.25  778.73  881.69
 64          UI   929.5  983.56  983.56  952.35  904.47  807.23  701.83  605.44  531.11  463.45
 65          UI  404.15  349.94  303.68  267.04  229.18  194.49  177.79  157.37  130.91  108.78
 66          UI  108.78   77.56   70.25   70.25   70.25   44.14   24.98   24.98   24.98   24.98
 67          UI   24.98   24.98   24.98   24.98   24.98   24.98   24.98     0.0

 68          KK     C3R   CNAME   C2-C3
 69          KO       0       0     0.0       0      22
 70          HC       2     0.0

 71          KK   C2-C3   CNAME     C3R
 72          KO       0       0     0.0       0      22
 73          RS       8    FLOW     0.0     0.0
 74          RC   0.046    0.05  0.0462 23418.0  0.0107     0.0
             * C2-C3
 75          RX     0.0    60.0   125.0   140.0   172.0   232.0   292.0   352.0
 76          RY    26.0    25.0    23.0    10.0    10.0    16.0    20.0    23.0

 77          KK      C3
 78          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 79          KM   L=4.44      Lca=2.51      S=56.33      Kn=0.050      LAG=84.0
 80          KM   S-GRAPH TYPE=DESERT RANGELAND
 81          KO       0       0     0.0       1      22
 82          BA  3.7859
 83          LG   0.345   0.345   4.357   0.372     0.0
             * C3
 84          UI     0.0  151.75  151.75  151.75  190.44  436.28  559.26  700.12  855.69  975.52
 85          UI  1073.3 1242.28 1321.31 1364.94 1436.99 1454.26 1454.26 1418.19 1372.63 1299.19
 86          UI  1161.9 1057.64   941.4  855.14  770.03  694.14  628.58  566.66   510.9  460.18
 87          UI   415.5   362.4  338.86  288.07  286.08  237.34  232.68  204.46  160.84  160.84
 88          UI  160.84  118.28  103.88  103.88  103.88  103.88   97.02   36.93   36.93   36.93
 89          UI   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93   36.93
 90          UI   36.93   36.93     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 91          KK     C4R   CNAME   C3-C4
 92          KO       0       0     0.0       0      22
 93          HC       2     0.0

 94          KK      C4
 95          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 96          KM   L=2.18      Lca=0.88      S=44.31      Kn=0.045      LAG=40.0
 97          KM   S-GRAPH TYPE=DESERT RANGELAND
 98          KO       0       0     0.0       1      22
 99          BA  1.4001
100          LG   0.327   0.327   4.737    0.29     0.0
             * C4
101          UI     0.0  117.85  153.21  406.59  642.02   848.8 1023.51 1108.81 1120.37 1044.08
102          UI  868.12  694.78   559.8  452.89  361.01  288.88  232.67  190.33  149.01  124.91
103          UI    88.1   80.67   73.19   28.68   28.68   28.68   28.68   28.68   28.68   28.68
104          UI     0.0

105          KK       C   CNAME     CCP
106          KO       0       0     0.0       0      22
107          HC       2     0.0

108          KK     CCP   CNAME       C
109          KO       0       0     0.0       0      22
110          KN     CCP
```

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111          KK      B1
112          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
113          KM   L=2.52      Lca=1.19      S=227.45      Kn=0.050      LAG=38.0
114          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
115          KO       0        0      0.0        1       22
116          BA  0.5559
117          LG    0.35     0.35    3.733     0.47    6.272
             * B1
118          UI     0.0    49.25    72.53   179.11   283.42   353.86   433.69   556.28   354.96   293.83
119          UI  258.29   226.62   196.88   163.69    131.5   117.02   105.83    83.39     66.1    58.84
120          UI   53.95    40.03    37.76    29.84     24.1     24.1    23.99     9.44     9.44     9.44
121          UI    9.44     9.44     9.44     9.44     9.44     9.44

122          KK   B1-B2    CNAME     B2R
123          KO       0        0      0.0        0       22
124          RS       6     FLOW      0.0      0.0
125          RC   0.055    0.042    0.055 11334.0   0.0137      0.0
             * B1-B2
126          RX     0.0     75.0    140.0    167.0    193.0    226.0    296.0    371.0
127          RY    20.0     17.0     14.0     10.0     10.0     13.0     17.0     22.0

128          KK      B2
129          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
130          KM   L=2.21      Lca=0.98      S=84.6      Kn=0.050      LAG=45.0
131          KM   S-GRAPH TYPE=DESERT RANGELAND
132          KO       0        0      0.0        1       22
133          BA  0.4888
134          LG    0.35     0.35    3.617    0.513      0.0
             * B2
```



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

135          UI     0.0    36.57    36.57    108.2   170.94   233.37   285.41    325.0   349.22   347.33
136          UI  325.56   278.29    231.3   188.32   156.44   128.94   105.91    86.03    71.02    59.44
137          UI   49.34    38.76    32.78    25.03    25.03    18.39      8.9      8.9      8.9      8.9
138          UI     8.9      8.9      8.9      8.9

139          KK     B3R    CNAME    B2-B3
140          KO       0        0      0.0        0       22
141          RC       2      0.0

142          KK   B2-B3    CNAME     B3R
143          KO       0        0      0.0        0       22
144          RS      16     FLOW      0.0      0.0
145          RC    0.05    0.025     0.05 19622.0   0.0121      0.0
             * B2-B3
146          RX     0.0    120.0    278.0    285.0    301.5    312.5    446.5    529.5
147          RY    13.5     10.0     11.6     10.1     10.1     11.5     10.8     12.6

148          KK      B3
149          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
150          KM   L=3.72      Lca=1.65      S=63.31      Kn=0.045      LAG=59.0
151          KM   S-GRAPH TYPE=DESERT RANGELAND
152          KO       0        0      0.0        1       22
153          BA   1.987
154          LG   0.331    0.331    4.284    0.389      0.0
             * B3
155          UI     0.0   113.39   113.39    174.2   365.68   513.62   667.08   787.09    935.3  1014.02
156          UI  1066.6  1086.67  1065.15  1007.46   902.78   777.14   664.54   576.28   502.42   427.51
157          UI  369.72   321.51   269.65   233.59   211.46   173.87   158.42   120.18   120.18    89.23
158          UI   77.62    77.62    77.62    39.48     27.6     27.6     27.6     27.6     27.6     27.6
159          UI    27.6     27.6     27.6     27.6      0.0

160          KK       B    CNAME      BCP
161          KO       0        0      0.0        0       22
162          RC       2      0.0

163          KK     BCP    CNAME        B
164          KO       0        0      0.0        0       22
165          RN     BCP

166          KK      A1
167          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
168          KM   L=2.20      Lca=0.86      S=322.08      Kn=0.050      LAG=30.0
169          KM   S-GRAPH TYPE=PHOENIX MOUNTAIN
170          KO       0        0      0.0        1       22
171          BA  1.1067
172          LG    0.35     0.35    4.058    0.417    9.677
             * A1
173          UI     0.0   124.21   285.26   628.48   880.99  1178.37  1187.81   769.89   652.53   550.24
174          UI  454.03   367.39   294.06   245.68    184.1   150.55   131.95    95.22    84.89    60.78
175          UI   60.78    43.03    23.81    23.81    23.81    23.81    23.81    23.81      0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

176          KK   A1-A2    CNAME     A2R
177          KO       0        0      0.0        0       22
178          RS       6     FLOW      0.0      0.0
179          RC   0.045    0.045    0.045 15153.0   0.0134      0.0
             * A1-A2
180          RX     0.0     75.0    125.0    165.0    190.0    220.0    280.0    340.0
181          RY    27.0     23.0     19.0     10.0     10.0     20.0     26.0     32.0

182          KK      A2
183          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
184          KM   L=3.34      Lca=1.28      S=94.61      Kn=0.055      LAG=57.0
185          KM   S-GRAPH TYPE=DESERT RANGELAND
186          KO       0        0      0.0        1       22
187          BA  1.6622
188          LG    0.35     0.35    4.847    0.339      0.0
             * A2
189          UI     0.0    98.18    98.18   167.77    329.1   468.89   598.13   713.32    831.1    883.8
190          UI  940.94   940.94   897.33   847.41   719.99   625.76   533.26   458.89   397.46    336.4
191          UI  288.45    247.3   210.36    185.1   155.06   143.14   104.07   104.07     78.8    67.21
192          UI   67.21    67.21    30.17     23.9     23.9     23.9     23.9     23.9     23.9     23.9
193          UI    23.9     23.9      0.0

194          KK     A3R    CNAME    A2-A3
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195          KO      0       0     0.0       0      22
196          HC      2   2.769

197          KK   A2-A3   CNAME     A3R
198          KO      0       0     0.0       0      22
199          RS      8    FLOW     0.0     0.0
200          RC   0.05   0.043    0.05 18190.0  0.0116     0.0
             * A2-A3
201          RX    0.0    20.0    30.0   165.0   186.0   346.0   361.0   381.0
202          RY   20.0    19.0    18.0    10.0    10.0    20.0    21.0    22.0

203          KK      A3
204          KM   THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
205          KM   L=3.92     Lca=1.89     S=58.21     Kn=0.045     LAG=64.0
206          KM   S-GRAPH TYPE-DESERT RANGELAND
207          KO      0       0     0.0       1      22
208          BA  3.7294
209          LG   0.35    0.35    4.23   0.405     0.0
             * A3
210          UI    0.0   196.2   196.2   216.8   570.49   813.36 1043.19 1275.51 1464.32 1668.95
211          UI 1757.8 1876.99 1880.23 1841.12 1751.54 1592.99 1387.91 1202.84 1048.95  919.72
212          UI 805.43  710.05  606.86  538.24  447.15  397.83  367.89  300.84  290.73  207.95
213          UI 207.95  183.56   134.3   134.3   134.3  131.67   47.75   47.75   47.75   47.75
214          UI  47.75   47.75   47.75   47.75   47.75   47.75   47.75   47.75

215          KK      A   CNAME     ACP
216          KO      0       0     0.0       0      22
217          HC      2   6.498
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

218          KK    ACP   CNAME       A
219          KO      0       0     0.0       0      22
220          RN    ACP
221          ZZ
```

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	C1	6874.	36.92	2392.	699.	252.	3.59		
+	ROUTED TO	C1-C2	6266.	37.25	2364.	699.	252.	3.59		
+									16.62	37.25
+	HYDROGRAPH AT	C2	3060.	37.25	1085.	279.	93.	1.92		
+	2 COMBINED AT	C3R	9326.	37.25	3419.	978.	345.	5.51		
+	ROUTED TO	C2-C3	8512.	37.83	3375.	978.	345.	5.51		
+									19.34	37.83
+	HYDROGRAPH AT	C3	4870.	37.58	2236.	593.	198.	3.79		
+	2 COMBINED AT	C4R	13205.	37.75	5510.	1571.	543.	9.29		
+	HYDROGRAPH AT	C4	3328.	36.83	942.	246.	82.	1.40		
+	2 COMBINED AT	C	14372.	37.75	6400.	1817.	625.	10.69		
+	ROUTED TO	CCP	14372.	37.75	6400.	1817.	625.	10.69		
+	HYDROGRAPH AT	B1	1259.	36.75	320.	85.	29.	0.56		
+	ROUTED TO	B1-B2	1115.	37.17	314.	85.	29.	0.56		
+									13.08	37.17
+	HYDROGRAPH AT	B2	1005.	36.92	256.	65.	22.	0.49		
+	2 COMBINED AT	B3R	2005.	37.08	566.	149.	51.	1.04		
+	ROUTED TO	B2-B3	1481.	38.33	551.	149.	51.	1.04		
+									11.87	38.33
+	HYDROGRAPH AT	B3	3382.	37.17	1186.	307.	102.	1.99		
+	2 COMBINED AT	B	3386.	37.17	1692.	456.	153.	3.03		
+	ROUTED TO	BCP	3386.	37.17	1692.	456.	153.	3.03		
+	HYDROGRAPH AT	A1	2987.	36.67	685.	185.	64.	1.11		
+	ROUTED TO	A1-A2	2554.	37.08	674.	185.	64.	1.11		
+									17.08	37.08
	HYDROGRAPH AT									

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+                          A2      2948.   37.17        1038.        271.        90.       1.66

        2 COMBINED AT
+                          A3R     5463.   37.08        1706.        455.       154.       2.77

        ROUTED TO
+                         A2-A3    4878.   37.67        1676.        455.       154.       2.77
+                                                                                   15.53       37.67

        HYDROGRAPH AT
+                          A3      5909.   37.25        2163.        559.       186.       3.73

        2 COMBINED AT
+                           A      9714.   37.50        3779.       1015.       341.       6.50

        ROUTED TO
+                          ACP     9714.   37.50        3779.       1015.       341.       6.50


 *** NORMAL END OF HEC-1 ***
1*************************************                                    *************************************
 *                                   *                                    *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                                    *   U.S. ARMY CORPS OF ENGINEERS    *
 *            MAY  1991              *                                    *   HYDROLOGIC ENGINEERING CENTER   *
 *          VERSION 4.0.1E           *                                    *         609 SECOND STREET         *
 *                                   *                                    *      DAVIS, CALIFORNIA 95616      *
 *  RUN DATE            TIME         *                                    *         (916) 551-1748            *
 *                                   *                                    *                                   *
 *************************************                                    *************************************
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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 26 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

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   PMP 72-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins E-K)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: maq_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      20 01JAN94       0
 15           JD    15.8    0.01
              * PMP 72-hour FRS1
 16           PI   0.003   0.003   0.003   0.004   0.004   0.004   0.004   0.004   0.004   0.004
 17           PI   0.005   0.005   0.005   0.005   0.006   0.006   0.006   0.007   0.007   0.007
 18           PI   0.007   0.008   0.008   0.008   0.008   0.009   0.009   0.009   0.009    0.01
 19           PI    0.01    0.01   0.011   0.011   0.011   0.011    0.02    0.02    0.02   0.021
 20           PI   0.021   0.021   0.022   0.022   0.022   0.023   0.023   0.023   0.024   0.024
 21           PI   0.024   0.024   0.025   0.025   0.025   0.026   0.026   0.026   0.026   0.026
 22           PI   0.027   0.027   0.027   0.027   0.028   0.028   0.028   0.028   0.028   0.028
 23           PI   0.028   0.028   0.036   0.036   0.036   0.036   0.036   0.036   0.037   0.037
 24           PI   0.037   0.037   0.038   0.039    0.04   0.041   0.043   0.044   0.047    0.05
 25           PI   0.052   0.052   0.053   0.054   0.055   0.056   0.058   0.059    0.06   0.062
 26           PI   0.064   0.067   0.068   0.071   0.075   0.078   0.082   0.086   3.143   0.493
 27           PI   0.473   0.454   0.431   0.415   0.395   0.376   0.376   0.356   0.336   0.317
 28           PI   0.297   0.278   0.257   0.241   0.219     0.2    0.18   0.162   0.147   0.136
 29           PI   0.127    0.12   0.114   0.108   0.105   0.101   0.099   0.096   0.094   0.093
 30           PI   0.091   0.091    0.09   0.089   0.037   0.036   0.036   0.036   0.036   0.035
 31           PI   0.035   0.035   0.034   0.034   0.034   0.033   0.033   0.033   0.033   0.032
 32           PI   0.032   0.032   0.032   0.031   0.031   0.031   0.031    0.03    0.03    0.03
 33           PI    0.03    0.03   0.029   0.029   0.029   0.029   0.029   0.029   0.028   0.028
 34           PI    0.02    0.02    0.02   0.019   0.019   0.019   0.018   0.018   0.018   0.018
 35           PI   0.017   0.017   0.017   0.017   0.016   0.016   0.016   0.015   0.015   0.015
 36           PI   0.015   0.014   0.014   0.014   0.014   0.013   0.013   0.013   0.013   0.012
 37           PI   0.012   0.012   0.012   0.012   0.012   0.012
 38           KK      J1
 39           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM      L=4.09      Lca=1.78      S=70.82      Kn=0.055      LAG=75.0
 41           KM      S-GRAPH TYPE-DESERT RANGELAND
 42           KO       0       0     0.0       1      22
 43           BA  1.7341
 44           LG    0.35    0.35    3.25   0.652     0.0
              * J1
 45           UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
 46           UI  644.32  664.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
 47           UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
 48           UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
 49           UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
 50           UI   18.95   18.95   18.95   18.95   18.95   18.95
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                                    HEC-1 INPUT                                                                    PAGE  2

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


  51          KK   J1-J2    CNAME     J2R
  52          KO       0        0     0.0       0      22
  53          RS      19     FLOW     0.0     0.0
  54          RC   0.055     0.04   0.055 24090.0  0.0086     0.0
              * J1-J2
  55          RX     0.0    161.0   247.0   254.0   271.0   279.0   393.0   660.0
  56          RY    17.0     12.5    12.2    10.8    10.0    12.1    12.9    17.0

  57          KK      J2
  58          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  59          KM      L=5.18      Lca=2.51      S=45.01      Kn=0.050      LAG=93.0
  60          KM      S-GRAPH TYPE=DESERT RANGELAND
  61          KO       0        0     0.0       1      22
  62          BA  3.6379
  63          LG   0.349    0.348   3.623   0.495   0.281
              * J2
  64          UI     0.0   131.71  131.71  131.71  131.71   310.0   410.19   529.5   653.07   756.36
  65          UI  857.31   932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
  66          UI  1189.1  1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
  67          UI  484.42   440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
  68          UI  201.95    172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
  69          UI   90.16    79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
  70          UI   32.06    32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

  71          KK    K3RB    CNAME   J2-K3
  72          KO       0        0     0.0       0      22
  73          HC       2      0.0

  74          KK   J2-K3    CNAME    K3RB
  75          KO       0        0     0.0       0      22
  76          RS       3     FLOW     0.0     0.0
  77          RC    0.05    0.048    0.05  4072.0  0.0059     0.0
              * J2-K3
  78          RX     0.0    390.0   490.0   502.0   520.0   532.0   632.0  1022.0
  79          RY    20.0     14.5    11.5    10.0    10.0    11.5    14.5    20.0

  80          KK      K1
  81          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  82          KM      L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
  83          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
  84          KO       0        0     0.0       1      22
  85          BA   1.543
  86          LG   0.112    0.255   4.382   0.365   21.06
              * K1
  87          UI     0.0   129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
  88          UI  726.82   641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
  89          UI  154.58   142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
  90          UI   24.89    24.89   24.89   24.89   24.89   24.89   24.89     0.0

                                    HEC-1 INPUT                                                                    PAGE  3

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


  91          KK   K1-K2    CNAME     K2R
  92          KO       0        0     0.0       0      22
  93          RS      13     FLOW     0.0     0.0
  94          RC   0.048     0.05   0.048 30021.0   0.015     0.0
              * K1-K2
  95          RX     0.0     20.0    55.0    85.0   235.0   259.0   289.0   309.0
  96          RY    22.0     21.0    20.0    10.0    10.0    20.0    21.0    22.0

  97          KK      K2
  98          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  99          KM      L=7.3       Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
 100          KM      S-GRAPH TYPE=DESERT RANGELAND
 101          KO       0        0     0.0       1      22
 102          BA   2.365
 103          LG   0.341    0.346   4.471   0.348   1.018
              * K2
 104          UI     0.0    66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
 105          UI  324.09   369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
 106          UI  641.26   641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
 107          UI  460.97   411.12  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
 108          UI  209.97    203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
 109          UI   102.6    102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
 110          UI    45.8     45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
 111          UI   16.29    16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
 112          UI   16.29    16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

 113          KK    K3RA    CNAME   K2-K3
 114          KO       0        0     0.0       0      22
 115          HC       2      0.0

 116          KK   K2-K3    CNAME    K3RA
 117          KO       0        0     0.0       0      22
 118          RS      19     FLOW     0.0     0.0
 119          RC    0.05    0.048    0.05 25950.0  0.0084     0.0
              * K2-K3
 120          RX     0.0    390.0   490.0   502.0   520.0   532.0   632.0  1022.0
 121          RY    20.0     14.5    11.5    10.0    10.0    11.5    14.5    20.0

 122          KK      F1
 123          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 124          KM      L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
 125          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 126          KO       0        0     0.0       1      22
 127          BA  2.7854
 128          LG   0.299     0.33   4.322   0.361  14.271
              * F1
 129          UI     0.0   203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
 130          UI  1348.3  1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
 131          UI  380.98   319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
 132          UI   99.77    99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
 133          UI   39.08    39.08   39.08     0.0

                                    HEC-1 INPUT                                                                    PAGE  4

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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134          KK   F1-F2    CNAME     F2R
135          KO       0        0     0.0       0      22
136          RS       2     FLOW     0.0     0.0
137          RC   0.053    0.045   0.055  8635.0   0.012     0.0
             * F1-F2
138          RX     0.0     60.0   120.0   146.0   178.0   208.0   268.0   328.0
139          RY    27.0     26.0    25.0    10.0    10.0    24.0    26.0    28.0

140          KK      F2
141          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
142          KM      L=3.88      Lca=1.76      S=161.6      Kn=0.050      LAG=57.0
143          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
144          KO       0        0     0.0       1      22
145          BA  2.5261
146          LG    0.35     0.35   4.311   0.375   3.026
             * F2
147          UI     0.0   149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
148          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
149          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
150          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
151          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
152          UI    28.6    28.6    28.6     0.0

153          KK     F3R    CNAME   F2-F3
154          KO       0        0     0.0       0      22
155          RC       2      0.0

156          KK   F2-F3    CNAME     F3R
157          KO       0        0     0.0       0      22
158          RS       5     FLOW     0.0     0.0
159          RC    0.05    0.047   0.048  7059.0    0.01     0.0
             * F2-F3
160          RX     0.0    350.0   425.0   455.0   472.0   499.0   569.0   900.0
161          RY    20.0     15.0    13.0    10.0    10.0    12.0    14.0    20.0

162          KK      F3
163          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
164          KM      L=2.71      Lca=1.26      S=81.34      Kn=0.055      LAG=54.0
165          KM      S-GRAPH TYPE=DESERT RANGELAND
166          KO       0        0     0.0       1      22
167          BA  0.7363
168          LG    0.35     0.35   3.266   0.647     0.0
             * F3
169          UI     0.0    45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
170          UI  439.96   431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
171          UI  113.72    96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
172          UI   21.41    11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
173          UI     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

174          KK    E4RB    CNAME   F3-E4
175          KO       0        0     0.0       0      22
176          RC       2      0.0

177          KK   F3-E4    CNAME    E4RB
178          KO       0        0     0.0       0      22
179          RS      18     FLOW     0.0     0.0
180          RC    0.05    0.044    0.05 27656.0  0.0072     0.0
             * F3-E4
181          RX     0.0    570.0   650.0   690.0   705.0   735.0   810.0  1200.0
182          RY    20.0     14.0    13.0    10.0    10.0    12.5    14.5    20.0

183          KK      H1
184          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
185          KM      L=2.41      Lca=1.09      S=64.59      Kn=0.055      LAG=51.0
186          KM      S-GRAPH TYPE=DESERT RANGELAND
187          KO       0        0     0.0       1      22
188          BA  1.0659
189          LG    0.35     0.35   2.733   0.945     0.0
             * H1
190          UI     0.0    70.37   70.37  156.66   277.5  386.06  480.97  578.94  629.54  674.37
191          UI  672.89    639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
192          UI  143.71   125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
193          UI   17.13    17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0

194          KK   H1-H2    CNAME     H2R
195          KO       0        0     0.0       0      22
196          RS      16     FLOW     0.0     0.0
197          RC   0.053     0.05   0.053 21738.0  0.0082     0.0
             * H1-H2
198          RX     0.0    330.0   430.0   465.0   495.0   530.0   630.0   960.0
199          RY    17.0     14.0    12.0    10.0    10.0    12.0    14.0    17.0

200          KK      E1
201          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
202          KM      L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
203          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
204          KO       0        0     0.0       1      22
205          BA  0.9558
206          LG    0.35    0.378   5.377   0.222    0.69
             * E1
207          UI     0.0    74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
208          UI  451.09    405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
209          UI  107.54    95.41   81.97    76.8   57.38   57.38    44.3   36.62   36.62   36.62
210          UI   23.52    14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
211          UI     0.0

212          KK   E1-E2    CNAME     E2R
213          KO       0        0     0.0       0      22
214          RS       5     FLOW     0.0     0.0
215          RC    0.05    0.047   0.046 11365.0   0.016     0.0
             * E1-E2
216          RX     0.0     65.0   140.0   170.0   185.0   200.0   270.0   340.0
217          RY    24.0     21.0    17.0    10.0    10.0    14.0    18.0    22.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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218          KK      E2
219          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
220          KM      L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
221          KM      S-GRAPH TYPE=DESERT RANGELAND
222          KO       0        0      0.0        1       22
223          BA  1.9794
224          LG    0.35     0.36    5.043    0.256      0.0
             * E2
225          UI     0.0    148.1    148.1   438.18   692.22   945.05 1155.78 1316.09 1414.16 1406.52
226          UI  1318.3 1126.95   936.66    762.6    633.5   522.15   428.87   348.36    287.6   240.69
227          UI  199.81   156.97   132.73   101.38   101.38    74.46    36.05    36.05    36.05    36.05
228          UI   36.05    36.05    36.05    36.05

229          KK     E3R    CNAME    E2-E3
230          KO       0        0      0.0        0       22
231          HC       2      0.0

232          KK   E2-E3    CNAME      E3R
233          KO       0        0      0.0        0       22
234          RS       8     FLOW      0.0      0.0
235          RC   0.052    0.046    0.052 19626.0   0.0088      0.0
             * E2-E3
236          RX     0.0    133.0    173.0    213.0    223.0    263.0    303.0    403.0
237          RY    22.0     17.0     14.0     10.0     10.0     15.0     18.0     22.0

238          KK      E3
239          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
240          KM      L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
241          KM      S-GRAPH TYPE=DESERT RANGELAND
242          KO       0        0      0.0        1       22
243          BA  2.4882
244          LG    0.35     0.35    4.358    0.347      0.0
             * E3
245          UI     0.0    111.7    111.7    111.7   226.89   361.15   481.85   599.61   709.05   795.97
246          UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24   958.91   843.22   765.06
247          UI  671.88   595.79    537.6   476.41   423.39   378.12   335.21   305.85   252.82   234.09
248          UI  210.58   188.38   171.28   154.62   116.39   118.39   115.88    76.46    76.46    76.46
249          UI   76.46    75.48    27.19    27.19    27.19    27.19    27.19    27.19    27.19    27.19
250          UI   27.19    27.19    27.19    27.19    27.19    27.19

251          KK    E4RA    CNAME    E3-E4
252          KO       0        0      0.0        0       22
253          HC       2      0.0

254          KK   E3-E4    CNAME     E4RA
255          KO       0        0      0.0        0       22
256          RS      11     FLOW      0.0      0.0
257          RC   0.056    0.049    0.056 13855.0   0.0048      0.0
             * E3-E4
258          RX     0.0    570.0    650.0    690.0    705.0    735.0    810.0   1200.0
259          RY    21.0     14.0     13.0     10.0     10.0     12.5     14.5     21.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

260          KK      H2
261          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
262          KM      L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
263          KM      S-GRAPH TYPE=DESERT RANGELAND
264          KO       0        0      0.0        1       22
265          BA  1.4003
266          LG    0.35     0.35    3.222    0.664      0.0
             * H2
267          UI     0.0    52.97    52.97    52.97    52.97   142.96   178.43   226.95   274.77   319.65
268          UI  365.43   394.29   441.22   466.81   479.41   507.67   507.67   507.67   494.57   478.69
269          UI  456.78   413.67   373.55   343.54   306.19    279.6   254.36   232.34   208.24   189.81
270          UI  169.48   155.77   145.05   121.27   117.27    99.87    99.87    83.39    81.23    75.87
271          UI   56.15    56.15    56.15    49.16    36.26    36.26    36.26    36.26    36.26    27.61
272          UI   12.89    12.89    12.89    12.89    12.89    12.89    12.89    12.89    12.89    12.89
273          UI   12.89    12.89    12.89    12.89    12.89    12.89      0.0

274          KK      E4
275          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
276          KM      L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
277          KM      S-GRAPH TYPE=DESERT RANGELAND
278          KO       0        0      0.0        1       22
279          BA  3.0419
280          LG    0.35     0.35    3.816    0.439      0.0
             * E4
281          UI     0.0   100.41   100.41   100.41   100.41    158.4   288.68   358.14   433.81   515.03
282          UI   586.7   661.72   710.89   802.46   849.75   890.64   905.96   962.27   962.27   962.27
283          UI  958.04   920.58   904.74   855.35   781.12   712.29   671.26   604.24   557.18    512.1
284          UI  469.44   435.74   392.69   363.68   334.36   307.93   277.84   264.87   224.22   220.82
285          UI   189.3    189.3    167.8   153.96   153.96   127.89   106.43   106.43   106.43   101.84
286          UI   68.73    68.73    68.73    68.73    68.73    68.73      5.9    24.44    24.44    24.44
287          UI   24.44    24.44    24.44    24.44    24.44    24.44    24.44    24.44    24.44    24.44
288          UI   24.44    24.44    24.44    24.44    24.44    24.44

289          KK     E5R    CNAME   E4R2E5
290          KO       0        0      0.0        0       22
291          HC       5      0.0

292          KK  E4R2E5    CNAME      E5R
293          KO       0        0      0.0        0       22
294          RS      11     FLOW      0.0      0.0
295          RC    0.06     0.05     0.06 15206.0   0.0051      0.0
             * E4R2-E5
296          RX     0.0   1010.0   1080.0   1090.0   1110.0   1120.0   1190.0   2200.0
297          RY    27.0     16.0     15.0     10.0     10.0     14.0     16.0     27.0

298          KK      K3
299          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
300          KM      L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
301          KM      S-GRAPH TYPE=DESERT RANGELAND
302          KO       0        0      0.0        1       22
303          BA  1.6364
304          LG    0.35     0.35    3.421    0.582      0.0
             * K3
305          UI     0.0    58.61    58.61    58.61    58.61   132.91   178.83   231.78   287.29   333.51
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                                        HEC-1 INPUT                                                          PAGE  8

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

 306          UI 374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
 307          UI 529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
 308          UI 222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
 309          UI  89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
 310          UI  40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
 311          UI  14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

 312          KK      E5
 313          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 314          KM      L=3.01      Lca=1.41      S=28.56      Kn=0.050      LAG=66.0
 315          KM      S-GRAPH TYPE=DESERT RANGELAND
 316          KO       0       0     0.0       1      22
 317          BA  1.3075
 318          LG  0.347   0.344    3.94   0.429   0.968
              * E5
 319          UI    0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
 320          UI 597.64  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
 321          UI 298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
 322          UI   70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
 323          UI  16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

 324          KK     E6R   CNAME   E5K2E6
 325          KO       0       0     0.0       0      22
 326          HC       5     0.0

 327          KK  E5K2E6   CNAME     E6R
 328          KO       0       0     0.0       0      22
 329          RS       4    FLOW     0.0     0.0
 330          RC   0.063   0.051   0.063  5083.0  0.0037     0.0
              * E5K3-E6
 331          RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
 332          RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

 333          KK      E6
 334          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 335          KM      L=3.04      Lca=1.06      S=34.17      Kn=0.050      LAG=57.0
 336          KM      S-GRAPH TYPE=DESERT RANGELAND
 337          KO       0       0     0.0       1      22
 338          BA  2.0375
 339          LG  0.343   0.336   4.356   0.367   0.711
              * E6
 340          UI    0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
 341          UI 1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
 342          UI 353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
 343          UI  62.38   62.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
 344          UI  29.29   29.29     0.0

 345          KK       E   CNAME     ECP
 346          KO       0       0     0.0       0      22
 347          HC       2     0.0

                                        HEC-1 INPUT                                                          PAGE  9

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

 348          KK     ECP   CNAME       E
 349          KO       0       0     0.0       0      22
 350          RN     ECP

 351          KK      G1
 352          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 353          KM      L=2.38      Lca=1.08      S=33.76      Kn=0.045      LAG=47.0
 354          KM      S-GRAPH TYPE=DESERT RANGELAND
 355          KO       0       0     0.0       1      22
 356          BA  1.1192
 357          LG   0.35    0.35   4.688   0.298     0.0
              * G1
 358          UI    0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
 359          UI 735.76  667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
 360          UI 124.99  103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
 361          UI  19.51   19.51   19.51   19.51   19.51     0.0

 362          KK     GCP   CNAME       G
 363          KO       0       0     0.0       0      22
 364          RN     GCP
 365          ZZ


                                        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
+                    J1            2291.    37.42        794.         200.         67.      1.73

ROUTED TO
+                  J1-J2           1949.    38.92        786.         200.         67.      1.73
+                                                                                                   14.04       38.92

HYDROGRAPH AT
+                    J2            4247.    37.75       1958.         513.        171.      3.64

2 COMBINED AT
+                   K3RB           4453.    38.75       2697.         713.        238.      5.37

ROUTED TO
+                  J2-K3           4361.    39.00       2690.         713.        238.      5.37
+                                                                                                   15.99       39.00

HYDROGRAPH AT
+                    K1            3584.    36.83       1105.         320.        115.      1.54

ROUTED TO
+                  K1-K2           2634.    37.83       1030.         320.        115.      1.54
+                                                                                                   12.55       37.83
```

+	HYDROGRAPH AT	K2	2415.	38.25	1418.	399.	133.	2.37	
+	2 COMBINED AT	K3RA	4856.	37.83	2417.	718.	248.	3.91	
+	ROUTED TO	K2-K3	4366.	39.33	2391.	718.	248.	3.91	15.66 39.33
+	HYDROGRAPH AT	F1	5811.	36.92	1895.	534.	188.	2.79	
+	ROUTED TO	F1-F2	5512.	37.00	1883.	534.	188.	2.79	19.02 37.00
+	HYDROGRAPH AT	F2	4463.	37.00	1581.	421.	142.	2.53	
+	2 COMBINED AT	F3R	9976.	37.00	3459.	955.	330.	5.31	
+	ROUTED TO	F2-F3	9435.	37.33	3446.	955.	330.	5.31	17.09 37.33
+	HYDROGRAPH AT	F3	1289.	37.08	341.	86.	29.	0.74	
+	2 COMBINED AT	E4RB	10517.	37.25	3766.	1040.	359.	6.05	
+	ROUTED TO	F3-E4	8441.	38.67	3708.	1040.	359.	6.05	16.80 38.67
+	HYDROGRAPH AT	H1	1822.	37.00	352.	88.	29.	1.07	
+	ROUTED TO	H1-H2	1421.	38.25	347.	88.	29.	1.07	13.24 38.25
+	HYDROGRAPH AT	E1	2114.	36.83	691.	187.	63.	0.96	
+	ROUTED TO	E1-E2	1943.	37.17	683.	187.	63.	0.96	15.45 37.17
+	HYDROGRAPH AT	E2	4401.	36.92	1395.	370.	123.	1.98	
+	2 COMBINED AT	E3R	6070.	37.00	2065.	557.	186.	2.94	
+	ROUTED TO	E2-E3	5401.	37.58	2016.	557.	186.	2.94	17.66 37.58
+	HYDROGRAPH AT	E3	3612.	37.42	1568.	416.	139.	2.49	
+	2 COMBINED AT	E4RA	8920.	37.58	3528.	973.	325.	5.42	
+	ROUTED TO	E3-E4	7986.	38.42	3495.	973.	325.	5.42	17.41 38.42
+	HYDROGRAPH AT	H2	1569.	37.67	628.	160.	53.	1.40	
+	HYDROGRAPH AT	E4	3367.	37.92	1712.	457.	152.	3.04	
+	5 COMBINED AT	E5R	20727.	38.50	9529.	2718.	918.	16.98	
+	ROUTED TO	E4H2E5	19333.	39.33	9452.	2718.	918.	16.98	21.68 39.33
+	HYDROGRAPH AT	K3	1827.	37.75	800.	206.	69.	1.64	
+	HYDROGRAPH AT	E5	2056.	37.33	772.	201.	67.	1.31	
+	5 COMBINED AT	E6R	29097.	39.33	15146.	4556.	1540.	29.20	
+	ROUTED TO	E5K2E6	28671.	39.58	15121.	4556.	1540.	29.20	19.90 39.58
+	HYDROGRAPH AT	E6	3678.	37.17	1285.	336.	112.	2.04	
+	2 COMBINED AT	E	29593.	39.58	15916.	4892.	1653.	31.24	
+	ROUTED TO	ECP	29593.	39.58	15916.	4892.	1653.	31.24	
+	HYDROGRAPH AT	G1	2389.	37.00	757.	199.	66.	1.12	
+	ROUTED TO	GCP	2389.	37.00	757.	199.	66.	1.12	

```
*** NORMAL END OF HEC-1 ***
1*************************************                                  *************************************
*                                   *                                  *                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*                                  *   U.S. ARMY CORPS OF ENGINEERS    *
*              MAY  1991            *                                  *  HYDROLOGIC ENGINEERING CENTER    *
*           VERSION 4.0.1E          *                                  *        609 SECOND STREET          *
*                                   *                                  *     DAVIS, CALIFORNIA 95616       *
*  RUN DATE            TIME         *                                  *        (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

                                          HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 01 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   PMP 72-hour
  4           ID   Existing Conditions
  5           ID   FRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      20 01JAN94       0
 15           JD    15.8    0.01
              * PMP 72-hour FRS1
 16           PI   0.003   0.003   0.003   0.004   0.004   0.004   0.004   0.004   0.004   0.004
 17           PI   0.005   0.005   0.005   0.005   0.006   0.006   0.006   0.007   0.007   0.007
 18           PI   0.007   0.008   0.008   0.008   0.008   0.009   0.009   0.009   0.009    0.01
 19           PI    0.01    0.01   0.011   0.011   0.011   0.011    0.02    0.02    0.02   0.021
 20           PI   0.021   0.021   0.022   0.022   0.022   0.023   0.023   0.023   0.024   0.024
 21           PI   0.024   0.024   0.025   0.025   0.025   0.026   0.026   0.026   0.026   0.026
 22           PI   0.027   0.027   0.027   0.027   0.028   0.028   0.028   0.028   0.028   0.028
 23           PI   0.028   0.028   0.036   0.036   0.036   0.036   0.036   0.036   0.037   0.037
 24           PI   0.037   0.037   0.038   0.039    0.04   0.041   0.043   0.044   0.047    0.05
 25           PI   0.052   0.052   0.053   0.054   0.055   0.056   0.058   0.059    0.06   0.062
 26           PI   0.064   0.067   0.068   0.071   0.075   0.078   0.082   0.086   3.143   0.493
 27           PI   0.473   0.454   0.431   0.415   0.395   0.376   0.376   0.356   0.336   0.317
 28           PI   0.297   0.278   0.257   0.241   0.219     0.2    0.18   0.162   0.147   0.136
 29           PI   0.127    0.12   0.114   0.108   0.105   0.101   0.099   0.096   0.094   0.093
 30           PI   0.091   0.091    0.09   0.089   0.037   0.036   0.036   0.036   0.036   0.035
 31           PI   0.035   0.035   0.034   0.034   0.034   0.033   0.033   0.033   0.033   0.032
 32           PI   0.032   0.032   0.032   0.031   0.031   0.031   0.031    0.03    0.03    0.03
 33           PI    0.03    0.03   0.029   0.029   0.029   0.029   0.029   0.029   0.028   0.028
 34           PI    0.02    0.02    0.02   0.019   0.019   0.019   0.018   0.018   0.018   0.018
 35           PI   0.017   0.017   0.017   0.017   0.016   0.016   0.016   0.015   0.015   0.015
 36           PI   0.015   0.014   0.014   0.014   0.014   0.013   0.013   0.013   0.013   0.012
 37           PI   0.012   0.012   0.012   0.012   0.012   0.012

 38           KK      Q1
 39           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM      L=5.23      Lca=2.81      S=228.56      Kn=0.055      LAG=78.0
 41           KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0       0     0.0       1      22
 43           BA  2.2336
 44           LG    0.35    0.35   4.203    0.39  12.313
              * Q1
 45           UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
 46           UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
 47           UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
 48           UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
 49           UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
 50           UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
 51           UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48

                                          HEC-1 INPUT                                                    PAGE  2

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

 52           UI   18.48   18.48   18.48

 53           KK     QCP    CNAME       Q
 54           KO       0       0     0.0       0      22
 55           KM     QCP

 56           KK      P1
 57           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 58           KM      L=6.39      Lca=2.62      S=200.13      Kn=0.055      LAG=85.0
 59           KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 60           KO       0       0     0.0       1      22
 61           BA  2.4365
 62           LG    0.35    0.35   4.193   0.396   6.712
              * P1
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 63          UI     0.0   96.51   96.51   96.51  112.8  277.47  344.99   422.5  540.66  601.48
 64          UI  664.09   718.1  766.78  866.24 1024.06 1165.36  901.23  714.77  637.57  587.86
 65          UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
 66          UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
 67          UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
 68          UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
 69          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
 70          UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0

 71          KK     PCP   CNAME       P
 72          KO       0       0     0.0       0      22
 73          RN     PCP

 74          KK      N1
 75          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 76          KM      L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
 77          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 78          KO       0       0     0.0       1      22
 79          BA   1.524
 80          LG    0.35    0.35   4.075   0.419    8.38
             * N1
 81          UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
 82          UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
 83          UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
 84          UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

 85          KK   N1-N2   CNAME     M2R
 86          KO       0       0     0.0       0      22
 87          RS      17    FLOW     0.0     0.0
 88          RC    0.05   0.047    0.05 26511.0  0.0115     0.0
             * N1-N2
 89          RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
 90          RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0

 91          KK      N2
 92          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 93          KM      L=5.64     Lca=3.27     S=170.14     Kn=0.055     LAG=91.0
 94          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 95          KO       0       0     0.0       1      22
 96          BA  3.3254
 97          LG    0.35    0.35   4.117   0.405    2.67
             * N2
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 98          UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
 99          UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
100          UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
101          UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
102          UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
103          UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
104          UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
105          UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
106          UI   23.58   23.58   23.58   23.58   23.58

107          KK       N   CNAME     NCP
108          KO       0       0     0.0       0      22
109          HC       2     0.0

110          KK     NCP   CNAME       M
111          KO       0       0     0.0       0      22
112          RN     NCP

113          KK      O1
114          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
115          KM      L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
116          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
117          KO       0       0     0.0       1      22
118          BA  3.0883
119          LG    0.35    0.35   4.189   0.393   2.105
             * O1
120          UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
121          UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
122          UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
123          UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
124          UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
125          UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
126          UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
127          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
128          UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
129          UI   19.93   19.93   19.93     0.0

130          KK     OCP   CNAME       O
131          KO       0       0     0.0       0      22
132          RN     OCP

133          KK      M1
134          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
135          KM      L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
136          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
137          KO       0       0     0.0       1      22
138          BA  5.5949
139          LG    0.35    0.35   4.306   0.347  17.122
             * M1
140          UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
141          UI  4005.2 2791.27  2249.2 1997.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
142          UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
143          UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
144          UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
145          UI   64.47   64.47     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

146          KK   M1-M2   CNAME     M2R
147          KO       0       0     0.0       0      22
148          RS      20    FLOW     0.0     0.0
149          RC    0.04    0.04   0.045 38719.0  0.0133     0.0
             * M1-M2
150          RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
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151          RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

152          KK      M2
153          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
154          KM      L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
155          KM      S-GRAPH TYPE=DESERT RANGELAND
156          KO       0       0     0.0       1      22
157          BA  7.5274
158          LG   0.35    0.35   3.952   0.446   0.287
             * M2
159          UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
160          UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
161          UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
162          UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
163          UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
164          UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
165          UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
166          UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

167          KK       M    CNAME     MCP
168          KO       0       0     0.0       0      22
169          RC       2     0.0

170          KK     MCP    CNAME       M
171          KO       0       0     0.0       0      22
172          RN     MCP

173          KK      Z1
174          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
175          KM      L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
176          KM      S-GRAPH TYPE=DESERT RANGELAND
177          KO       0       0     0.0       1      22
178          BA  0.6644
179          LG  0.321   0.292   4.004    0.43   2.909
             * Z1
180          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
181          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
182          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

183          KK     ZCP    CNAME       Z
184          KO       0       0     0.0       0      22
185          RN     ZCP
```



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

186          KK      L1
187          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
188          KM      L=4.93     Lca=2.29     S=308.27     Kn=0.050     LAG=61.0
189          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
190          KO       0       0     0.0       1      22
191          BA  3.5462
192          LG  0.271   0.318   4.357   0.352  16.317
             * L1
193          UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
194          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
195          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
196          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
197          UI   95.79   95.79    79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
198          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

199          KK   L1-L2    CNAME     L2R
200          KO       0       0     0.0       0      22
201          RS      10    FLOW     0.0     0.0
202          RC   0.046   0.045   0.046 28949.0  0.0147     0.0
             * L1-L2
203          RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
204          RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

205          KK      L2
206          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
207          KM      L=5.21     Lca=2.40     S=82.13     Kn=0.055     LAG=90.0
208          KM      S-GRAPH TYPE=DESERT RANGELAND
209          KO       0       0     0.0       1      22
210          BA  7.3294
211          LG   0.35    0.35   4.202   0.399     0.0
             * L2
212          UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
213          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
214          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
215          UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
216          UI  319.44  290.62  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69
217          UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
218          UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74

219          KK     L3R    CNAME   L2-L3
220          KO       0       0     0.0       0      22
221          RC       2     0.0

222          KK   L2-L3    CNAME     L3R
223          KO       0       0     0.0       0      22
224          RS      11    FLOW     0.0     0.0
225          RC    0.05   0.045    0.06 20567.0  0.0084     0.0
             * L2-L3
226          RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
227          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0
```



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

228          KK      L3
229          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
230          KM      L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
231          KM      S-GRAPH TYPE=DESERT RANGELAND
232          KO       0       0     0.0       1      22
233          BA  5.8518
234          LG  0.341   0.328    3.98   0.419    1.05
             * L3
235          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
236          UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
```

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237        UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
238        UI   759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
239        UI   296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
240        UI   121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
241        UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

242        KK       L   CNAME     LCP
243        KO       0       0     0.0       0      22
244        HC       2     0.0

245        KK     LCP   CNAME       L
246        KO       0       0     0.0       0      22
247        RN     LCP

248        KK      R1
249        KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
250        KM      L=1.01     Lca=0.46     S=213.31     Km=0.050     LAG=19.0
251        KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
252        KO       0       0     0.0       1      22
253        BA  0.2836
254        LG    0.35    0.35   4.358   0.374   8.387
           * R1
255        UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
256        UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63    9.63     0.0

257        KK     RCP   CNAME       R
258        KO       0       0     0.0       0      22
259        RN     RCP
260        ZZ
```

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	Q1	3248.	37.33	1411.	406.	142.	2.23		
+	ROUTED TO	QCP	3248.	37.33	1411.	406.	142.	2.23		
+	HYDROGRAPH AT	P1	3305.	37.42	1474.	414.	142.	2.44		
+	ROUTED TO	PCP	3305.	37.42	1474.	414.	142.	2.44		
+	HYDROGRAPH AT	N1	3424.	36.83	955.	258.	89.	1.52		
+	ROUTED TO	N1-N2	2342.	38.33	932.	258.	89.	1.52		
+									14.23	38.33
+	HYDROGRAPH AT	N2	4269.	37.50	1936.	535.	180.	3.33		
+	2 COMBINED AT	N	5177.	38.25	2820.	792.	270.	4.85		
+	ROUTED TO	NCP	5177.	38.25	2820.	792.	270.	4.85		
+	HYDROGRAPH AT	O1	3719.	37.67	1786.	500.	168.	3.09		
+	ROUTED TO	OCP	3719.	37.67	1786.	500.	168.	3.09		
+	HYDROGRAPH AT	M1	10299.	37.00	3840.	1109.	394.	5.59		
+	ROUTED TO	M1-M2	7466.	38.83	3737.	1109.	394.	5.59		
+									13.48	38.83
+	HYDROGRAPH AT	M2	8220.	37.92	4187.	1118.	373.	7.53		
+	2 COMBINED AT	M	13252.	38.75	7580.	2227.	767.	13.12		
+	ROUTED TO	MCP	13252.	38.75	7580.	2227.	767.	13.12		
+	HYDROGRAPH AT	Z1	1616.	36.83	410.	106.	36.	0.66		
+	ROUTED TO	ZCP	1616.	36.83	410.	106.	36.	0.66		
+	HYDROGRAPH AT	L1	6179.	37.08	2423.	701.	248.	3.55		
+	ROUTED TO	L1-L2	5241.	37.83	2376.	701.	248.	3.55		
+									16.32	37.83
+	HYDROGRAPH AT	L2	9034.	37.75	4313.	1147.	382.	7.33		
+	2 COMBINED AT	L3R	14147.	37.75	6608.	1848.	631.	10.88		
+	ROUTED TO	L2-L3	12650.	38.83	6410.	1848.	631.	10.88		
+									15.39	38.83
+	HYDROGRAPH AT	L3	7162.	37.75	3431.	917.	307.	5.85		

```
        2 COMBINED AT
+                          L    16901.  38.75       9266.      2765.       938.     16.73

        ROUTED TO
+                        LCP    16901.  38.75       9266.      2765.       938.     16.73

        HYDROGRAPH AT
+                         R1     1036.  36.58        188.        50.        17.      0.28

        ROUTED TO
+                        RCP     1036.  36.58        188.        50.        17.      0.28


 *** NORMAL END OF HEC-1 ***
1****************************************                                    ****************************************
 *                                      *                                    *                                      *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                                    *   U.S. ARMY CORPS OF ENGINEERS       *
 *             MAY   1991               *                                    *   HYDROLOGIC ENGINEERING CENTER      *
 *           VERSION 4.0.1E             *                                    *         609 SECOND STREET            *
 *                                      *                                    *      DAVIS, CALIFORNIA 95616         *
 *  RUN DATE            TIME            *                                    *         (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

                                                HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 1 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
  3           ID   PMP 72-hour
  4           ID   Existing Conditions
  5           ID   FRS #2 (Sub-basins S-U)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       3
 14           IN      20 01JAN94       0
 15           JD    17.5    0.01
              * PMP 72-hour FRS2
 16           PI   0.003   0.003   0.003   0.004   0.004   0.004   0.005   0.005   0.005   0.005
 17           PI   0.006   0.006   0.006   0.006   0.007   0.007   0.007   0.008   0.008   0.008
 18           PI   0.008   0.009   0.009   0.009   0.009    0.01    0.01    0.01    0.01   0.011
 19           PI   0.011   0.011   0.012   0.012   0.012   0.012   0.022   0.023   0.023   0.024
 20           PI   0.024   0.024   0.025   0.025   0.025   0.026   0.026   0.026   0.027   0.027
 21           PI   0.027   0.027   0.028   0.028   0.028   0.029   0.029   0.029   0.029   0.029
 22           PI   0.029   0.029   0.029   0.029    0.03    0.03    0.03    0.03    0.03   0.031
 23           PI   0.031   0.031    0.04    0.04    0.04    0.04    0.04    0.04   0.041   0.041
 24           PI   0.041   0.041   0.042   0.043   0.044   0.045   0.047   0.049   0.052   0.055
 25           PI   0.058   0.058   0.059    0.06   0.061   0.062   0.064   0.065   0.067   0.069
 26           PI   0.071   0.074   0.076   0.078   0.083   0.087    0.09   0.095   3.481   0.546
 27           PI   0.524   0.502   0.478   0.459   0.438   0.416   0.416   0.394   0.373   0.351
 28           PI   0.329   0.308   0.284   0.266   0.243   0.221     0.2   0.179   0.163    0.15
 29           PI   0.141   0.133   0.126    0.12   0.116   0.112   0.109   0.106   0.104   0.103
 30           PI   0.101     0.1   0.099   0.098   0.041    0.04    0.04   0.039   0.039   0.038
 31           PI   0.038   0.038   0.037   0.037   0.037   0.036   0.036   0.036   0.036   0.035
 32           PI   0.035   0.035   0.035   0.034   0.034   0.034   0.034   0.033   0.033   0.033
 33           PI   0.033   0.033   0.032   0.032   0.032   0.032   0.032   0.032   0.031   0.031
 34           PI   0.022   0.022   0.022   0.021   0.021   0.021    0.02    0.02    0.02    0.02
 35           PI   0.019   0.019   0.019   0.019   0.018   0.018   0.018   0.017   0.017   0.017
 36           PI   0.017   0.016   0.016   0.016   0.016   0.015   0.015   0.015   0.015   0.014
 37           PI   0.014   0.014   0.013   0.013   0.013   0.013

 38           KK      T1
 39           KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KH      L=4.34      Lca=1.58      S=274.89      Kn=0.050      LAG=51.0
 41           KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0       0     0.0       1      22
 43           BA  3.0415
 44           LG    0.35    0.35   4.644   0.299  11.497
              * T1
 45           UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
 46           UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
 47           UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 48           UI  153.94  103.27   98.26   98.26   98.26   93.33   38.49   38.49   38.49   38.49
 49           UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49

                                                HEC-1 INPUT                                                    PAGE  2

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

 50           KK     TCP   CNAME       T
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```
51          KO      0       0     0.0       0      22
52          RN    TCP

53          KK     U1
54          KM     THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
55          KM     L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
56          KM     S-GRAPH TYPE=PHOENIX MOUNTAIN
57          KO      0       0     0.0       1      22
58          BA  1.3705
59          LG   0.35    0.37   5.258   0.233   6.449
            * U1
60          UI    0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
61          UI  603.81 505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
62          UI   86.65  68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
63          UI    26.8    0.0

64          KK    UCP   CNAME      U
65          KO      0       0     0.0       0      22
66          RN    UCP

67          KK     S1
68          KM     THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
69          KM     L=2.32     Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
70          KM     S-GRAPH TYPE=PHOENIX MOUNTAIN
71          KO      0       0     0.0       1      22
72          BA  1.4105
73          LG   0.35    0.35   4.484   0.352   6.918
            * S1
74          UI    0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.96
75          UI  554.64 420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   80.14
76          UI   72.14  31.39   31.39   31.39   31.39   31.39   31.39     0.0

77          KK    SCP   CNAME      S
78          KO      0       0     0.0       0      22
79          RN    SCP
80          ZZ
```

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	T1	6656.	36.92	2445.	694.	241.	3.04		
+	ROUTED TO	TCP	6656.	36.92	2445.	694.	241.	3.04		
+	HYDROGRAPH AT	U1	4033.	36.75	1156.	322.	110.	1.37		
+	ROUTED TO	UCP	4033.	36.75	1156.	322.	110.	1.37		
+	HYDROGRAPH AT	S1	4479.	36.67	1090.	293.	100.	1.41		
+	ROUTED TO	SCP	4479.	36.67	1090.	293.	100.	1.41		

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 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE (HEC-1)*
*             MAY  1991             *
*          VERSION 4.0.1E           *
*                                   *
* RUN DATE          TIME            *
*                                   *
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
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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

HEC-1 INPUT PAGE 1

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

   1          ID   Buckeye/Sun Valley ADMS - 01 March 2004
   2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
   3          ID   PMP 72-hour
   4          ID   Existing Conditions
   5          ID   FRS #3 (Sub-basins V-Y)
   6          ID   Rainfall Loss Method - Green & Ampt
   7          ID   Unit Hydrograph Method - FCDMC S-Graph
   8          ID   Channel Routing Method - Normal Depth
   9          ID   Land Use - FCDMC GIS Data: mag_landuse (2000)
```

```
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       3
14          IN      20 01JAN94       0
15          JD    17.5    0.01
            * PMP 72-hour FR63
16          PI   0.003   0.003   0.003   0.004   0.004   0.004   0.005   0.005   0.005   0.005
17          PI   0.006   0.006   0.006   0.006   0.007   0.007   0.007   0.008   0.008   0.008
18          PI   0.008   0.009   0.009   0.009   0.009    0.01    0.01    0.01    0.01   0.011
19          PI   0.011   0.011   0.012   0.012   0.012   0.012   0.022   0.023   0.023   0.024
20          PI   0.024   0.024   0.025   0.025   0.025   0.026   0.026   0.026   0.027   0.027
21          PI   0.027   0.027   0.028   0.028   0.028   0.029   0.029   0.029   0.029   0.029
22          PI   0.029   0.029   0.029   0.029    0.03    0.03    0.03    0.03    0.03   0.031
23          PI   0.031   0.031    0.04    0.04    0.04    0.04    0.04    0.04   0.041   0.041
24          PI   0.041   0.041   0.042   0.043   0.044   0.045   0.047   0.049   0.052   0.055
25          PI   0.058   0.058   0.059    0.06   0.061   0.062   0.064   0.065   0.067   0.069
26          PI   0.071   0.074   0.076   0.079   0.083   0.087    0.09   0.095   3.481   0.546
27          PI   0.524   0.502   0.478   0.459   0.438   0.416   0.416   0.394   0.373   0.351
28          PI   0.329   0.308   0.284   0.266   0.243   0.221     0.2   0.179   0.163    0.15
29          PI   0.141   0.133   0.126    0.12   0.116   0.112   0.109   0.106   0.104   0.103
30          PI   0.101     0.1   0.099   0.098   0.041    0.04    0.04   0.039   0.039   0.038
31          PI   0.038   0.038   0.037   0.037   0.037   0.036   0.036   0.036   0.036   0.035
32          PI   0.035   0.035   0.035   0.034   0.034   0.034   0.034   0.033   0.033   0.033
33          PI   0.033   0.033   0.032   0.032   0.032   0.032   0.032   0.032   0.031   0.031
34          PI   0.022   0.022   0.022   0.021   0.021   0.021    0.02    0.02    0.02    0.02
35          PI   0.019   0.019   0.019   0.019   0.018   0.018   0.018   0.017   0.017   0.017
36          PI   0.017   0.016   0.016   0.016   0.016   0.015   0.015   0.015   0.015   0.014
37          PI   0.014   0.014   0.013   0.013   0.013   0.013

38          KK      Y1
39          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
40          KM      L=1.37      Lca=0.53      S=771.84      Kn=0.050      LAG=17.0
41          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
42          KO       0       0     0.0       1      22
43          BA  0.5808
44          LG    0.35    0.35   4.044   0.415  10.947
            * Y1
45          UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
46          UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0
```



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

47          KK     YCP   CNAME       Y
48          KO       0       0     0.0       0      22
49          RN     YCP

50          KK      X1
51          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
52          KM      L=2.60      Lca=1.44      S=288.89      Kn=0.050      LAG=40.0
53          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
54          KO       0       0     0.0       1      22
55          BA  0.7867
56          LG    0.35    0.35   3.955   0.417  12.555
            * X1
57          UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
58          UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
59          UI   78.91   72.53   55.32   50.77   43.42   32.41   32.41   32.41   19.79   12.69
60          UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

61          KK     XCP   CNAME       X
62          KO       0       0     0.0       0      22
63          RN     XCP

64          KK      W1
65          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
66          KM      L=3.46      Lca=1.78      S=486.28      Kn=0.050      LAG=44.0
67          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
68          KO       0       0     0.0       1      22
69          BA   3.894
70          LG    0.35    0.35   3.976    0.41  15.199
            * W1
71          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
72          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
73          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
74          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
75          UI   57.11     0.0

76          KK   W1-W2   CNAME     W2R
77          KO       0       0     0.0       0      22
78          RS       6    FLOW     0.0     0.0
79          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
            * W1-W2
80          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
81          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

82          KK      W2
83          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
84          KM      L=3.25      Lca=1.19      S=178.54      Kn=0.050      LAG=44.0
85          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
86          KO       0       0     0.0       1      22
87          BA  2.8478
88          LG    0.35    0.35   4.081   0.402   3.547
            * W2
89          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
90          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
91          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
```



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

92          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
93          UI   41.77     0.0

94          KK       W    CNAME     WCP
95          KO       0       0     0.0       0      22
96          HC       2     0.0

97          KK     WCP   CNAME       W
```

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 98          KO      0       0     0.0       0      22
 99          RM     WCP

100          KK      V1
101          KM      THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
102          KM      L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
103          KM      S-GRAPH TYPE=PHOENIX MOUNTAIN
104          KO      0       0     0.0       1      22
105          BA   0.6646
106          LG    0.35    0.35   3.972   0.405  13.864
             * V1
107          UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
108          UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
109          UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
110          UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
111          UI     0.0

112          KK     VCP   CNAME       V
113          KO       0       0     0.0       0      22
114          RM     VCP
115          ZZ
```

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	Y1	2556.	36.50	438.	119.	41.	0.58		
+	ROUTED TO	YCP	2556.	36.50	438.	119.	41.	0.58		
+	HYDROGRAPH AT	X1	1994.	36.83	589.	163.	57.	0.79		
+	ROUTED TO	XCP	1994.	36.83	589.	163.	57.	0.79		
+	HYDROGRAPH AT	W1	9329.	36.83	2958.	835.	295.	3.89		
+	ROUTED TO	W1-W2	8426.	37.25	2934.	835.	295.	3.89		
+									15.08	37.25
+	HYDROGRAPH AT	W2	6736.	36.83	2065.	547.	185.	2.85		
+	2 COMBINED AT	W	13040.	37.17	4959.	1382.	480.	6.74		
+	ROUTED TO	WCP	13040.	37.17	4959.	1382.	480.	6.74		
+	HYDROGRAPH AT	V1	1618.	36.83	504.	141.	50.	0.66		
+	ROUTED TO	VCP	1618.	36.83	504.	141.	50.	0.66		

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

D.6.8.b HEC-1 Output File for PMP 72-Hour (Future Conditions)

```
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*            MAY   1991             *
*          VERSION 4.0.1E           *
*                                   *
* RUN DATE            TIME          *
*                                   *
*************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*         (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
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KN.

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

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 1   ID   Buckeye/Sun Valley ADMS - 23 March 2004
 2   ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
 3   ID   PMP 72-hour
 4   ID   Future Conditions
 5   ID   FRS #1 (Sub-basins E-K)
 6   ID   Rainfall Loss Method - Green & Ampt
 7   ID   Unit Hydrograph Method - FCDMC S-Graph
 8   ID   Channel Routing Method - Normal Depth
 9   ID   Land Use - Town of Buckeye LU District (2003)
10   ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11   ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
     *DIAGRAM
12   IT       5  1JAN94       0    2000
13   IO       0
14   IN      20 01JAN94       0
15   JD    15.8    0.01
     * PMP 72-hour FRS1
16   PI   0.003   0.003   0.003   0.004   0.004   0.004   0.004   0.004   0.004   0.004
17   PI   0.005   0.005   0.005   0.005   0.006   0.006   0.006   0.007   0.007   0.007
18   PI   0.007   0.008   0.008   0.008   0.008   0.009   0.009   0.009   0.009    0.01
19   PI    0.01    0.01   0.011   0.011   0.011   0.011    0.02    0.02    0.02   0.021
20   PI   0.021   0.021   0.022   0.022   0.022   0.023   0.023   0.023   0.024   0.024
21   PI   0.024   0.024   0.025   0.025   0.025   0.026   0.026   0.026   0.026   0.026
22   PI   0.027   0.027   0.027   0.027   0.028   0.028   0.028   0.028   0.028   0.028
23   PI   0.028   0.028   0.036   0.036   0.036   0.036   0.036   0.036   0.037   0.037
24   PI   0.037   0.037   0.038   0.039    0.04   0.041   0.043   0.044   0.047    0.05
25   PI   0.052   0.052   0.053   0.054   0.055   0.056   0.058   0.059    0.06   0.062
26   PI   0.064   0.067   0.068   0.071   0.075   0.078   0.082   0.086   3.143   0.493
27   PI   0.473   0.454   0.431   0.415   0.395   0.376   0.376   0.356   0.336   0.317
28   PI   0.297   0.278   0.257   0.241   0.219     0.2    0.18   0.162   0.147   0.136
29   PI   0.127    0.12   0.114   0.108   0.105   0.101   0.099   0.096   0.094   0.093
30   PI   0.091   0.091    0.09   0.089   0.037   0.036   0.036   0.036   0.036   0.035
31   PI   0.035   0.035   0.034   0.034   0.034   0.033   0.033   0.033   0.033   0.032
32   PI   0.032   0.032   0.032   0.031   0.031   0.031   0.031    0.03    0.03    0.03
33   PI    0.03    0.03   0.028   0.029   0.029   0.029   0.029   0.029   0.028   0.028
34   PI    0.02    0.02    0.02   0.019   0.019   0.019   0.018   0.018   0.018   0.018
35   PI   0.017   0.017   0.017   0.017   0.016   0.016   0.016   0.015   0.015   0.015
36   PI   0.015   0.014   0.014   0.014   0.014   0.013   0.013   0.013   0.013   0.012
37   PI   0.012   0.012   0.012   0.012   0.012   0.012

38   KK      G1
39   KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
40   KM         L=2.38      Lca=1.08      S=33.76      Kn=0.045      LAG=47.0
41   KM         S-GRAPH TYPE=DESERT RANGELAND
42   KO       0       0     0.0       1      22
43   BA  1.1192
44   LG   0.297   0.297   4.688   0.326  15.814
     * G1
45   UI     0.0   80.18   80.18  213.21  355.01  484.39  602.77  698.96  750.35  768.35
46   UI  735.76   667.1  553.81  458.12  381.96   318.8  263.39  222.24  176.97  151.15
47   UI  124.99   103.3   84.98   70.61   54.88   54.88   43.59   19.51   19.51   19.51
48   UI   19.51   19.51   19.51   19.51   19.51     0.0
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LINE  ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

49   KK   G1-Do
50   KO       0       0     0.0       0      22
51   DT    G1-D    47.0     0.0
     * Curve 1
52   DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
53   DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
     * Curve 1
54   DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
55   DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

56   KK     GCP   CNAME       G
57   KO       0       0     0.0       0      22
58   RN     GCP

59   KK      J1
60   KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
61   KM         L=4.09      Lca=1.78      S=70.82      Kn=0.055      LAG=75.0
62   KM         S-GRAPH TYPE=DESERT RANGELAND
63   KO       0       0     0.0       1      22
64   BA  1.7341
65   LG    0.25    0.27    3.25   0.657    30.0
     * J1
66   UI     0.0   77.85   77.85   77.85  158.13   251.7  335.81  417.88  494.16  554.74
67   UI  644.32  684.11  713.07  746.04  746.04  734.85  705.46  668.29  587.67  533.19
68   UI  468.25  415.23  374.67  332.03  295.07  263.53  233.62  213.16  176.19  163.14
69   UI  146.76  131.28  119.37  107.76   82.51   82.51   80.76   53.29   53.29   53.29
70   UI   53.29    52.6   18.95   18.95   18.95   18.95   18.95   18.95   18.95   18.95
71   UI   18.95   18.95   18.95   18.95   18.95   18.95

72   KK   J1-Do
73   KO       0       0     0.0       0      22
74   DT    J1-D   102.0     0.0
     * Curve 1
75   DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
76   DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
     * Curve 1
77   DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
78   DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

79   KK   J1-J2   CNAME     J2R
80   KO       0       0     0.0       0      22
81   RS      19    FLOW     0.0     0.0
82   RC   0.055    0.04   0.055 24090.0  0.0086     0.0
     * J1-J2
83   RX     0.0   161.0   247.0   254.0   271.0   279.0   393.0   660.0
84   RY    17.0    12.5    12.2    10.8    10.0    12.1    12.9    17.0

85   KK      J2
86   KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
87   KM         L=5.18      Lca=2.51      S=45.01      Kn=0.050      LAG=93.0
88   KM         S-GRAPH TYPE=DESERT RANGELAND
89   KO       0       0     0.0       1      22
90   BA  3.6379
91   LG    0.25    0.26   3.623   0.499    30.0
     * J2
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                                    HEC-1 INPUT                                                                    PAGE  3

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

  92          UI     0.0  131.71  131.71  131.71  131.71   310.0  410.19   529.5  653.07  756.36
  93          UI  857.31  932.01 1064.78 1131.28 1183.02 1211.17 1262.18 1262.18 1262.18  1218.5
  94          UI  1189.1 1123.15 1016.12  925.88  854.59  766.34  699.91  639.83  585.77  530.32
  95          UI  484.42  440.99  403.55  360.62  330.98   294.1  269.83   248.3  236.22  201.95
  96          UI  201.95   172.6   139.6   139.6   139.6  118.12   90.16   90.16   90.16   90.16
  97          UI   90.16   79.42   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06
  98          UI   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06   32.06     0.0

  99          KK   J2-Do
 100          KO       0       0     0.0       0      22
 101          DT    J2-D   224.0     0.0
              * Curve 1
 102          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 103          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 104          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 105          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 106          KK    K3RB   CNAME   J2-K3
 107          KO       0       0     0.0       0      22
 108          HC       2     0.0

 109          KK   J2-K3   CNAME    K3RB
 110          KO       0       0     0.0       0      22
 111          RS       4    FLOW     0.0     0.0
 112          RC    0.05   0.048    0.05  4072.0  0.0059     0.0
              * J2-K3
 113          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
 114          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

 115          KK      K1
 116          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 117          KM          L=3.23      Lca=1.84      S=681.00      Kn=0.050      LAG=40.0
 118          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 119          KO       0       0     0.0       1      22
 120          BA   1.543
 121          LG   0.112   0.255   4.382   0.365   21.06
              * K1
 122          UI     0.0  129.88  168.84  442.11  706.31  896.38 1061.91 1457.77 1111.25  821.11
 123          UI  726.82  641.11  561.31  488.34  403.67  331.29  304.06  271.41  213.37  169.75
 124          UI  154.58  142.25  108.11   99.57   85.17   63.56   63.56   63.56   38.81   24.89
 125          UI   24.89   24.89   24.89   24.89   24.89   24.89   24.89     0.0

 126          KK   K1-K2   CNAME     K2R
 127          KO       0       0     0.0       0      22
 128          RS      13    FLOW     0.0     0.0
 129          RC   0.048    0.05   0.048 30021.0   0.015     0.0
              * K1-K2
 130          RX     0.0    20.0    55.0    85.0   235.0   259.0   289.0   309.0
 131          RY    22.0    21.0    20.0    10.0    10.0    20.0    21.0    22.0

                                    HEC-1 INPUT                                                                    PAGE  4

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

 132          KK      K2
 133          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 134          KM          L=7.3       Lca=4.04      S=108.84      Kn=0.055      LAG=119.0
 135          KM          S-GRAPH TYPE=DESERT RANGELAND
 136          KO       0       0     0.0       1      22
 137          BA   2.365
 138          LG   0.272   0.277   4.471   0.382   21.86
              * K2
 139          UI     0.0   66.91   66.91   66.91   66.91   66.91  132.91  192.38  234.97  273.87
 140          UI  324.09  369.36  410.96  453.67  472.54  532.28  558.99   587.9  605.63  610.31
 141          UI  641.26  641.26  641.26  641.26  620.87  601.29  597.45  565.84  516.46  476.06
 142          UI  460.97  411.32  386.21  359.14  335.65  312.63  290.38  266.75  251.32  236.77
 143          UI  209.97   203.8  183.22  181.03  149.42  149.42  135.15  126.15  126.15  109.44
 144          UI   102.6   102.6   98.17   70.92   70.92   70.92   70.92   70.92   46.43    45.8
 145          UI    45.8    45.8    45.8    45.8    45.8    45.8   16.92   16.29   16.29   16.29
 146          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29
 147          UI   16.29   16.29   16.29   16.29   16.29   16.29   16.29   16.29     0.0

 148          KK   K2-Do
 149          KO       0       0     0.0       0      22
 150          DT    K2-D   128.0     0.0
              * Curve 1
 151          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 152          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 153          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 154          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 155          KK    K3RA   CNAME   K2-K3
 156          KO       0       0     0.0       0      22
 157          HC       2   1.543

 158          KK   K2-K3   CNAME    K3RA
 159          KO       0       0     0.0       0      22
 160          RS      20    FLOW     0.0     0.0
 161          RC    0.05   0.048    0.05 25950.0  0.0084     0.0
              * K2-K3
 162          RX     0.0   390.0   490.0   502.0   520.0   532.0   632.0  1022.0
 163          RY    20.0    14.5    11.5    10.0    10.0    11.5    14.5    20.0

 164          KK      F1
 165          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 166          KM          L=4.07      Lca=1.63      S=441.98      Kn=0.050      LAG=46.0
 167          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 168          KO       0       0     0.0       1      22
 169          BA  2.7854
 170          LG    0.24    0.27   4.322   0.384  32.052
              * F1
 171          UI     0.0  203.88  203.88  570.72  906.57 1255.03 1478.42 1724.35 2318.93 1830.17
 172          UI  1348.3 1190.57 1067.92  966.08  849.55  752.02   639.8  527.23  486.03  447.26
 173          UI  380.98  319.46  260.51  239.96  223.29  181.76   156.3   156.3  107.68   99.77
 174          UI   99.77   99.77   67.24   39.08   39.08   39.08   39.08   39.08   39.08   39.08
 175          UI   39.08   39.08   39.08     0.0
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                                        HEC-1 INPUT                                                          PAGE  5
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 176          KK   F1-Do
 177          KO       0       0     0.0       0      22
 178          DT    F1-D   133.0     0.0
              * Curve 1
 179          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 180          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 181          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 182          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 183          KK   F1-F2   CNAME     F2R
 184          KO       0       0     0.0       0      22
 185          RS       2    FLOW     0.0     0.0
 186          RC   0.053   0.045   0.055  8635.0   0.012     0.0
              * F1-F2
 187          RX     0.0    60.0   120.0   146.0   178.0   208.0   268.0   328.0
 188          RY    27.0    26.0    25.0    10.0    10.0    24.0    26.0    28.0

 189          KK      F2
 190          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 191          KM          L=3.88      Lca=1.76     S=161.6      Kn=0.050      LAG=57.0
 192          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
 193          KO       0       0     0.0       1      22
 194          BA  2.5261
 195          LG    0.25    0.25   4.311   0.436  33.026
              * F2
 196          UI     0.0  149.21  149.21  254.97  495.63  697.83  908.32 1043.12 1160.83 1374.76
 197          UI  1770.7 1344.86 1025.23  904.53  840.52  763.84  704.22  635.65  584.61  511.95
 198          UI  443.72  385.73  360.15  340.51  311.99  256.37  232.28  190.66  185.65  163.43
 199          UI  163.43  124.69   114.4   114.4   99.09   73.02   73.02   73.02   73.02   72.49
 200          UI    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6    28.6
 201          UI    28.6    28.6    28.6     0.0

 202          KK    F2-D
 203          KO       0       0     0.0       0      22
 204          DT    F2-D   130.0     0.0
              * Curve 1
 205          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 206          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 207          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 208          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 209          KK     F3R   CNAME   F2-F3
 210          KO       0       0     0.0       0      22
 211          RC       2     0.0

 212          KK   F2-F3   CNAME     F3R
 213          KO       0       0     0.0       0      22
 214          RS       5    FLOW     0.0     0.0
 215          RC    0.05   0.047   0.048  7059.0    0.01     0.0
              * F2-F3
 216          RX     0.0   350.0   425.0   455.0   472.0   499.0   869.0   900.0
 217          RY    20.0    15.0    13.0    10.0    10.0    12.0    14.0    20.0
                                        HEC-1 INPUT                                                          PAGE  6
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 218          KK      F3
 219          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 220          KM          L=2.71      Lca=1.26     S=81.34      Kn=0.055      LAG=54.0
 221          KM          S-GRAPH TYPE=DESERT RANGELAND
 222          KO       0       0     0.0       1      22
 223          BA  0.7363
 224          LG    0.28    0.27   3.266   0.656    30.0
              * F3
 225          UI     0.0   45.91   45.91   90.33  163.23  236.71  300.13  352.45  401.74  427.37
 226          UI  439.96  431.69  405.94  355.21   304.4  256.17  219.35  187.61  158.44  134.39
 227          UI  113.72   96.06   85.15   70.39   60.25   48.66   46.54   31.43   31.43   31.43
 228          UI   21.41   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17   11.17
 229          UI     0.0

 230          KK   F3-Do
 231          KO       0       0     0.0       0      22
 232          DT    F3-D    45.0     0.0
              * Curve 1
 233          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 234          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 235          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 236          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 237          KK    E4RB   CNAME   F3-E4
 238          KO       0       0     0.0       0      22
 239          RC       2     0.0

 240          KK   F3-E4   CNAME    E4RB
 241          KO       0       0     0.0       0      22
 242          RS      17    FLOW     0.0     0.0
 243          RC    0.05   0.044    0.05 27656.0  0.0072     0.0
              * F3-E4
 244          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
 245          RY    20.0    14.0    13.0    10.0    10.0    12.5    14.5    20.0

 246          KK      H1
 247          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 248          KM          L=2.41      Lca=1.09     S=64.59      Kn=0.055      LAG=51.0
 249          KM          S-GRAPH TYPE=DESERT RANGELAND
 250          KO       0       0     0.0       1      22
 251          BA  1.0659
 252          LG    0.25    0.29   2.733   0.945    30.0
              * H1
 253          UI     0.0   70.37   70.37  156.66  277.5  386.06  480.97  578.94  629.54  674.37
 254          UI  672.89   639.6  573.43  484.81  406.97  343.94  290.29   244.6  205.26  171.38
 255          UI  143.71  125.13   107.9   82.11   74.58   59.77   48.17   48.17   44.02   17.13
 256          UI   17.13   17.13   17.13   17.13   17.13   17.13   17.13   17.13     0.0
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                                        HEC-1 INPUT                                                    PAGE  7

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

  257         KK   H1-Do
  258         KO       0       0     0.0       0      22
  259         DT    H1-D    60.0     0.0
              * Curve 1
  260         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  261         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  262         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  263         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  264         KK   H1-H2   CNAME     H2R
  265         KO       0       0     0.0       0      22
  266         RS      17    FLOW     0.0     0.0
  267         RC   0.053    0.05   0.053 21738.0  0.0082     0.0
              * H1-H2
  268         RX     0.0   330.0   430.0   465.0   495.0   530.0   630.0   960.0
  269         RY    17.0    14.0    12.0    10.0    10.0    12.0    14.0    17.0

  270         KK      E1
  271         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  272         KM          L=2.51      Lca=1.13      S=178.34      Kn=0.055      LAG=43.0
  273         KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
  274         KO       0       0     0.0       1      22
  275         BA  0.9558
  276         LG    0.25    0.25   5.377   0.273   30.69
              * E1
  277         UI     0.0   74.84   77.93  239.12  368.21  486.14  570.74  714.05  832.68  536.61
  278         UI  451.09   405.2  360.47  317.65  278.73  233.73  192.22  176.81  160.96  130.73
  279         UI  107.54   95.41   81.97    76.8   57.38    57.38    44.3   36.62   36.62   36.62
  280         UI   23.52   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34   14.34
  281         UI     0.0

  282         KK   E1-Do
  283         KO       0       0     0.0       0      22
  284         DT    E1-D    53.0     0.0
              * Curve 1
  285         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  286         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  287         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  288         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  289         KK   E1-E2   CNAME     E2R
  290         KO       0       0     0.0       0      22
  291         RS       5    FLOW     0.0     0.0
  292         RC    0.05   0.047   0.046 11365.0   0.016     0.0
              * E1-E2
  293         RX     0.0    65.0   140.0   170.0   185.0   200.0   270.0   340.0
  294         RY    24.0    21.0    17.0    10.0    10.0    14.0    18.0    22.0

                                        HEC-1 INPUT                                                    PAGE  8

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

  295         KK      E2
  296         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  297         KM          L=2.92      Lca=0.80      S=96.39      Kn=0.055      LAG=45.0
  298         KM          S-GRAPH TYPE=DESERT RANGELAND
  299         KO       0       0     0.0       1      22
  300         BA  1.9794
  301         LG    0.25    0.25   5.043   0.306    30.0
              * E2
  302         UI     0.0   148.1   148.1  438.18  692.22  945.05 1155.78 1316.09 1414.16 1406.52
  303         UI  1318.3 1126.95  936.66   762.6   633.5  522.15  428.87  348.36   287.6  240.69
  304         UI  159.81  156.97  132.73  101.38  101.38   74.46   36.05   36.05   36.05   36.05
  305         UI   36.05   36.05   36.05   36.05

  306         KK   E2-Do
  307         KO       0       0     0.0       0      22
  308         DT    E2-D   118.0     0.0
              * Curve 1
  309         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  310         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
  311         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
  312         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

  313         KK     E3R   CNAME   E2-E3
  314         KO       0       0     0.0       0      22
  315         HC       2     0.0

  316         KK   E2-E3   CNAME     E3R
  317         KO       0       0     0.0       0      22
  318         RS       8    FLOW     0.0     0.0
  319         RC   0.052   0.046   0.052 19626.0  0.0088     0.0
              * E2-E3
  320         RX     0.0   133.0   173.0   213.0   223.0   263.0   303.0   403.0
  321         RY    22.0    17.0    14.0    10.0    10.0    15.0    18.0    22.0

  322         KK      E3
  323         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
  324         KM          L=3.87      Lca=1.99      S=49.65      Kn=0.050      LAG=75.0
  325         KM          S-GRAPH TYPE=DESERT RANGELAND
  326         KO       0       0     0.0       1      22
  327         BA  2.4882
  328         LG    0.25    0.25   4.358   0.377    30.0
              * E3
  329         UI     0.0   111.7   111.7   111.7  226.89  361.15  481.85  599.61  709.05  795.97
  330         UI  924.52   981.6 1023.16 1070.47 1070.47 1054.42 1012.24  958.91  843.22  765.06
  331         UI  671.88  595.79   537.6  476.41  423.39  378.12  335.21  305.85  252.82  234.09
  332         UI  210.58  188.38  171.28  154.62  118.39  118.39  115.88   76.46   76.46   76.46
  333         UI   76.46   75.48   27.19   27.19   27.19   27.19   27.19   27.19   27.19   27.19
  334         UI   27.19   27.19   27.19   27.19   27.19   27.19

                                        HEC-1 INPUT                                                    PAGE  9

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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335          KK   E3-Do
336          KO       0       0     0.0       0      22
337          DT    E3-D   152.0     0.0
             * Curve 1
338          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
339          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
340          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
341          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

342          KK    E4RA   CNAME   E3-E4
343          KO       0       0     0.0       0      22
344          RC       2     0.0

345          KK   E3-E4   CNAME    E4RA
346          KO       0       0     0.0       0      22
347          RS      11    FLOW     0.0     0.0
348          RC   0.056   0.049   0.056 13855.0  0.0048     0.0
             * E3-E4
349          RX     0.0   570.0   650.0   690.0   705.0   735.0   810.0  1200.0
350          RY    21.0    14.0    13.0    10.0    10.0    12.5    14.5    21.0

351          KK      H2
352          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
353          KM          L=4.41      Lca=2.60      S=44.71      Kn=0.050      LAG=89.0
354          KM          S-GRAPH TYPE=DESERT RANGELAND
355          KO       0       0     0.0       1      22
356          BA  1.4003
357          LG    0.25    0.27   3.222   0.664    30.0
             * H2
358          UI     0.0   52.97   52.97   52.97   52.97  142.96  178.43  226.95  274.77  319.65
359          UI  365.43  394.29  441.22  466.81  479.41  507.67  507.67  507.67  494.57  478.69
360          UI  456.78  413.67  373.55  343.54  306.19   279.6  254.36  232.34  208.24  189.81
361          UI  169.48  155.77  145.05  121.27  117.27   99.87   99.87   83.39   81.23   75.87
362          UI   56.15   56.15   56.15   49.16   36.26   36.26   36.26   36.26   36.26   27.61
363          UI   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89   12.89
364          UI   12.89   12.89   12.89   12.89   12.89   12.89     0.0

365          KK   H2-Do
366          KO       0       0     0.0       0      22
367          DT    H2-D    88.0     0.0
             * Curve 1
368          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
369          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
370          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
371          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

372          KK      E4
373          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
374          KM          L=5.36      Lca=2.81      S=38.26      Kn=0.050      LAG=102.0
375          KM          S-GRAPH TYPE=DESERT RANGELAND
376          KO       0       0     0.0       1      22
377          BA  3.0419
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

378          LG    0.25    0.25   3.816   0.441    30.0
             * E4
379          UI     0.0  100.41  100.41  100.41  100.41   158.4  288.68  358.14  433.81  515.03
380          UI   586.7  661.72  710.89  802.46  849.75  890.64  905.96  962.27  962.27  962.27
381          UI  958.04  920.58  904.74  855.35  781.12  712.29  671.26  604.24  557.18   512.1
382          UI  469.44  435.74  392.69  363.68  334.36  307.93  277.84  264.87  224.22  220.82
383          UI   189.3   189.3   167.8  153.96  153.96  127.89  106.43  106.43  106.43  101.84
384          UI   68.73   68.73   68.73   68.73   68.73   68.73    56.9   24.44   24.44   24.44
385          UI   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44   24.44
386          UI   24.44   24.44   24.44   24.44   24.44   24.44

387          KK   E4-Do
388          KO       0       0     0.0       0      22
389          DT    E4-D   190.0     0.0
             * Curve 1
390          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
391          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
392          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
393          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

394          KK     E5R   CNAME  E4H2E5
395          KO       0       0     0.0       0      22
396          RC       5     0.0

397          KK  E4H2E5   CNAME     E5R
398          KO       0       0     0.0       0      22
399          RS      11    FLOW     0.0     0.0
400          RC    0.06    0.05    0.06 15206.0  0.0051     0.0
             * E4H2-E5
401          RX     0.0  1010.0  1080.0  1090.0  1110.0  1120.0  1190.0  2200.0
402          RY    27.0    16.0    15.0    10.0    10.0    14.0    16.0    27.0

403          KK      K3
404          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
405          KM          L=4.92      Lca=2.65      S=44.16      Kn=0.050      LAG=94.0
406          KM          S-GRAPH TYPE=DESERT RANGELAND
407          KO       0       0     0.0       1      22
408          BA  1.6364
409          LG    0.25    0.27   3.421     0.6    30.0
             * K3
410          UI     0.0   58.61   58.61   58.61   58.61  132.91  178.83  231.78  287.29  333.51
411          UI  374.73  416.16  465.16  498.52  523.45  535.39  561.71  561.71  561.71  546.66
412          UI  529.11  508.44  466.94  418.32  391.42  351.43  318.39  291.69  266.79  243.88
413          UI  222.25  205.35  179.75  166.96  157.98  130.88  127.86   110.5   110.5   92.87
414          UI   89.87   88.91   62.12   62.12   62.12   62.12   41.11   40.12   40.12   40.12
415          UI   40.12   40.12   23.62   14.27   14.27   14.27   14.27   14.27   14.27   14.27
416          UI   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27   14.27

417          KK   K3-Do
418          KO       0       0     0.0       0      22
419          DT    K3-D   101.0     0.0
             * Curve 1
```

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420        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
421        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
                                          HEC-1 INPUT                                          PAGE 11
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

422        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
423        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

424        KK      E5
425        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
426        KM         L=3.01     Lca=1.41     S=28.56     Kn=0.050     LAG=66.0
427        KM         S-GRAPH TYPE=DESERT RANGELAND
428        KO       0       0     0.0       1      22
429        BA  1.3075
430        LG    0.25    0.25    3.94   0.473    30.0
           * E5
431        UI     0.0    66.7    66.7    66.7  187.26  261.44  342.24  416.67  480.36  556.15
432        UI  597.84  622.72  639.22  635.89  605.55  574.14  496.32  443.74  383.07  336.76
433        UI  298.38  258.84  227.02  198.06  176.33  148.94  129.75  120.65  102.28   94.78
434        UI    70.7    70.7   61.36   45.66   45.66   45.66   45.66   18.07   16.23   16.23
435        UI   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23   16.23     0.0

436        KK   E5-Do
437        KO       0       0     0.0       0      22
438        DT    E5-D    79.0     0.0
           * Curve 1
439        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
440        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
441        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
442        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

443        KK     E6R   CNAME  E5K2E6
444        KO       0       0     0.0       0      22
445        HC       5   1.543

446        KK  E5K2E6   CNAME     E6R
447        KO       0       0     0.0       0      22
448        RS       4    FLOW     0.0     0.0
449        RC   0.063   0.051   0.063  5083.0  0.0037     0.0
           * E5K3-E6
450        RX     0.0   850.0   980.0   990.0  1030.0  1040.0  1230.0  2020.0
451        RY    25.0    13.0    13.0    10.0    10.0    12.0    12.0    25.0

452        KK      E6
453        KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
454        KM         L=3.04     Lca=1.06     S=34.17     Kn=0.050     LAG=57.0
455        KM         S-GRAPH TYPE=DESERT RANGELAND
456        KO       0       0     0.0       1      22
457        BA  2.0375
458        LG   0.289   0.289   4.356   0.392  18.293
           * E6
459        UI     0.0  120.35  120.35  205.65  403.41  574.76  733.18  874.37 1018.75 1083.35
460        UI  1153.3 1153.39 1099.93 1038.74  882.55  767.05  653.67   562.5   487.2  412.36
461        UI  353.58  303.13  257.86   226.9  190.07  175.46  127.56  127.56   96.59   82.38
462        UI   82.38   82.38   36.98   29.29   29.29   29.29   29.29   29.29   29.29   29.29
463        UI   29.29   29.29     0.0
                                          HEC-1 INPUT                                          PAGE 12
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

464        KK   E6-Do
465        KO       0       0     0.0       0      22
466        DT    E6-D   100.0     0.0
           * Curve 1
467        DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
468        DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
           * Curve 1
469        DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
470        DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

471        KK       E   CNAME     ECP
472        KO       0       0     0.0       0      22
473        HC       2   1.543

474        KK     ECP   CNAME       E
475        KO       0       0     0.0       0      22
476        RN     ECP
477        ZZ
```

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	G1	2429.	37.00	796.	226.	80.	1.12		
+	DIVERSION TO	G1-D	2429.	37.00	767.	213.	72.	1.12		
+	HYDROGRAPH AT	G1-Do	2429.	37.00	767.	213.	72.	1.12		
+	ROUTED TO	GCP	2429.	37.00	767.	213.	72.	1.12		
+	HYDROGRAPH AT	J1	2517.	37.42	1050.	327.	122.	1.73		
+	DIVERSION TO	J1-D	2517.	37.42	1019.	307.	105.	1.73		
+	HYDROGRAPH AT	J1-Do	2517.	37.42	1019.	307.	105.	1.73		

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                ROUTED TO
+                         J1-J2     2139.   38.92     986.     305.     105.    1.73
+                                                                                      14.14    38.92
                HYDROGRAPH AT
+                         J2        4639.   37.75    2393.     750.     278.    3.64
                DIVERSION TO
+                         J2-D      4639.   37.75    2330.     702.     240.    3.64
                HYDROGRAPH AT
+                         J2-Do     4639.   37.75    2330.     702.     240.    3.64
                2 COMBINED AT
+                         K3RB      5047.   38.83    3222.    1006.     345.    5.37
                ROUTED TO
+                         J2-K3     4975.   39.08    3203.    1004.     345.    5.37
+                                                                                      16.25    39.08
                HYDROGRAPH AT
+                         K1        3584.   36.83    1105.     320.     115.    1.54
                ROUTED TO
+                         K1-K2     2634.   37.83    1030.     320.     115.    1.54
+                                                                                      12.55    37.83
                HYDROGRAPH AT
+                         K2        2536.   38.25    1541.     483.     174.    2.37
                DIVERSION TO
+                         K2-D      2536.   38.25    1504.     449.     153.    2.37
                HYDROGRAPH AT
+                         K2-Do     2536.   38.25    1504.     449.     153.    2.37
                2 COMBINED AT
+                         K3RA      4964.   37.83    2526.     766.     268.    1.54
                ROUTED TO
+                         K2-K3     4485.   39.33    2463.     765.     267.    1.54
+                                                                                      15.71    39.33
                HYDROGRAPH AT
+                         F1        5943.   36.92    2039.     622.     230.    2.79
                DIVERSION TO
+                         F1-D      5943.   36.92    2039.     608.     208.    2.79
                HYDROGRAPH AT
+                         F1-Do     5943.   36.92    2039.     608.     208.    2.79
                ROUTED TO
+                         F1-F2     5643.   37.00    2023.     607.     208.    2.79
+                                                                                      19.14    37.00
                HYDROGRAPH AT
+                         F2        4648.   37.00    1785.     553.     206.    2.53
                DIVERSION TO
+                         F2-D      4648.   37.00    1783.     537.     184.    2.53
                HYDROGRAPH AT
+                         F2-D      4648.   37.00    1783.     537.     184.    2.53
                2 COMBINED AT
+                         F3R      10291.   37.00    3800.    1144.     392.    5.31
                ROUTED TO
+                         F2-F3     9761.   37.33    3781.    1142.     392.    5.31
+                                                                                      17.16    37.33
                HYDROGRAPH AT
+                         F3        1389.   37.08     452.     139.      52.    0.74
                DIVERSION TO
+                         F3-D      1389.   37.08     434.     129.      44.    0.74
                HYDROGRAPH AT
+                         F3-Do     1389.   37.08     434.     129.      44.    0.74
                2 COMBINED AT
+                         E4RB     10958.   37.33    4207.    1272.     436.    6.05
                ROUTED TO
+                         F3-E4     8771.   38.67    4105.    1264.     436.    6.05
+                                                                                      16.88    38.67
                HYDROGRAPH AT
+                         H1        2004.   37.00     554.     175.      67.    1.07
                DIVERSION TO
+                         H1-D      2004.   37.00     537.     164.      56.    1.07
                HYDROGRAPH AT
+                         H1-Do     2004.   37.00     537.     164.      56.    1.07
                ROUTED TO
+                         H1-H2     1581.   38.33     505.     162.      56.    1.07
+                                                                                      13.37    38.33
                HYDROGRAPH AT
+                         E1        2170.   36.83     745.     227.      83.    0.96
                DIVERSION TO
+                         E1-D      2170.   36.83     735.     218.      74.    0.96
                HYDROGRAPH AT
+                         E1-Do     2170.   36.83     735.     218.      74.    0.96
                ROUTED TO
+                         E1-E2     1992.   37.17     722.     217.      74.    0.96
+                                                                                      15.51    37.17
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+	HYDROGRAPH AT	E2	4527.	36.92	1517.	458.	168.	1.98	
+	DIVERSION TO	E2-D	4527.	36.92	1484.	435.	148.	1.98	
+	HYDROGRAPH AT	E2-Do	4527.	36.92	1484.	435.	148.	1.98	
+	2 COMBINED AT	E3R	6192.	37.08	2195.	652.	222.	2.94	
+	ROUTED TO	E2-E3	5470.	37.67	2125.	648.	222.	2.94	
+									17.70 37.67
+	HYDROGRAPH AT	E3	3819.	37.50	1785.	551.	203.	2.49	
+	DIVERSION TO	E3-D	3819.	37.50	1744.	520.	177.	2.49	
+	HYDROGRAPH AT	E3-Do	3819.	37.50	1744.	520.	177.	2.49	
+	2 COMBINED AT	E4RA	9171.	37.58	3829.	1167.	400.	5.42	
+	ROUTED TO	E3-E4	8155.	38.42	3765.	1163.	400.	5.42	
+									17.46 38.42
+	HYDROGRAPH AT	H2	1774.	37.67	835.	263.	98.	1.40	
+	DIVERSION TO	H2-D	1774.	37.67	803.	244.	84.	1.40	
+	HYDROGRAPH AT	H2-Do	1774.	37.67	803.	244.	84.	1.40	
+	HYDROGRAPH AT	E4	3679.	37.92	2054.	651.	240.	3.04	
+	DIVERSION TO	E4-D	3679.	37.92	2006.	609.	208.	3.04	
+	HYDROGRAPH AT	E4-Do	3679.	37.92	2006.	609.	208.	3.04	
+	5 COMBINED AT	E5R	22046.	38.58	10789.	3434.	1184.	16.98	
+	ROUTED TO	E4H2E5	20645.	39.33	10701.	3428.	1184.	16.98	
+									21.86 39.33
+	HYDROGRAPH AT	K3	2015.	37.75	1009.	318.	118.	1.64	
+	DIVERSION TO	K3-D	2015.	37.75	977.	296.	102.	1.64	
+	HYDROGRAPH AT	K3-Do	2015.	37.75	977.	296.	102.	1.64	
+	HYDROGRAPH AT	E5	2172.	37.33	894.	273.	101.	1.31	
+	DIVERSION TO	E5-D	2172.	37.33	869.	257.	88.	1.31	
+	HYDROGRAPH AT	E5-Do	2172.	37.33	869.	257.	88.	1.31	
+	5 COMBINED AT	E6R	31605.	39.33	17044.	5738.	1986.	1.54	
+	ROUTED TO	E5K2E6	31104.	39.58	17028.	5732.	1986.	1.54	
+									20.22 39.58
+	HYDROGRAPH AT	E6	3774.	37.17	1383.	398.	142.	2.04	
+	DIVERSION TO	E6-D	3774.	37.17	1321.	370.	125.	2.04	
+	HYDROGRAPH AT	E6-Do	3774.	37.17	1321.	370.	125.	2.04	
+	2 COMBINED AT	E	32130.	39.58	17789.	6095.	2111.	1.54	
+	ROUTED TO	ECP	32130.	39.58	17789.	6095.	2111.	1.54	

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

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1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*              MAY  1991            *
*           VERSION 4.0.1E          *
*                                   *
*  RUN DATE            TIME         *
*                                   *
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*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*        (916) 551-1748             *
*                                   *
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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

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                                    HEC-1 INPUT                                                    PAGE  1

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

  1           ID   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PBS&J - Modelers: Jacob Lesus & Wen Chen
  3           ID   PMP 72-hour
  4           ID   Future Conditions
  5           ID   FRS #1 (Sub-basins L-R)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      20 01JAN94       0
 15           JD    15.8    0.01
              * PMP 72-hour FRS1
 16           PI   0.003   0.003   0.003   0.004   0.004   0.004   0.004   0.004   0.004   0.004
 17           PI   0.005   0.005   0.005   0.005   0.006   0.006   0.006   0.007   0.007   0.007
 18           PI   0.007   0.008   0.008   0.008   0.008   0.009   0.009   0.009   0.009    0.01
 19           PI    0.01    0.01   0.011   0.011   0.011   0.011    0.02    0.02    0.02   0.021
 20           PI   0.021   0.021   0.022   0.022   0.022   0.023   0.023   0.023   0.024   0.024
 21           PI   0.024   0.024   0.025   0.025   0.025   0.026   0.026   0.026   0.026   0.026
 22           PI   0.027   0.027   0.027   0.027   0.028   0.028   0.028   0.028   0.028   0.028
 23           PI   0.028   0.028   0.036   0.036   0.036   0.036   0.036   0.036   0.037   0.037
 24           PI   0.037   0.037   0.038   0.039    0.04   0.041   0.043   0.044   0.047    0.05
 25           PI   0.052   0.052   0.053   0.054   0.055   0.056   0.058   0.059    0.06   0.062
 26           PI   0.064   0.067   0.068   0.071   0.075   0.078   0.082   0.086   3.143   0.493
 27           PI   0.473   0.454   0.431   0.415   0.395   0.376   0.376   0.356   0.336   0.317
 28           PI   0.297   0.278   0.257   0.241   0.219     0.2    0.18   0.162   0.147   0.136
 29           PI   0.127    0.12   0.114   0.108   0.105   0.101   0.099   0.096   0.094   0.093
 30           PI   0.091   0.091    0.09   0.089   0.037   0.036   0.036   0.036   0.036   0.035
 31           PI   0.035   0.035   0.034   0.034   0.034   0.033   0.033   0.033   0.033   0.032
 32           PI   0.032   0.032   0.032   0.031   0.031   0.031   0.031    0.03    0.03    0.03
 33           PI    0.03    0.03   0.029   0.029   0.029   0.029   0.029   0.029   0.028   0.028
 34           PI    0.02    0.02    0.02   0.019   0.019   0.019   0.018   0.018   0.018   0.018
 35           PI   0.017   0.017   0.017   0.017   0.016   0.016   0.016   0.015   0.015   0.015
 36           PI   0.015   0.014   0.014   0.014   0.014   0.013   0.013   0.013   0.013   0.012
 37           PI   0.012   0.012   0.012   0.012   0.012   0.012

 38           KK      R1
 39           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM         L=1.01     Lca=0.46     S=213.31     Kn=0.050     LAG=19.0
 41           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0       0     0.0       1      22
 43           BA  0.2836
 44           LG   0.161   0.282   4.358   0.474  62.581
              * R1
 45           UI     0.0   62.13  235.96  401.77  464.88  281.67  216.06   150.6  113.69   76.27
 46           UI   57.54   39.69   27.52   24.53    9.63    9.63    9.63     9.63     0.0
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                                    HEC-1 INPUT                                                    PAGE  2

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

 47           KK   R1-Do
 48           KO       0       0     0.0       0      22
 49           DT    R1-D    24.0     0.0
              * Curve 1
 50           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 51           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 52           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 53           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 54           KK     RCP   CNAME       R
 55           KO       0       0     0.0       0      22
 56           RM     RCP

 57           KK      L1
 58           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 59           KM         L=4.93     Lca=2.29     S=308.27     Kn=0.050     LAG=61.0
 60           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 61           KO       0       0     0.0       1      22
 62           BA  3.5462
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 63          LG   0.271   0.318   4.357   0.352  16.317
             * L1
 64          UI     0.0  195.74  195.74  266.93  603.63  823.25 1120.55 1287.07 1452.32 1611.06
 65          UI  1991.3 2326.75 1575.05 1312.31 1173.42 1097.38 1002.28  929.54  850.49  775.65
 66          UI  701.21  620.51  525.99  484.91  458.87  430.63  397.34  321.56  290.98  250.11
 67          UI  241.82  214.38  214.38  171.29  150.06  150.06  149.52   95.79   95.79   95.79
 68          UI   95.79   95.79   79.7   37.52   37.52   37.52   37.52   37.52   37.52   37.52
 69          UI   37.52   37.52   37.52   37.52   37.52   37.52   37.52     0.0

 70          KK   L1-L2   CNAME     L2R
 71          KO       0       0     0.0       0      22
 72          RS      10    FLOW     0.0     0.0
 73          RC   0.046   0.045   0.046 26949.0  0.0147     0.0
             * L1-L2
 74          RX     0.0    80.0   165.0   200.0   215.0   255.0   340.0   420.0
 75          RY    19.0    17.0    14.0    10.0    10.0    14.0    18.0    22.0

 76          KK      L2
 77          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 78          KM          L=5.21     Lca=2.40     S=82.13     Kn=0.055     LAG=90.0
 79          KM          S-GRAPH TYPE=DESERT RANGELAND
 80          KO       0       0     0.0       1      22
 81          BA  7.3294
 82          LG    0.24   0.257   4.202   0.462  33.542
             * L2
 83          UI     0.0   274.2   274.2   274.2   274.2  716.34  906.16 1156.59 1406.58 1625.88
 84          UI  1873.4 2006.82 2272.85 2404.02 2469.24 2608.71 2627.71 2627.71 2580.41  2477.2
 85          UI  2404.5 2210.07 1962.85 1830.08 1638.23 1474.72 1349.05 1231.09 1114.64 1013.65
 86          UI  919.78  837.26  750.77  677.65  612.28  548.01  516.93   470.8  420.43  420.43
 87          UI  319.44  290.62  290.62  290.62  200.87  187.69  187.69  187.69  187.69  187.69
 88          UI   88.02   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74   66.74
 89          UI   66.74   66.74   66.74   66.74   66.74   66.74   66.74
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 90          KK   L2-Do
 91          KO       0       0     0.0       0      22
 92          DT    L2-D   475.0     0.0
             * Curve 1
 93          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 94          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 95          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 96          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 97          KK     L3R   CNAME   L2-L3
 98          KO       0       0     0.0       0      22
 99          HC       2     0.0
100          KK   L2-L3   CNAME     L3R
101          KO       0       0     0.0       0      22
102          RS      11    FLOW     0.0     0.0
103          RC    0.05   0.045    0.06 20567.0  0.0084     0.0
             * L2-L3
104          RX     0.0  1093.0  1210.0  1215.0  1225.0  1232.0  1372.0  2000.0
105          RY    18.0    11.8    11.7    10.0    10.0    11.7    11.8    18.0

106          KK      L3
107          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
108          KM          L=4.75     Lca=2.00     S=44.27     Kn=0.055     LAG=91.0
109          KM          S-GRAPH TYPE=DESERT RANGELAND
110          KO       0       0     0.0       1      22
111          BA  5.8518
112          LG   0.205   0.257    3.98   0.449  45.272
             * L3
113          UI     0.0  216.51  216.51  216.51  216.51  546.97  701.79   899.0 1098.31 1266.31
114          UI  1460.0 1557.79  1786.1 1888.63 1950.16 2034.92 2074.91 2074.91 2053.75 1965.49
115          UI  1920.6 1789.16 1583.48 1486.06 1313.63 1207.77 1091.42  994.62  909.22  825.02
116          UI  759.89  663.97  614.46  574.55  483.47  461.44  408.18  402.68  331.99  331.99
117          UI  296.91  229.48  229.48  229.48  197.56  148.21  148.21  148.21  148.21  148.21
118          UI  121.69    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7    52.7
119          UI    52.7    52.7    52.7    52.7    52.7    52.7    52.7     0.0

120          KK   L3-Do
121          KO       0       0     0.0       0      22
122          DT    L3-D   456.9     0.0
             * Curve 2
123          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
124          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
125          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
126          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

127          KK       L   CNAME     LCP
128          KO       0       0     0.0       0      22
129          HC       2     0.0
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

130          KK     LCP   CNAME       L
131          KO       0       0     0.0       0      22
132          RN     LCP

133          KK      Z1
134          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
135          KM          L=1.70     Lca=0.66     S=47.00     Kn=0.055     LAG=39.0
136          KM          S-GRAPH TYPE=DESERT RANGELAND
137          KO       0       0     0.0       1      22
138          BA  0.6644
139          LG   0.168   0.277   4.004   0.499  58.182
             * Z1
140          UI     0.0   57.36   79.51  205.31  321.74  423.99  504.02  545.15   540.9  493.68
141          UI  399.44  319.16  256.25  205.08  164.89  127.64  104.63   87.85    60.8   54.09
142          UI   39.26   39.26   21.79   13.96   13.96   13.96   13.96   13.96   13.96     0.0

143          KK   Z1-Do
144          KO       0       0     0.0       0      22
145          DT    Z1-D    58.0     0.0
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            * Curve 1
146         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
147         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
148         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
149         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

150         KK     ZCP   CNAME       Z
151         KO       0       0     0.0       0      22
152         RN     ZCP

153         KK      M1
154         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
155         KM          L=4.99     Lca=1.81     S=302.46     Kn=0.050     LAG=56.0
156         KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
157         KO       0       0     0.0       1      22
158         BA  5.5949
159         LG   0.349   0.349   4.306   0.348  17.433
            * M1
160         UI     0.0  336.39  336.39  603.82 1137.33 1624.75 2070.76 2388.19 2652.37 3233.29
161         UI  4005.2 2791.27  2249.2 1897.59 1849.54 1685.71 1552.54 1393.19 1268.31 1104.08
162         UI  946.29  845.54  793.05  739.37  664.77  552.64  468.14  429.83  388.56  368.42
163         UI  333.06   257.9   257.9   257.9  168.35  164.62  164.62  164.62  164.62   94.92
164         UI   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47   64.47
165         UI   64.47   64.47     0.0

166         KK   M1-Do
167         KO       0       0     0.0       0      22
168         DT    M1-D   170.0     0.0
            * Curve 1
169         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
170         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
171         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
172         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

173         KK   M1-M2   CNAME     M2R
174         KO       0       0     0.0       0      22
175         RS      21    FLOW     0.0     0.0
176         RC    0.04    0.04   0.045 38719.0  0.0133     0.0
            * M1-M2
177         RX     0.0   961.0  1028.0  1051.0  1136.0  1153.0  1193.0  1900.0
178         RY    15.5    12.0    11.8    10.3    10.0    11.0    11.2    15.5

179         KK      M2
180         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
181         KM          L=7.60     Lca=3.07     S=88.36     Kn=0.050     LAG=103.0
182         KM          S-GRAPH TYPE=DESERT RANGELAND
183         KO       0       0     0.0       1      22
184         BA  7.5274
185         LG   0.205   0.255   3.952   0.547  45.552
            * M2
186         UI     0.0  246.06  246.06  246.06  246.06  366.94  707.43  862.03 1046.84 1248.07
187         UI  1424.7 1592.75 1748.11 1929.89 2062.25 2176.05 2221.53 2334.54 2358.09 2358.09
188         UI  2358.0 2271.78 2217.13 2123.85 1976.02 1771.84 1691.54  1501.0  1393.0 1284.99
189         UI  1178.7  1088.8  995.34   919.2  857.56  754.59  708.67  673.74  569.64  549.46
190         UI  488.21  463.89  446.34  377.29  377.29  364.18   260.8   260.8   260.8   260.8
191         UI  201.47  168.43  168.43  168.43  168.43  168.43  168.43   90.19   59.89   59.89
192         UI   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89   59.89
193         UI   59.89   59.89   59.89   59.89   59.89   59.89     0.0

194         KK   M2-Do
195         KO       0       0     0.0       0      22
196         DT    M2-D   585.0     0.0
            * Curve 1
197         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
198         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
199         DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
200         DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

201         KK       M   CNAME     MCP
202         KO       0       0     0.0       0      22
203         RC       2     0.0

204         KK     MCP   CNAME       M
205         KO       0       0     0.0       0      22
206         RN     MCP

207         KK      O1
208         KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
209         KM          L=5.20     Lca=2.79     S=64.07     Kn=0.055     LAG=100.0
210         KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
211         KO       0       0     0.0       1      22
212         BA  3.0883
213         LG   0.252   0.252   4.189   0.443   31.44
            * O1
214         UI     0.0  103.98  103.98  103.98  103.98  181.97  298.95  378.66  446.43  550.06
215         UI  624.46  676.83  731.54  781.25  824.52  905.38 1042.04 1204.77  1242.7  887.05
216         UI   765.3   690.9  643.35  614.88  590.49  558.55  530.78  506.48  485.09  454.93
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

217         UI  429.36  410.34   388.6  356.95  326.56   302.9  274.89  260.97  254.42  242.21
218         UI  239.16  221.76  217.42  189.46  170.83  170.83  140.46  132.86  132.86  129.07
219         UI  113.88  113.88  113.88  113.88   79.72   79.72   79.72   79.72   79.72   79.72
220         UI   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   50.88   32.31
221         UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
222         UI   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93   19.93
223         UI   19.93   19.93   19.93     0.0

224         KK   O1-Do
225         KO       0       0     0.0       0      22
226         DT    O1-D   150.0     0.0
            * Curve 1
227         DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
228         DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
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          * Curve 1
229       DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
230       DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

231       KK     OCP   CNAME       O
232       KO       0       0     0.0       0      22
233       KN     OCP

234       KK      N1
235       KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
236       KM          L=2.79     Lca=1.44     S=340.38     Kn=0.050     LAG=40.0
237       KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
238       KO       0       0     0.0       1      22
239       BA   1.524
240       LG   0.289   0.289   4.075   0.469  26.648
          * N1
241       UI     0.0  128.28  166.76  436.67  697.62  885.35 1048.84 1439.82 1097.57   811.0
242       UI  717.87  633.22  554.39  482.33   398.7  327.21  300.32  268.07  210.75  167.66
243       UI  152.67   140.5  106.78   98.35   84.12   62.78   62.78   62.78   38.33   24.59
244       UI   24.59   24.59   24.59   24.59   24.59   24.59   24.59     0.0

245       KK   N1-Do
246       KO       0       0     0.0       0      22
247       DT    N1-D    65.0     0.0
          * Curve 1
248       DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
249       DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
          * Curve 1
250       DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
251       DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

252       KK   N1-N2   CNAME     N2R
253       KO       0       0     0.0       0      22
254       RS      17    FLOW     0.0     0.0
255       RC    0.05   0.047    0.05 26511.0  0.0115     0.0
          * N1-N2
256       RX     0.0   280.0   350.0   358.0   367.0   381.0   451.0   730.0
257       RY    17.0    13.0    11.5    10.0    10.0    11.5    13.0    17.0
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

258       KK      N2
259       KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
260       KM          L=5.64     Lca=3.27     S=170.14     Kn=0.055     LAG=91.0
261       KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
262       KO       0       0     0.0       1      22
263       BA  3.3254
264       LG   0.268   0.268   4.117   0.446  27.305
          * N2
265       UI     0.0  123.04  123.04  123.04  123.04  310.82  395.95  496.74  616.34  730.85
266       UI  796.44  869.05  928.55  990.24 1125.95 1316.06 1517.94 1186.36  925.57  834.34
267       UI  764.31  726.51  694.11  654.42   619.9  586.86  557.14  517.77  491.74   466.8
268       UI  422.37  387.25   352.0  325.27  302.29  296.75  282.99  272.23  257.26  234.33
269       UI  202.13  202.13  163.14  157.21  157.21  143.92  134.76  134.76  134.76  103.63
270       UI   94.33   94.33   94.33   94.33   83.75   60.21   60.21   60.21   60.21   60.21
271       UI   60.21   60.21   60.21   32.52   23.58   23.58   23.58   23.58   23.58   23.58
272       UI   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58   23.58
273       UI   23.58   23.58   23.58   23.58   23.58

274       KK   N2-Do
275       KO       0       0     0.0       0      22
276       DT    N2-D   150.0     0.0
          * Curve 1
277       DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
278       DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
          * Curve 1
279       DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
280       DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

281       KK       N   CNAME     NCP
282       KO       0       0     0.0       0      22
283       HC       2     0.0

284       KK     NCP   CNAME       N
285       KO       0       0     0.0       0      22
286       KN     NCP

287       KK      P1
288       KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
289       KM          L=6.39     Lca=2.62     S=200.13     Kn=0.055     LAG=85.0
290       KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
291       KO       0       0     0.0       1      22
292       BA  2.4365
293       LG   0.312   0.312   4.193   0.424    18.0
          * P1
294       UI     0.0   96.51   96.51   96.51   112.8  277.47  344.99   422.5  544.66  601.48
295       UI  664.09   718.1  766.78  866.24 1024.06 1185.36  901.23  714.77  637.57  587.86
296       UI  562.05  530.68  496.62  470.96  448.38   414.0  389.12  369.81  331.31   304.2
297       UI  272.76  252.72  236.15  228.64  221.98  205.23   201.8  160.29  158.56  138.12
298       UI  123.32  123.32  114.16   105.7   105.7   105.7   75.58   73.99   73.99   73.99
299       UI   73.99   51.24   47.23   47.23   47.23   47.23   47.23   47.23   47.23   22.52
300       UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5
301       UI    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5    18.5     0.0
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LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

302       KK   P1-Do
303       KO       0       0     0.0       0      22
304       DT    P1-D    85.0     0.0
          * Curve 1
305       DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
306       DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
          * Curve 1
307       DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
308       DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

309       KK     PCP   CNAME       P
310       KO       0       0     0.0       0      22
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311          RN     RCP

312          KK      Q1
313          KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
314          KM          L=5.23     Lca=2.81     S=228.56     Kn=0.055     LAG=78.0
315          KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
316          KO       0       0     0.0       1      22
317          BA  2.2336
318          LG   0.338    0.34   4.203   0.396  15.896
             * Q1
319          UI     0.0   96.42   96.42   96.42   170.9  292.35  386.45  493.18  585.93  645.92
320          UI  711.02  763.18  869.42 1043.58 1161.91  814.93  681.34  610.73  571.35  541.64
321          UI  505.03  473.57  449.52  412.98  385.87  360.82  325.28  298.43  254.89  242.17
322          UI  233.02  221.76  208.77   201.6  161.51   158.4  132.21   123.2   123.2  106.72
323          UI   105.6   105.6   84.69   73.92   73.92   73.92   73.92   47.72   47.18   47.18
324          UI   47.18   47.18   47.18   47.18   28.58   18.48   18.48   18.48   18.48   18.48
325          UI   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48   18.48
326          UI   18.48   18.48   18.48

327          KK   Q1-Do
328          KO       0       0     0.0       0      22
329          DT    Q1-D    71.5     0.0
             * Curve 1
330          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
331          DI   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
332          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
333          DQ   25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

334          KK     QCF   CNAME       Q
335          KO       0       0     0.0       0      22
336          RN     QCF
337          ZZ
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RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	R1	1081.	36.58	232.	77.	30.	0.28		
+	DIVERSION TO	R1-D	1081.	36.58	232.	75.	26.	0.28		
+	HYDROGRAPH AT	R1-Do	1081.	36.58	232.	75.	26.	0.28		
+	ROUTED TO	RCP	1081.	36.58	232.	75.	26.	0.28		
+	HYDROGRAPH AT	L1	6179.	37.08	2423.	701.	248.	3.55		
+	ROUTED TO	L1-L2	5241.	37.83	2376.	701.	248.	3.55		
+									16.32	37.83
+	HYDROGRAPH AT	L2	9694.	37.75	4997.	1587.	592.	7.33		
+	DIVERSION TO	L2-D	9694.	37.75	4891.	1494.	512.	7.33		
+	HYDROGRAPH AT	L2-Do	9694.	37.75	4891.	1494.	512.	7.33		
+	2 COMBINED AT	L3R	14817.	37.83	7236.	2190.	761.	10.88		
+	ROUTED TO	L2-L3	13247.	38.83	6928.	2182.	761.	10.88		
+									15.47	38.83
+	HYDROGRAPH AT	L3	7915.	37.75	4249.	1414.	539.	5.85		
+	DIVERSION TO	L3-D	7915.	37.75	4204.	1340.	462.	5.85		
+	HYDROGRAPH AT	L3-Do	7915.	37.75	4204.	1340.	462.	5.85		
+	2 COMBINED AT	L	18396.	38.83	10465.	3518.	1223.	16.73		
+	ROUTED TO	LCP	18396.	38.83	10465.	3518.	1223.	16.73		
+	HYDROGRAPH AT	Z1	1719.	36.83	523.	174.	68.	0.66		
+	DIVERSION TO	Z1-D	1719.	36.83	523.	169.	58.	0.66		
+	HYDROGRAPH AT	Z1-Do	1719.	36.83	523.	168.	58.	0.66		
+	ROUTED TO	ZCP	1719.	36.83	523.	168.	58.	0.66		
+	HYDROGRAPH AT	M1	10302.	37.00	3843.	1112.	395.	5.59		
+	DIVERSION TO	M1-D	10302.	37.00	3825.	1084.	367.	5.59		
+	HYDROGRAPH AT	M1-Do	10302.	37.00	3825.	1084.	367.	5.59		

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+          ROUTED TO
+                    M1-M2     7427.  38.83     3677.     1076.     367.     5.59
+                                                                                13.47     38.83
+          HYDROGRAPH AT
+                      M2      9138.  37.92     5171.     1750.     670.     7.53
+          DIVERSION TO
+                    M2-D      9138.  37.92     5118.     1657.     573.     7.53
+          HYDROGRAPH AT
+                   M2-Do      9138.  37.92     5118.     1657.     573.     7.53
+          2 COMBINED AT
+                       M     14225.  38.75     8459.     2730.     939.    13.12
+          ROUTED TO
+                     MCP     14225.  38.75     8459.     2730.     939.    13.12
+          HYDROGRAPH AT
+                      O1      3946.  37.67     2040.      664.     246.     3.09
+          DIVERSION TO
+                    O1-D      3946.  37.67     2039.      645.     221.     3.09
+          HYDROGRAPH AT
+                   O1-Do      3946.  37.67     2039.      645.     221.     3.09
+          ROUTED TO
+                     OCP      3946.  37.67     2039.      645.     221.     3.09
+          HYDROGRAPH AT
+                      N1      3496.  36.83     1029.      305.     112.     1.52
+          DIVERSION TO
+                    N1-D      3496.  36.83     1025.      297.     101.     1.52
+          HYDROGRAPH AT
+                   N1-Do      3496.  36.83     1025.      297.     101.     1.52
+          ROUTED TO
+                    N1-N2     2398.  38.33      989.      295.     101.     1.52
+                                                                                14.26     38.33
+          HYDROGRAPH AT
+                      N2      4477.  37.50     2174.      686.     252.     3.33
+          DIVERSION TO
+                    N2-D      4477.  37.50     2168.      663.     227.     3.33
+          HYDROGRAPH AT
+                   N2-Do      4477.  37.50     2168.      663.     227.     3.33
+          2 COMBINED AT
+                       N      5469.  38.25     3102.      957.     328.     4.85
+          ROUTED TO
+                     NCP      5469.  38.25     3102.      957.     328.     4.85
+          HYDROGRAPH AT
+                      P1      3367.  37.42     1540.      460.     164.     2.44
+          DIVERSION TO
+                    P1-D      3367.  37.42     1526.      443.     150.     2.44
+          HYDROGRAPH AT
+                   P1-Do      3367.  37.42     1526.      443.     150.     2.44
+          ROUTED TO
+                     PCP      3367.  37.42     1526.      443.     150.     2.44
+          HYDROGRAPH AT
+                      Q1      3268.  37.33     1433.      420.     149.     2.23
+          DIVERSION TO
+                    Q1-D      3268.  37.33     1418.      405.     137.     2.23
+          HYDROGRAPH AT
+                   Q1-Do      3268.  37.33     1418.      405.     137.     2.23
+          ROUTED TO
+                     QCP      3268.  37.33     1418.      405.     137.     2.23

 *** NORMAL END OF HEC-1 ***
1*************************************
*                                   *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*              MAY  1991            *
*           VERSION 4.0.1E          *
*                                   *
* RUN DATE            TIME          *
*                                   *
*************************************

*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (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.
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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   Buckeye/Sun Valley ADMS - 23 March 2004
  2           ID   PB56J - Modelers: Jacob Lesue & Wen Chen
  3           ID   PMP 72-hour
  4           ID   Future Conditions
  5           ID   FRS #2 (Sub-basins S-U)
  6           ID   Rainfall Loss Method - Green & Ampt
  7           ID   Unit Hydrograph Method - FCDMC S-Graph
  8           ID   Channel Routing Method - Normal Depth
  9           ID   Land Use - Town of Buckeye LU Districts (2003)
 10           ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
 11           ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
              *DIAGRAM
 12           IT       5  1JAN94       0    2000
 13           IO       0
 14           IN      20 01JAN94       0
 15           JD    17.5    0.01
              * PMP 72-hour FRS#2
 16           PI   0.003   0.003   0.003   0.004   0.004   0.004   0.005   0.005   0.005   0.005
 17           PI   0.006   0.006   0.006   0.006   0.007   0.007   0.007   0.008   0.008   0.008
 18           PI   0.008   0.009   0.009   0.009   0.009    0.01    0.01    0.01    0.01    0.011
 19           PI   0.011   0.011   0.012   0.012   0.012   0.012   0.022   0.023   0.023   0.024
 20           PI   0.024   0.024   0.025   0.025   0.025   0.026   0.026   0.026   0.027   0.027
 21           PI   0.027   0.027   0.028   0.028   0.028   0.029   0.029   0.029   0.029   0.029
 22           PI   0.029   0.029   0.029   0.029    0.03    0.03    0.03    0.03    0.03    0.031
 23           PI   0.031   0.031    0.04    0.04    0.04    0.04    0.04    0.04   0.041   0.041
 24           PI   0.041   0.041   0.042   0.043   0.044   0.045   0.047   0.049   0.052   0.055
 25           PI   0.058   0.058   0.059    0.06   0.061   0.062   0.064   0.065   0.067   0.069
 26           PI   0.071   0.074   0.076   0.079   0.083   0.087    0.09   0.095   3.481   0.546
 27           PI   0.524   0.502   0.478   0.459   0.438   0.416   0.416   0.394   0.373   0.351
 28           PI   0.329   0.308   0.284   0.266   0.243   0.221     0.2   0.179   0.163    0.15
 29           PI   0.141   0.133   0.126    0.12   0.116   0.112   0.109   0.106   0.104   0.103
 30           PI   0.101     0.1   0.099   0.098   0.041    0.04    0.04   0.039   0.039   0.038
 31           PI   0.038   0.038   0.037   0.037   0.037   0.036   0.036   0.036   0.036   0.035
 32           PI   0.035   0.035   0.035   0.034   0.034   0.034   0.034   0.033   0.033   0.033
 33           PI   0.033   0.033   0.032   0.032   0.032   0.032   0.032   0.032   0.031   0.031
 34           PI   0.022   0.022   0.022   0.021   0.021   0.021    0.02    0.02    0.02    0.02
 35           PI   0.019   0.019   0.019   0.019   0.018   0.018   0.018   0.017   0.017   0.017
 36           PI   0.017   0.016   0.016   0.016   0.016   0.015   0.015   0.015   0.015   0.014
 37           PI   0.014   0.014   0.013   0.013   0.013   0.013

 38           KK      S1
 39           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 40           KM         L=2.32     Lca=0.52     S=143.99     Kn=0.050     LAG=29.0
 41           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 42           KO       0       0     0.0       1      22
 43           BA  1.4105
 44           LG   0.289   0.313   4.485   0.392  25.978
              * S1
 45           UI     0.0  163.76  399.96  863.78 1191.38 1674.04 1389.89  974.39  824.12  687.86
 46           UI  554.64  420.01  366.82  290.75  215.71   183.9  145.46  125.55   85.13   60.14
 47           UI   72.14   31.39   31.39   31.39   31.39   31.39   31.39     0.0

                                        HEC-1 INPUT                                                    PAGE  2

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

 48           KK   S1-Do
 49           KO       0       0     0.0       0      22
 50           DT    S1-D    61.0     0.0
              * Curve 1
 51           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 52           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 53           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 54           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 55           KK     SCP   CNAME       S
 56           KO       0       0     0.0       0      22
 57           RN     SCP

 58           KK      U1
 59           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 60           KM         L=2.37     Lca=1.03     S=326.50     Kn=0.050     LAG=33.0
 61           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 62           KO       0       0     0.0       1      22
 63           BA  1.3705
 64           LG   0.316   0.329   5.226   0.254  17.067
              * U1
 65           UI     0.0  139.83   266.2  626.33  919.49 1139.88 1569.26 1014.69  819.13  707.21
 66           UI  603.81  505.84  395.99  334.05  299.65  225.43  178.67   155.8  129.72   107.2
 67           UI   86.65   68.43   68.43   50.61    26.8    26.8    26.8    26.8    26.8    26.8
 68           UI    26.8     0.0

 69           KK   U1-Do
 70           KO       0       0     0.0       0      22
 71           DT    U1-D    47.0     0.0
              * Curve 1
 72           DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 73           DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
              * Curve 1
 74           DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 75           DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 76           KK     UCP   CNAME       U
 77           KO       0       0     0.0       0      22
 78           RN     UCP

 79           KK      T1
 80           KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
 81           KM         L=4.34     Lca=1.58     S=274.89     Kn=0.050     LAG=51.0
 82           KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
 83           KO       0       0     0.0       1      22
 84           BA  3.0415
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 85          LG   0.327   0.327   4.641   0.316    18.7
             * T1
 86          UI     0.0   200.8   200.8  447.02  773.33 1107.71 1336.75 1525.87 1807.83 2359.26
 87          UI  1728.6 1335.29 1184.68 1081.59  978.95  886.26  793.63  697.43  590.13  511.99
 88          UI  476.04  440.92  386.02  329.88  260.38  252.47  219.92  219.92  155.92  153.94
 89          UI  153.94  103.27   98.26   98.26   98.26   91.33   38.49   38.49   38.49   38.49
 90          UI   38.49   38.49   38.49   38.49   38.49   38.49   38.49   38.49
                                          HEC-1 INPUT                                          PAGE  3

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


 91          KK   T1-Do
 92          KO       0       0     0.0       0      22
 93          DT    T1-D   103.0     0.0
             * Curve 2
 94          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 95          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
             * Curve 1
 96          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
 97          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

 98          KK     TCP    CNAME       T
 99          KO       0        0     0.0       0      22
100          RN     TCP
101          ZZ
```

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	S1	4539.	36.67	1149.	337.	123.	1.41		
+	DIVERSION TO	S1-D	4539.	36.67	1149.	330.	112.	1.41		
+	HYDROGRAPH AT	S1-Do	4539.	36.67	1149.	330.	112.	1.41		
+	ROUTED TO	SCP	4539.	36.67	1149.	330.	112.	1.41		
+	HYDROGRAPH AT	U1	4059.	36.75	1178.	340.	120.	1.37		
+	DIVERSION TO	U1-D	4059.	36.75	1171.	332.	112.	1.37		
+	HYDROGRAPH AT	U1-Do	4059.	36.75	1171.	332.	112.	1.37		
+	ROUTED TO	UCP	4059.	36.75	1171.	332.	112.	1.37		
+	HYDROGRAPH AT	T1	6696.	36.92	2483.	726.	258.	3.04		
+	DIVERSION TO	T1-D	6696.	36.92	2479.	711.	241.	3.04		
+	HYDROGRAPH AT	T1-Do	6696.	36.92	2479.	711.	241.	3.04		
+	ROUTED TO	TCP	6696.	36.92	2479.	711.	241.	3.04		

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 *** NORMAL END OF HEC-1 ***
1*************************************
 *                                   *
 *   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
 *              MAY  1991            *
 *           VERSION 4.0.1E          *
 *                                   *
 *  RUN DATE            TIME         *
 *                                   *
 *************************************
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*************************************
*                                   *
*   U.S. ARMY CORPS OF ENGINEERS    *
*   HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET         *
*      DAVIS, CALIFORNIA 95616      *
*          (916) 551-1748           *
*                                   *
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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

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                                          HEC-1 INPUT                                          PAGE  1

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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 1          ID   Buckeye/Sun Valley ADMS - 23 March 2004
 2          ID   PBS&J - Modelers: Jacob Lesue & Wen Chen
 3          ID   PMP 72-hour
 4          ID   Future Conditions
 5          ID   FRS #3 (Sub-basins V-Y)
 6          ID   Rainfall Loss Method - Green & Ampt
 7          ID   Unit Hydrograph Method - FCDMC S-Graph
 8          ID   Channel Routing Method - Normal Depth
 9          ID   Land Use - Town of Buckeye LU Districts (2003)
10          ID   Soil Data - USDA SCS Soil Survey (1972 & 1981)
11          ID   Units - L(mi)   Lca(mi)   S(ft/mi)   LAG(min)
            *DIAGRAM
12          IT       5  1JAN94       0    2000
13          IO       0
14          IN      20 01JAN94       0
15          JD    17.5    0.01
            * PMP 72-hour FRS3
16          PI   0.003   0.003   0.003   0.004   0.004   0.004   0.005   0.005   0.005   0.005
17          PI   0.006   0.006   0.006   0.006   0.007   0.007   0.007   0.008   0.008   0.008
18          PI   0.008   0.009   0.009   0.009   0.009    0.01    0.01    0.01    0.01   0.011
19          PI   0.011   0.011   0.012   0.012   0.012   0.012   0.022   0.023   0.023   0.024
20          PI   0.024   0.024   0.025   0.025   0.025   0.026   0.026   0.026   0.027   0.027
21          PI   0.027   0.027   0.028   0.028   0.028   0.029   0.029   0.029   0.029   0.029
22          PI   0.029   0.029   0.029   0.029    0.03    0.03    0.03    0.03    0.03   0.031
23          PI   0.031   0.031    0.04    0.04    0.04    0.04    0.04    0.04   0.041   0.041
24          PI   0.041   0.041   0.042   0.043   0.044   0.045   0.047   0.049   0.052   0.055
25          PI   0.058   0.058   0.059    0.06   0.061   0.062   0.064   0.065   0.067   0.069
26          PI   0.071   0.074   0.076   0.079   0.083   0.087    0.09   0.095   3.481   0.546
27          PI   0.524   0.502   0.478   0.459   0.438   0.416   0.416   0.394   0.373   0.351
28          PI   0.329   0.308   0.284   0.266   0.243   0.221     0.2   0.179   0.163    0.15
29          PI   0.141   0.133   0.126    0.12   0.116   0.112   0.109   0.106   0.104   0.103
30          PI   0.101     0.1   0.099   0.098   0.041    0.04    0.04   0.039   0.039   0.038
31          PI   0.038   0.038   0.037   0.037   0.037   0.036   0.036   0.036   0.036   0.035
32          PI   0.035   0.035   0.035   0.034   0.034   0.034   0.034   0.033   0.033   0.033
33          PI   0.033   0.033   0.032   0.032   0.032   0.032   0.032   0.032   0.031   0.031
34          PI   0.022   0.022   0.022   0.021   0.021   0.021    0.02    0.02    0.02    0.02
35          PI   0.019   0.019   0.019   0.019   0.018   0.018   0.018   0.017   0.017   0.017
36          PI   0.017   0.016   0.016   0.016   0.016   0.015   0.015   0.015   0.015   0.014
37          PI   0.014   0.014   0.013   0.013   0.013   0.013

38          KK      V1
39          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
40          KM         L=2.86     Lca=1.75     S=344.82     Kn=0.050     LAG=43.0
41          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
42          KO       0         0     0.0       1      22
43          BA  0.6646
44          LG   0.335   0.335   3.971   0.405  16.644
            * V1
45          UI     0.0   52.04   54.19  166.27  256.03  338.03  396.86  496.51  578.99  373.13
46          UI  313.66  281.75  250.64  220.87  193.81  162.52  133.66  122.94  111.92    90.9
47          UI   74.78   66.34   56.99    53.4    39.9    39.9   30.81   25.47   25.47   25.47
48          UI   16.36    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97    9.97
49          UI     0.0
```



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

50          KK   V1-Do
51          KO       0         0     0.0       0      22
52          DT    V1-D    23.0     0.0
            * Curve 3
53          DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
54          DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
            * Curve 1
55          DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
56          DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

57          KK     VCP   CNAME       V
58          KO       0         0     0.0       0      22
59          RN     VCP

60          KK      W1
61          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
62          KM         L=3.46     Lca=1.78     S=486.28     Kn=0.050     LAG=44.0
63          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
64          KO       0         0     0.0       1      22
65          BA   3.894
66          LG    0.35    0.35   3.975    0.41  15.228
            * W1
67          UI     0.0  297.97  297.97  920.94 1416.37 1894.97 2238.82 2710.48 3465.75 2237.36
68          UI  1844.7 1658.52 1479.19 1314.83 1166.02  980.71   816.4  720.69   665.9  577.11
69          UI  477.35  380.74  352.03  326.35  259.78  228.45  225.14  145.82  145.82  145.82
70          UI  145.82   65.63   57.11   57.11   57.11   57.11   57.11   57.11   57.11   57.11
71          UI   57.11     0.0

72          KK   W1-W2   CNAME     W2R
73          KO       0         0     0.0       0      22
74          RS       6    FLOW     0.0     0.0
75          RC   0.050    0.05    0.06 11249.0  0.0189     0.0
            * W1-W2
76          RX     0.0   350.0   372.0   384.0   472.0   489.0   525.0  1005.0
77          RY    17.5    11.5    11.6    10.0    11.2    13.4    13.8    17.5

78          KK      W2
79          KM         THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
80          KM         L=3.25     Lca=1.19     S=178.54     Kn=0.050     LAG=44.0
81          KM         S-GRAPH TYPE=PHOENIX MOUNTAIN
82          KO       0         0     0.0       1      22
83          BA  2.8478
84          LG   0.321   0.321   4.063   0.409  12.128
            * W2
85          UI     0.0  217.92  217.92  673.51 1035.83 1385.85 1637.32 1982.26  2534.6 1636.25
86          UI  1349.1 1212.93 1081.78  961.58  852.74  717.22  597.06  527.06  486.99  422.06
87          UI   349.1  278.45  257.45  238.67  189.98  167.07  164.65  106.64  106.64  106.64
88          UI  106.64    48.0   41.77   41.77   41.77   41.77   41.77   41.77   41.77   41.77
89          UI   41.77     0.0
```



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

```
KK   W2-Do
KO       0       0     0.0       0      22
DT    W2-D   130.0     0.0
* Curve 1
DI     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
DI  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0
* Curve 2
DQ     0.0  2500.0  5000.0  7500.0 10000.0 12500.0 15000.0 17500.0 20000.0 22500.0
DQ  25000. 27500.0 30000.0 32500.0 35000.0 37500.0 40000.0 42500.0 45000.0 47500.0

KK       W   CNAME     WCP
KO       0       0     0.0       0      22
HC       2     0.0

KK     WCP   CNAME       W
KO       0       0     0.0       0      22
RN     WCP

KK      X1
KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM          L=2.60      Lca=1.44      S=288.89      Kn=0.050      LAG=40.0
KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
KO       0       0     0.0       1      22
BA  0.7867
LG    0.35    0.35   3.947   0.418  12.841
* X1
UI     0.0   66.22   86.09  225.41  360.12  457.02  541.42  743.25  566.57  418.64
UI  370.57  326.87  286.18  248.98  205.81  168.91  155.03  138.38  108.79   86.55
UI   78.81   72.53   55.12   50.77   43.42   32.41   32.41   32.41   19.79   12.69
UI   12.69   12.69   12.69   12.69   12.69   12.69   12.69     0.0

KK     XCP   CNAME       X
KO       0       0     0.0       0      22
RN     XCP

KK      Y1
KM          THE FOLLOWING PARAMETERS WERE PROVIDED FOR THIS BASIN
KM          L=1.37      Lca=0.54      S=771.84      Kn=0.050      LAG=17.0
KM          S-GRAPH TYPE=PHOENIX MOUNTAIN
KO       0       0     0.0       1      22
BA  0.5808
LG    0.35    0.35   4.051   0.415  10.599
* Y1
UI     0.0  162.05  614.46 1087.12   811.3  562.72  397.42  272.87  186.43   132.2
UI   88.57   57.25   43.55   22.05   22.05   22.05     0.0

KK     YCP   CNAME       Y
KO       0       0     0.0       0      22
RN     YCP
ZZ
```

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	V1	1628.	36.83	517.	148.	53.	0.66		
+	DIVERSION TO	V1-D	1628.	36.83	515.	145.	49.	0.66		
+	HYDROGRAPH AT	V1-Do	1628.	36.83	515.	145.	49.	0.66		
+	ROUTED TO	VCP	1628.	36.83	515.	145.	49.	0.66		
+	HYDROGRAPH AT	W1	9330.	36.83	2959.	835.	295.	3.89		
+	ROUTED TO	W1-W2	8426.	37.25	2934.	835.	295.	3.89		
+									15.08	37.25
+	HYDROGRAPH AT	W2	6810.	36.83	2149.	597.	209.	2.85		
+	DIVERSION TO	W2-D	6810.	36.83	2038.	555.	187.	2.85		
+	HYDROGRAPH AT	W2-Do	6810.	36.83	2038.	555.	187.	2.85		
+	2 COMBINED AT	W	13126.	37.17	4968.	1384.	482.	6.74		
+	ROUTED TO	WCP	13126.	37.17	4968.	1384.	482.	6.74		
+	HYDROGRAPH AT	X1	1994.	36.83	590.	164.	57.	0.79		
+	ROUTED TO	XCP	1994.	36.83	590.	164.	57.	0.79		
+	HYDROGRAPH AT	Y1	2556.	36.50	438.	118.	41.	0.58		
+	ROUTED TO	YCP	2556.	36.50	438.	118.	41.	0.58		

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

E.6.9 100-Year 10-Days Principal Spillway Hydrograph (PSH)

E.6.9.a 100-Year 10-Days PSH (Existing Conditions)

1. Data Available

Watershed drainage areas that contribute to FRS: 90.38 square miles

Time of concentration Tc = 6 hour (FRS is 16 miles, use average velocity 4 fps, get an estimation of Tc = 5.9 hour)

Average annual precipitation = 7.65 inch (from Western Regional Climate Center, http://www.wrcc.dri.edu/htmlfiles/az/az.ppt.ext.html)

Average annual temperature = 69.9 F (from Western Regional Climate Center, http://www.wrcc.dri.edu/htmlfiles/az/az.tmp.ext.html)

Runoff curve number (CN) for 100-year 1-day = 86 (33% soil D, 67% soil C, poor desert shrub) (TR55, Table 2.2d; and Hydrologic Design for Highway Drainage in Arizona, Figure 2-1)

2. Rainfall Calculation for 100-Year 1-Day and 10-Day

The 100-year 10-day precipitation for Buckeye Area 3 was estimated by following SCS Technical Note – Hydrology – PO-6 (Rev. 2) (SCS, 1975). The cited figures and tables in this section are from that document, and attached in the supporting materials.

Step A: Run Prefre (DDMSW 2.1) to obtain the following data:

a). 2-year 6-hour: 1.30 inch

b). 2-year 24-hour: 1.50 inch

c). 100-year 24-hour: 4.20 inch

d). 2-year 1-hour: 1.05 inch (checked with the formula in Table B-1 using Region 8, and obtained 0.96 inch, close enough).

Step B: Using Figure B-2, apply the results from step 1 and Latitude 33° for Buckeye, obtain 2-year 10-day rainfall 2.2 inch.

Step C: From Figure B-3, a rainfall ratio of 2.8 is assigned to Buckeye 100-year 10-day over 2-year 10-day.

Therefore, point rainfall for 100-year, 10-day rainfall for Buckeye area 3 = 2.8 x 2.2 = 6.2 inch; and 100-year, 1-day rainfall for Buckeye Area 3 is 4.2 inch, respectively.

Step D: the areal rainfall depths were adjusted according to Figure B-5. for drainage area of 90.38 square miles, adjustment factors are 0.967 and 0.935 for 100-year 10-day and 1-day, respectively.

Therefore, areal rainfall for 100-year, 10-day rainfall for Buckeye area 3 = 6.2 x 0.967 = 6.0 inch; and 100-year, 1-day rainfall for Buckeye Area 3 is 3.9 inch, respectively.

3. Hydrograph for 100-Year 10-Day Storm Event

The principal spillway hydrograph was calculated by following the procedure in NEH Notice 4-102 Section 4, Chapter 21 (SCS, 1972). The cited figures and tables in this section are from that document, and attached in the supporting materials.

Step A: Determine CN for 100-year, 10-day storm event

From Table 21.2 in NEH Notice 4-102 Section 4, Chapter 21 (SCS, 1972) and the revised Table 2-3 in TR-60 (SCS, 1985), with 100-year 1-day CN of 86, 100-year 10-day CN is 74.

Step B: Direct runoff for 100-year 1-day and 10-day in Buckeye Area 3

From Figure 10.1, direct runoff for 100-year 1-day is 2.7 inch, and direct runoff for 100-year 10-day is 3.2 inch.

Step C: Compute the climatic index

From Equation 21.1 in SCS (1972), $Ci = \frac{100 \times Pa}{(Ta)^2} = \frac{100 \times 7.65}{69.9^2} = 0.157$

Because Ci is less than 1, the channel loss may be used to reduce direct runoff.

Step D: Compute the net runoff

From Table 21.3, the channel-loss factor for reduction of direct runoff is 0.41 for Ci=0.157 and drainage area 90 square miles. Then the net runoff for

Q1 = 2.7(0.41) = 1.11 inch;

Q10 = 3.2 (0.41) = 1.31 inch

The net runoffs will be Q1 and Q10 in terms of 100-year 1-day and 10-day respectively in the rest of this calculation.

Step E: Compute the Q1/Q10 ratio, from Step D, Q1/Q10 = 1.11/1.31 = 0.841

Step F: find the PSH and PSMC tabulations in Table 21.10

Enter Table 21.9 with the ratio 0.841 and Tc of 6 hours and find that the PSH with values nearest those is No. 23. Locate the appropriate tabulation in Table 21.1 by looking up PSH No. 23. Columns 1, 2, and 4 of Table D.6-3a show the time, rate, and mass tabulations taken from Table 21.10.

Step G: Compute PSH discharge in cfs.

First find the product of drainage area and Q10. This is 90.38 (1.31) = 118.40 mile^2-inches. Multiply the entries in column 2, Table D.6-3a by 118.40, to get the discharges in cfs in column 3. The PSH is plotted in Figure D.6-1a.

Step H: Compute PSMC amounts in inches

Multiply the entries in column 4, Table D-1, by Q10 (1.31) to get accumulated runoff in inches as shown in column 5. The PSMC is plotted in Figure D.6-2a.

Table E.6-3a

Summary of Principal Spillway Hydrograph (Exisiting Condition)

Time	PSH (ratio)	PSH (cfs)	PSMC (ratio)	PSMC (in)
0	0.000	0	0.0000	0.000
0.3	0.130	15	0.0004	0.001
0.6	0.254	30	0.0026	0.003
1	0.302	36	0.0079	0.010
2	0.412	49	0.0218	0.029
3	0.566	67	0.0398	0.052
4	0.708	84	0.0536	0.070
4.3	1.004	119	0.0668	0.088
4.6	1.489	176	0.0804	0.105
4.8	1.961	232	0.0987	0.129
4.9	2.887	342	0.1161	0.152
5	4.056	480	0.1289	0.169
5.1	32.166	3,808	0.1955	0.256
5.2	69.093	8,181	0.3817	0.500
5.3	49.241	5,830	0.5993	0.785
5.4	26.833	3,177	0.7392	0.968
5.4	14.486	1,715	0.8159	1.069
5.6	8.572	1,015	0.8589	1.125
5.8	5.120	606	0.8841	1.158
6	2.199	260	0.9096	1.192
6.2	1.326	157	0.9216	1.207
6.5	0.931	110	0.9409	1.233
6.8	0.666	79	0.9551	1.251
7.4	0.525	62	0.9658	1.265
8	0.415	49	0.9743	1.276
9	0.305	36	0.9880	1.294
10	0.271	32	0.9978	1.307
10.3	0.122	14	0.9988	1.308
10.6	0.028	3	0.9999	1.310
11.4	0.000	0	1.0000	1.310

Figure E.6-1a

Plot of Principal Spillway Hydrograph (Existing Condition)

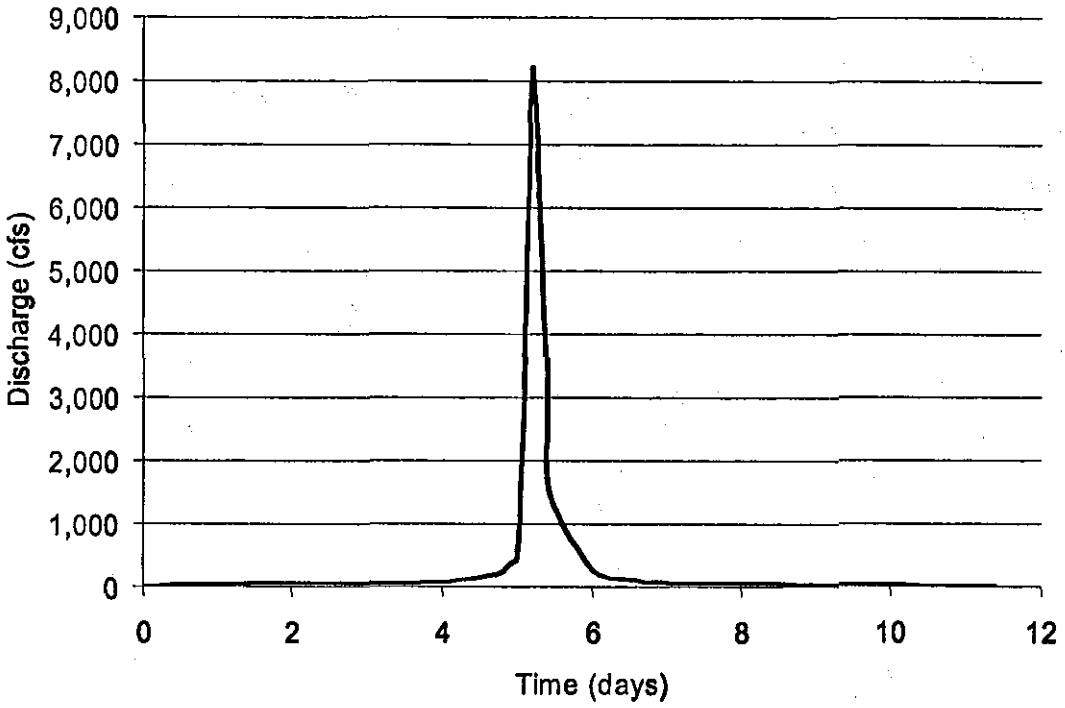
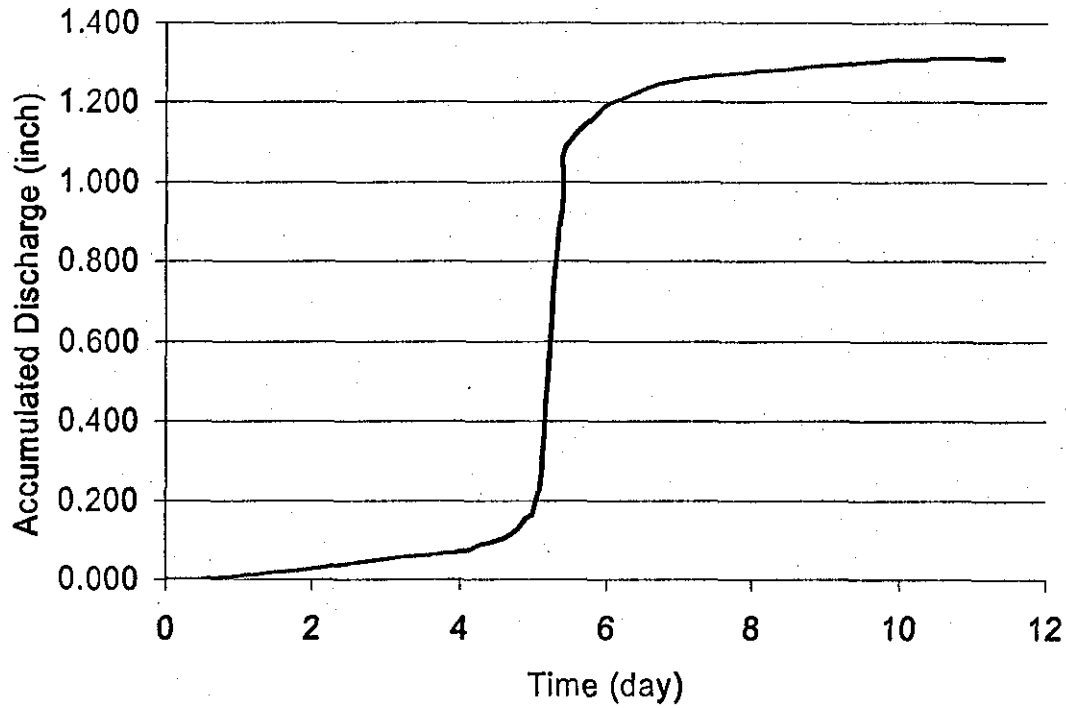


Figure E.6-2a

Plot of Principal Spillway Mass Curve (Existing Condition)



E.6.9.b100-Year 10-Days PSH (Future Conditions)

1. **Data Available**

Watershed drainage areas that contribute to FRS: 90.38 square miles

Time of concentration Tc = 6 hour (FRS is 16 miles, use average velocity 4 fps, get an estimation of Tc = 5.9 hour)

Average annual precipitation = 7.65 inch (from Western Regional Climate Center, http://www.wrcc.dri.edu/htmlfiles/az/az.ppt.ext.html)

Average annual temperature = 69.9 F (from Western Regional Climate Center, http://www.wrcc.dri.edu/htmlfiles/az/az.tmp.ext.html)

Runoff curve number (CN) for 100-year 1-day = 89 (33% soil D, 67% soil C, newly graded area with poor desert shrub) (TR55, Table 2.2a & d; and Hydrologic Design for Highway Drainage in Arizona, Figure 2-1)

2. **Rainfall Calculation for 100-Year 1-Day and 10-Day**

The 100-year 10-day precipitation for Buckeye Area 3 was estimated by following SCS Technical Note – Hydrology – PO-6 (Rev. 2) (SCS, 1975). The cited figures and tables in this section are from that document, and attached in the supporting materials.

Step A: Run Prefre (DDMSW 2.1) to obtain the following data:

a). 2-year 6-hour: 1.30 inch

b). 2-year 24-hour: 1.50 inch

c). 100-year 24-hour: 4.20 inch

d). 2-year 1-hour: 1.05 inch (checked with the formula in Table B-1 using Region 8, and obtained 0.96 inch, close enough).

Step B: Using Figure B-2, apply the results from step 1 and Latitude 33° for Buckeye, obtain 2-year 10-day rainfall 2.2 inch.

Step C: From Figure B-3, a rainfall ratio of 2.8 is assigned to Buckeye 100-year 10-day over 2-year 10-day.

Therefore, point rainfall for 100-year, 10-day rainfall for Buckeye area 3 = 2.8 x 2.2 = 6.2 inch; and 100-year, 1-day rainfall for Buckeye Area 3 is 4.2 inch, respectively.

Step D: the areal rainfall depths were adjusted according to Figure B-5. for drainage area of 90.38 square miles, adjustment factors are 0.967 and 0.935 for 100-year 10-day and 1-day, respectively.

Therefore, areal rainfall for 100-year, 10-day rainfall for Buckeye area 3 = 6.2 x 0.967 = 6.0 inch; and 100-year, 1-day rainfall for Buckeye Area 3 is 3.9 inch, respectively.

3. Hydrograph for 100-Year 10-Day Storm Event

The principal spillway hydrograph was calculated by following the procedure in NEH Notice 4-102 Section 4, Chapter 21 (SCS, 1972). The cited figures and tables in this section are from that document, and attached in the supporting materials.

Step A: Determine CN for 100-year, 10-day storm event

From Table 21.2 in SCS (1972) and the revised Table 2-3 in TR-60 (1985), with 100-year 1-day CN of 89, 100-year 10-day CN is 79.

Step B: Direct runoff for 100-year 1-day and 10-day in Buckeye Area 3

From Figure 10.1, direct runoff for 100-year 1-day is 2.8 inch, and direct runoff for 100-year 10-day is 3.7 inch.

Step C: Compute the climatic index

From Equation 21.1 in SCS (1972), $Ci = \frac{100 \times Pa}{(Ta)^2} = \frac{100 \times 7.65}{69.9^2} = 0.157$

Because Ci is less than 1, the channel loss may be used to reduce direct runoff.

Step D: Compute the net runoff

From Table 21.3, the channel-loss factor for reduction of direct runoff is 0.41 for Ci=0.157 and drainage area 90 square miles. Then the net runoff for

Q1 = 2.8(0.41) = 1.15 inch;

Q10 = 3.7 (0.41) = 1.52 inch

The net runoffs will be Q1 and Q10 in terms of 100-year 1-day and 10-day respectively in the rest of this calculation.

Step E: Compute the Q1/Q10 ratio, from Step D, Q1/Q10 = 1.15/1.52 = 0.757

Step F: find the PSH and PSMC tabulations in Table 21.10

Enter Table 21.9 with the ratio 0.841 and Tc of 6 hours and find that the PSH with values nearest those is No. 23. Locate the appropriate tabulation in Table 21.1 by looking up PSH No. 23. Columns 1, 2, and 4 of Table D.6-3b show the time, rate, and mass tabulations taken from Table 21.10.

Step G: Compute PSH discharge in cfs.

First find the product of drainage area and Q10. This is 90.38 (1.52) = 137.11 mile^2-inches. Multiply the entries in column 2, Table D.6-3b by 137.11, to get the discharges in cfs in column 3. The PSH is plotted in Figure D.6-1b.

Step H: Compute PSMC amounts in inches

Multiply the entries in column 4, Table D.6-3b, by Q10 (1.52) to get accumulated runoff in inches as shown in column 5. The PSMC is plotted in Figure D.6-2b.

Table E.6-3b

Summary of Principal Spillway Hydrograph (Future Condition)

Time	PSH (ratio)	PSH (cfs)	PSMC (ratio)	PSMC (in)
0	0.000	0	0.0000	0.000
0.3	0.130	18	0.0004	0.001
0.6	0.254	35	0.0026	0.004
1	0.302	41	0.0079	0.012
2	0.412	56	0.0218	0.033
3	0.566	78	0.0398	0.060
4	0.708	97	0.0536	0.081
4.3	1.004	138	0.0668	0.102
4.6	1.489	204	0.0804	0.122
4.8	1.961	269	0.0987	0.150
4.9	2.887	396	0.1161	0.176
5	4.056	556	0.1289	0.196
5.1	32.166	4,410	0.1955	0.297
5.2	69.093	9,473	0.3817	0.580
5.3	49.241	6,751	0.5993	0.911
5.4	26.833	3,679	0.7392	1.124
5.4	14.486	1,986	0.8159	1.240
5.6	8.572	1,175	0.8589	1.306
5.8	5.120	702	0.8841	1.344
6	2.199	302	0.9096	1.383
6.2	1.326	182	0.9216	1.401
6.5	0.931	128	0.9409	1.430
6.8	0.666	91	0.9551	1.452
7.4	0.525	72	0.9658	1.468
8	0.415	57	0.9743	1.481
9	0.305	42	0.9880	1.502
10	0.271	37	0.9978	1.517
10.3	0.122	17	0.9988	1.518
10.6	0.028	4	0.9999	1.520
11.4	0.000	0	1.0000	1.520

Figure E.6-1b

Plot of Principal Spillway Hydrograph (Future Condition)

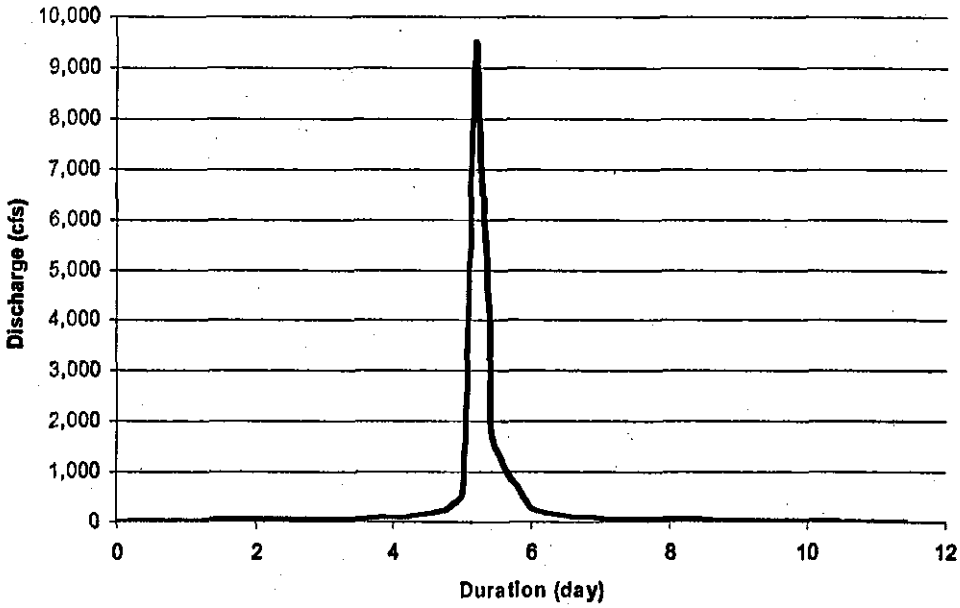
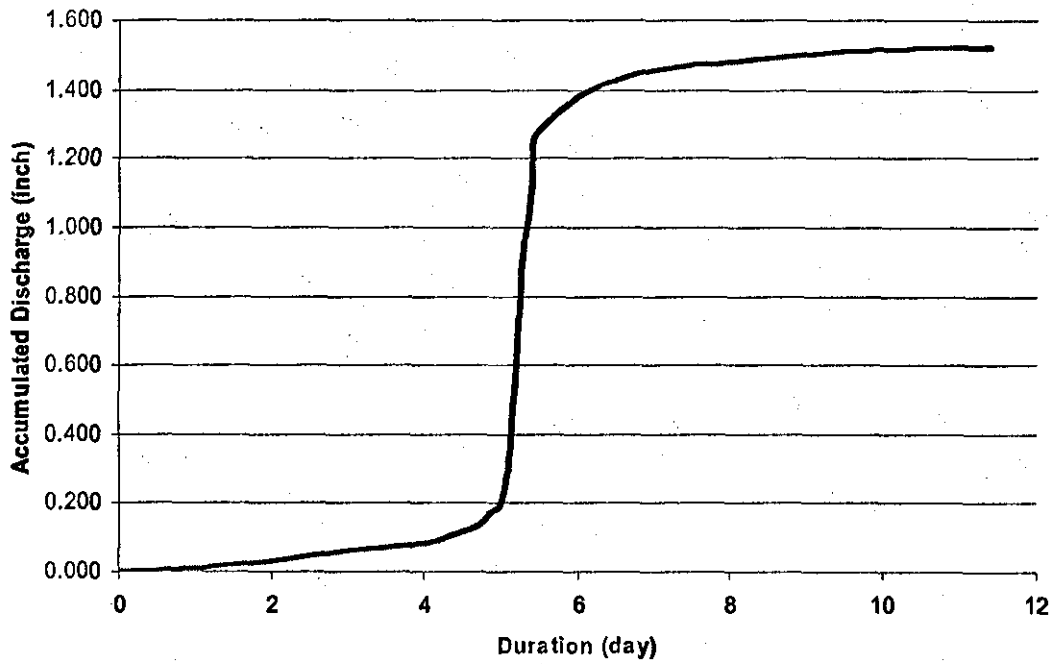
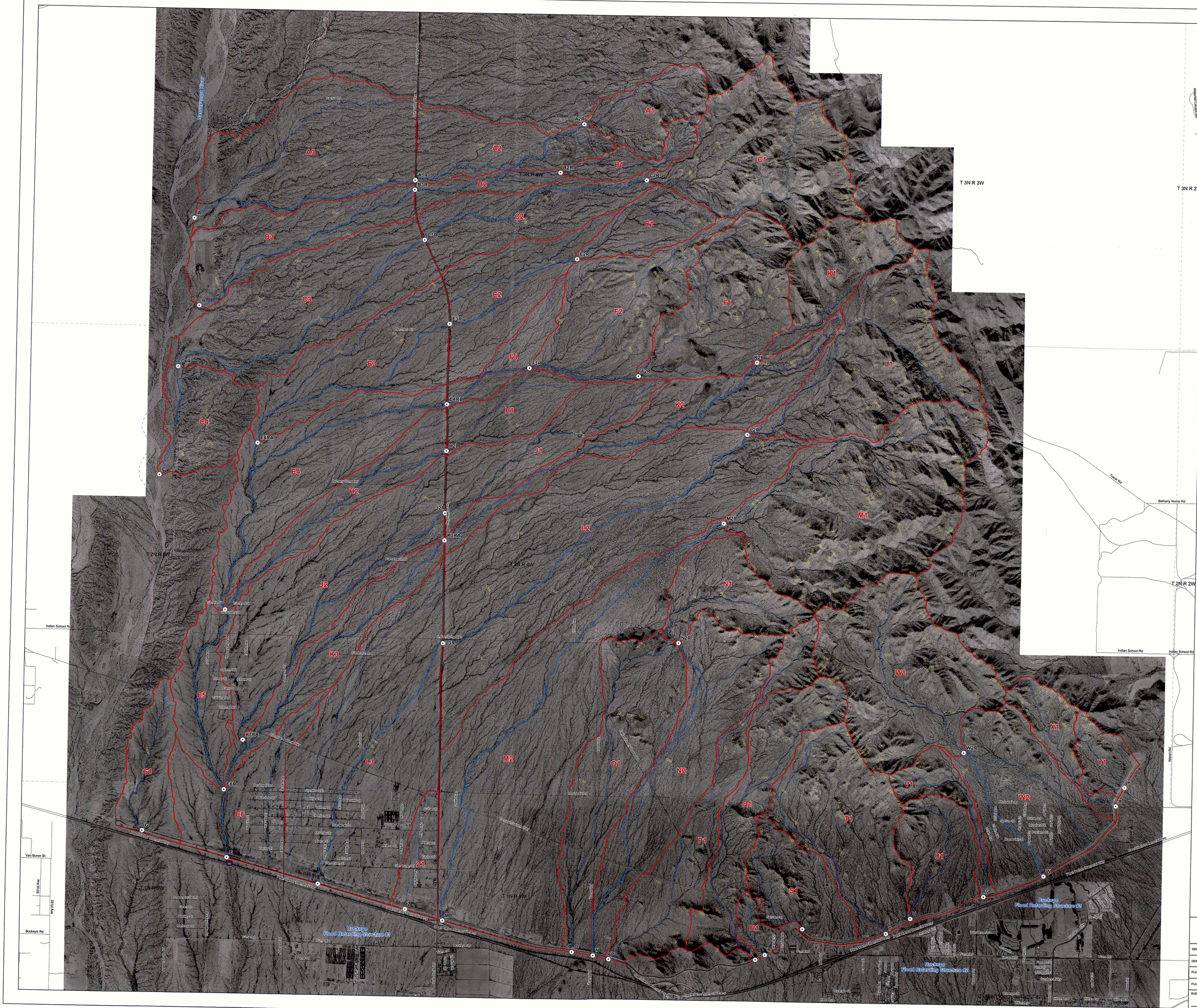


Figure E.6-2b

Plot of Principal Spillway Mass Curve (Future Condition)





Flood Control District of Maricopa County

BUCKEYE/SUN VALLEY AREA DRAINAGE MASTER STUDY
FCD CONTRACT NO. 2002C027

Figure 4-9
Area 3 Watershed Workmap

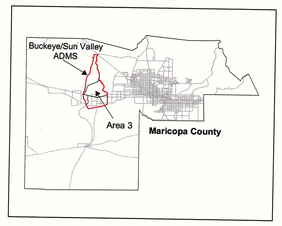
LEGEND

- Concentration/Combining Point
- Sub-Basin Boundary
- Road
- Township - Range
- Contour
- Lag Time Path
- Routing Channel
- Culvert

NOTES

Registered Professional Engineer (Civil) CERTIFICATE NO. 34894 Stephen M. Roberts Date Signed 1-30-07 ARIZONA U.S.A.

INDEX MAP



0 2,000 4,000 6,000 Feet

1 inch equals 2,000 feet
contour interval equals 50 feet

Horizontal Coordinate System:
NAD 1983 State Plane Arizona Central
Vertical Coordinate System:
NAVD 1988

N

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	BY	DATE
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PLANS CHK.		

SUBMITTED BY: DATE:

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RECOMMENDED BY: DATE

APPROVED BY: DATE

CHIEF ENGINEER AND GENERAL MANAGER

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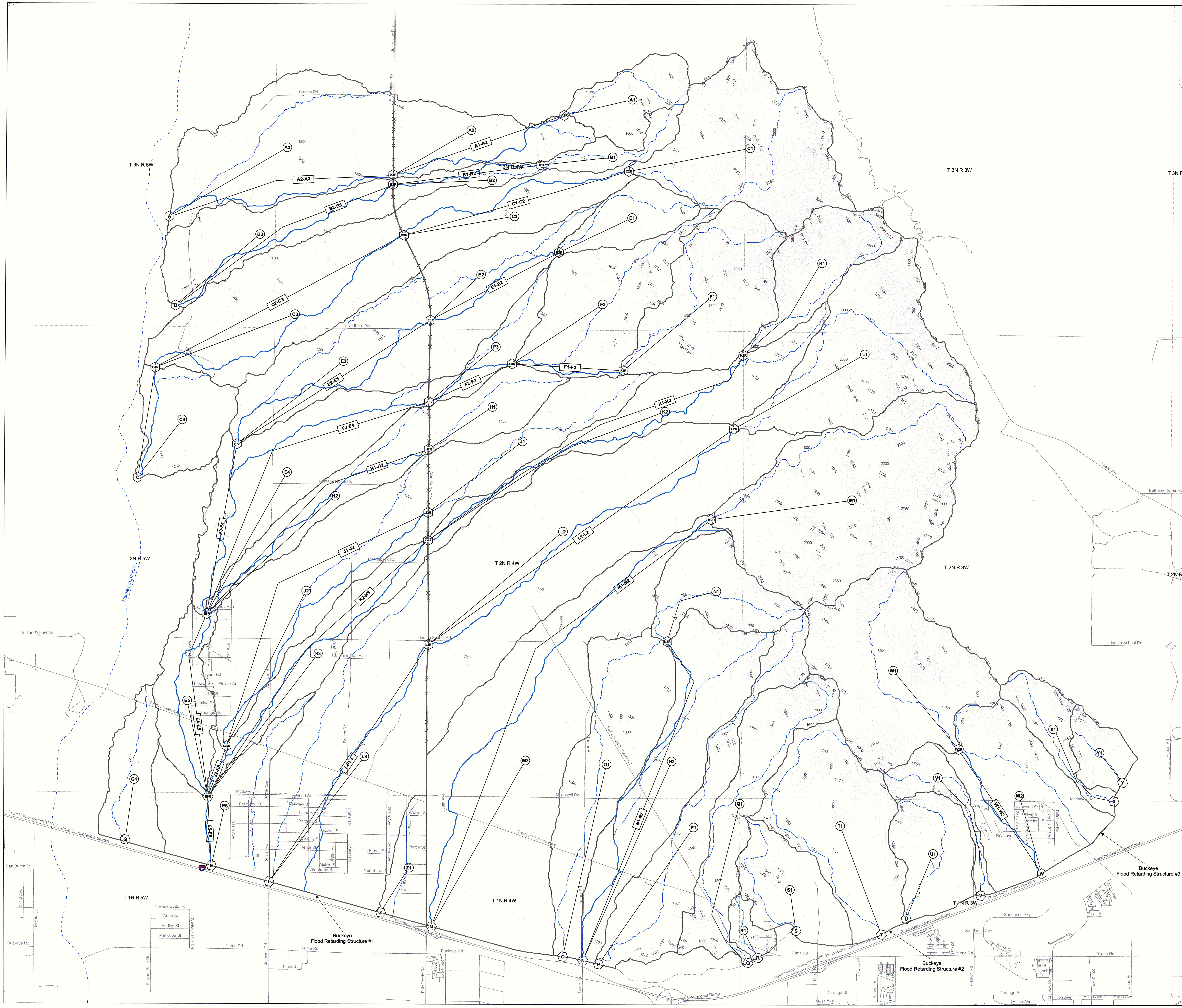


BUCKEYE/SUN VALLEY AREA DRAINAGE MASTER STUDY

FCD CONTRACT NO. 2002C027

Figure 4-10

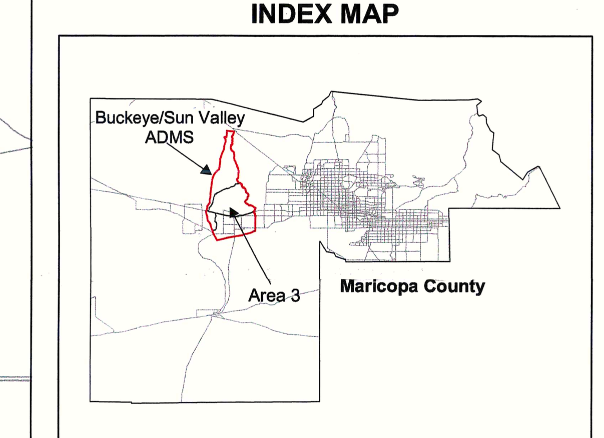
Area 3 Existing Conditions Schematic Map

LEGEND

- E1 Sub-Basin ID
- E Concentration/Combining Point
- E1-E2 Routing Channel ID
- Sub-Basin Boundary
- Routing Channel
- Lag Time Path
- × Culvert
- Road
- Contour (50ft)
- Township - Range

NOTES

INDEX MAP



Feet: 0 2,000 4,000 6,000

1 inch equals 2,000 feet

Horizontal Coordinate System:
NAD 1983 State Plane Arizona Central
Vertical Coordinate System:
NAVD 1988

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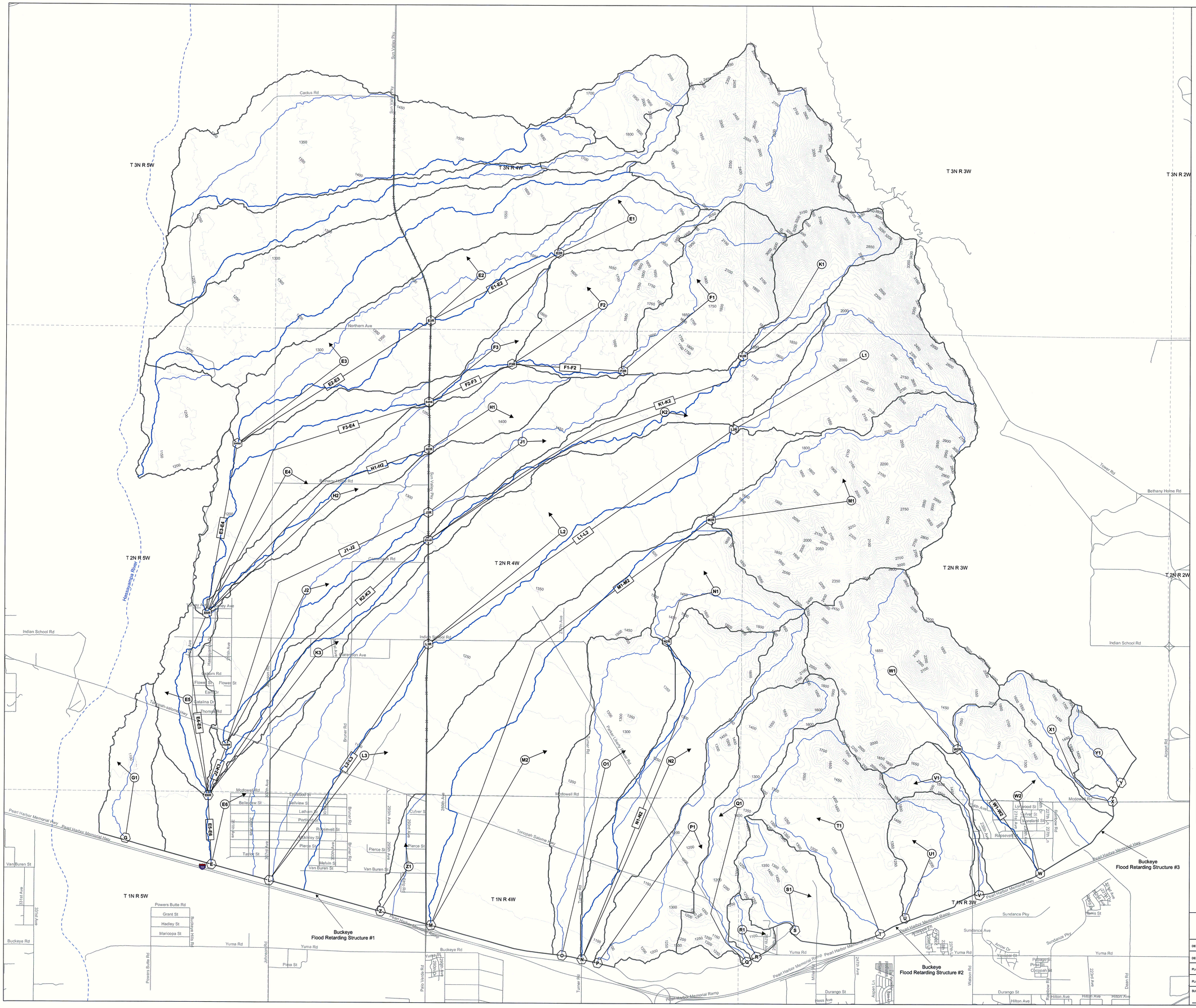


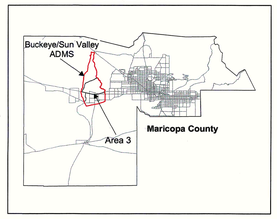
BUCKEYE/SUN VALLEY AREA DRAINAGE MASTER STUDY
FCD CONTRACT NO. 2002C027
Figure 4-11
Area 3 Future Conditions Schematic Map

LEGEND

- E1 — Sub-Basin ID
- E — Concentration/Combining Point
- E1-E2 — Routing Channel ID
- Diversion to Retention Basin
- Sub-Basin Boundary
- Routing Channel
- Lag Time Path
- Culvert
- Road
- Contour (50ft)
- Township - Range

NOTES

INDEX MAP



Feet
0 2,000 4,000 6,000
1 inch equals 2,000 feet

N

Horizontal Coordinate System:
NAD 1983 State Plane Arizona Central
Vertical Coordinate System:
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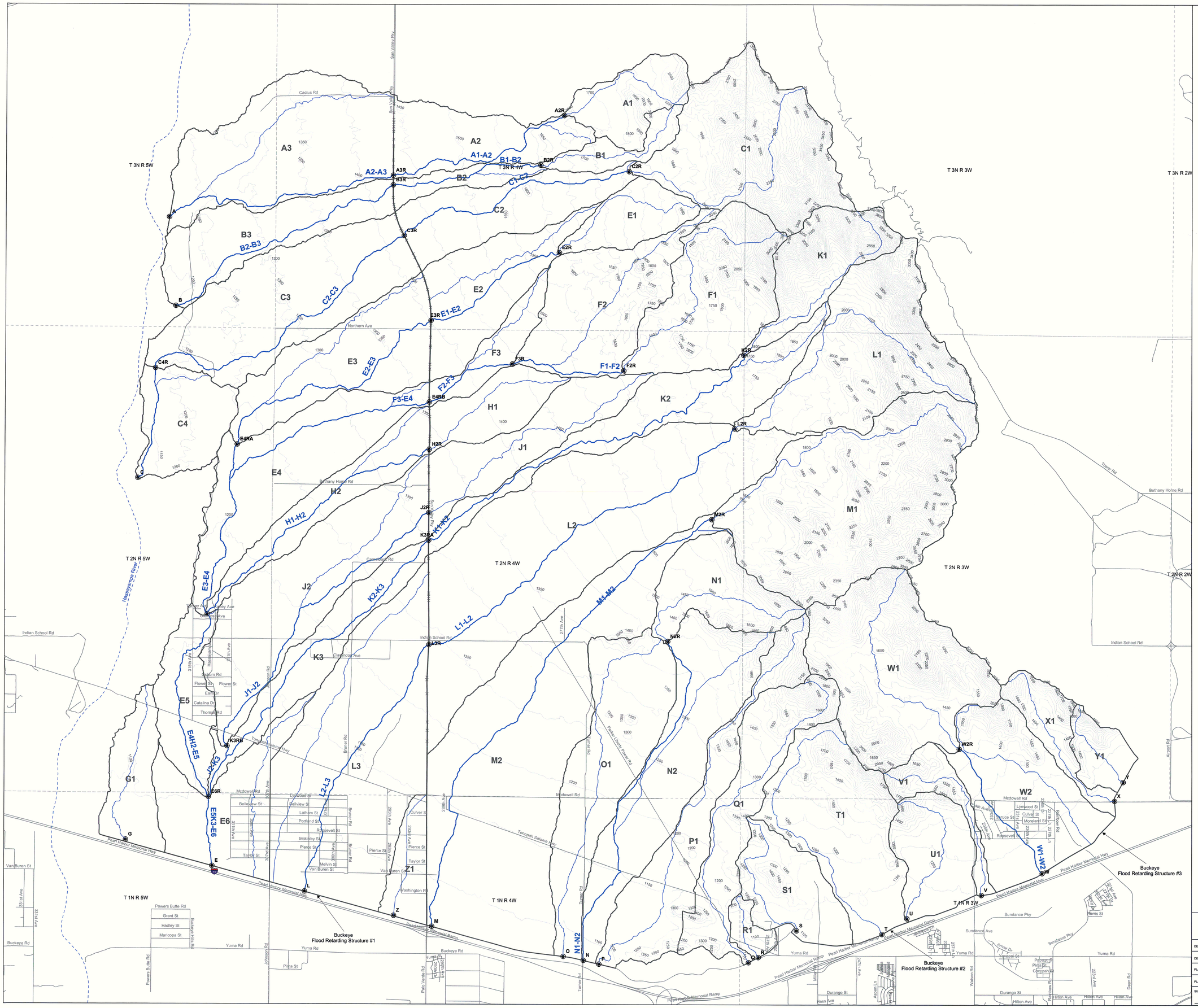


BUCKEYE/SUN VALLEY
AREA DRAINAGE MASTER STUDY
FCD CONTRACT NO. 2002C027

Figure 4-12
Area 3 Routing Map

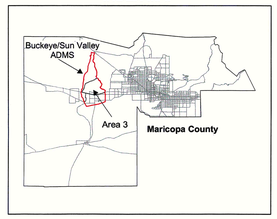
LEGEND

- E1 — Sub-Basin Boundary
- E — Concentration Point
- E1-E2 — Routing Channel
- Lag Time Path
- Culvert
- Road
- Contour (50ft)
- Township - Range

NOTES

Please refer to Volume V-A1 Area 3 Hydrology Report Appendix D for cross section data, "n" value selection, culvert dimensions, slopes, and all other hydraulic data.

INDEX MAP



0 2,000 4,000 6,000 Feet

1 inch equals 2,000 feet

N

Horizontal Coordinate System:
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Vertical Coordinate System:
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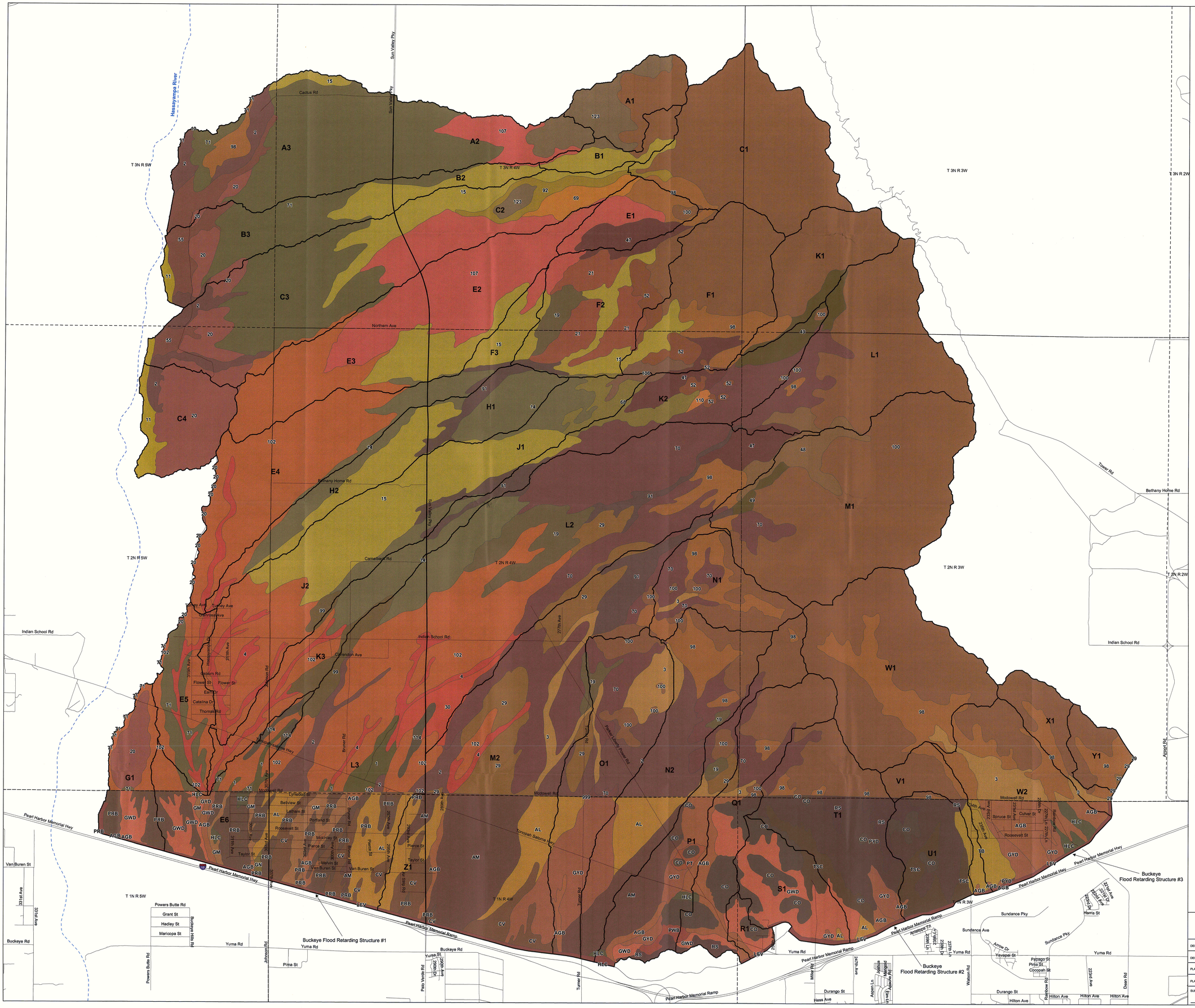


BUCKEYE/SUN VALLEY
AREA DRAINAGE MASTER STUDY
F.C.D. CONTRACT NO. 2002C027

Figure 4-13
Area 3 Soil Map

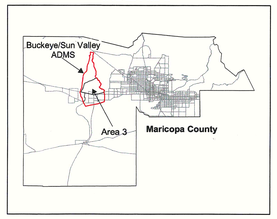
LEGEND

- E1 Sub-Basin Boundary
- Aba Soil Type
- Township-Range
- Roads

NOTES

Table D.2-2 lists the soil characteristics for each ID number.

INDEX MAP



0 2,000 4,000 6,000 Feet
1 inch equals 2,000 feet

N

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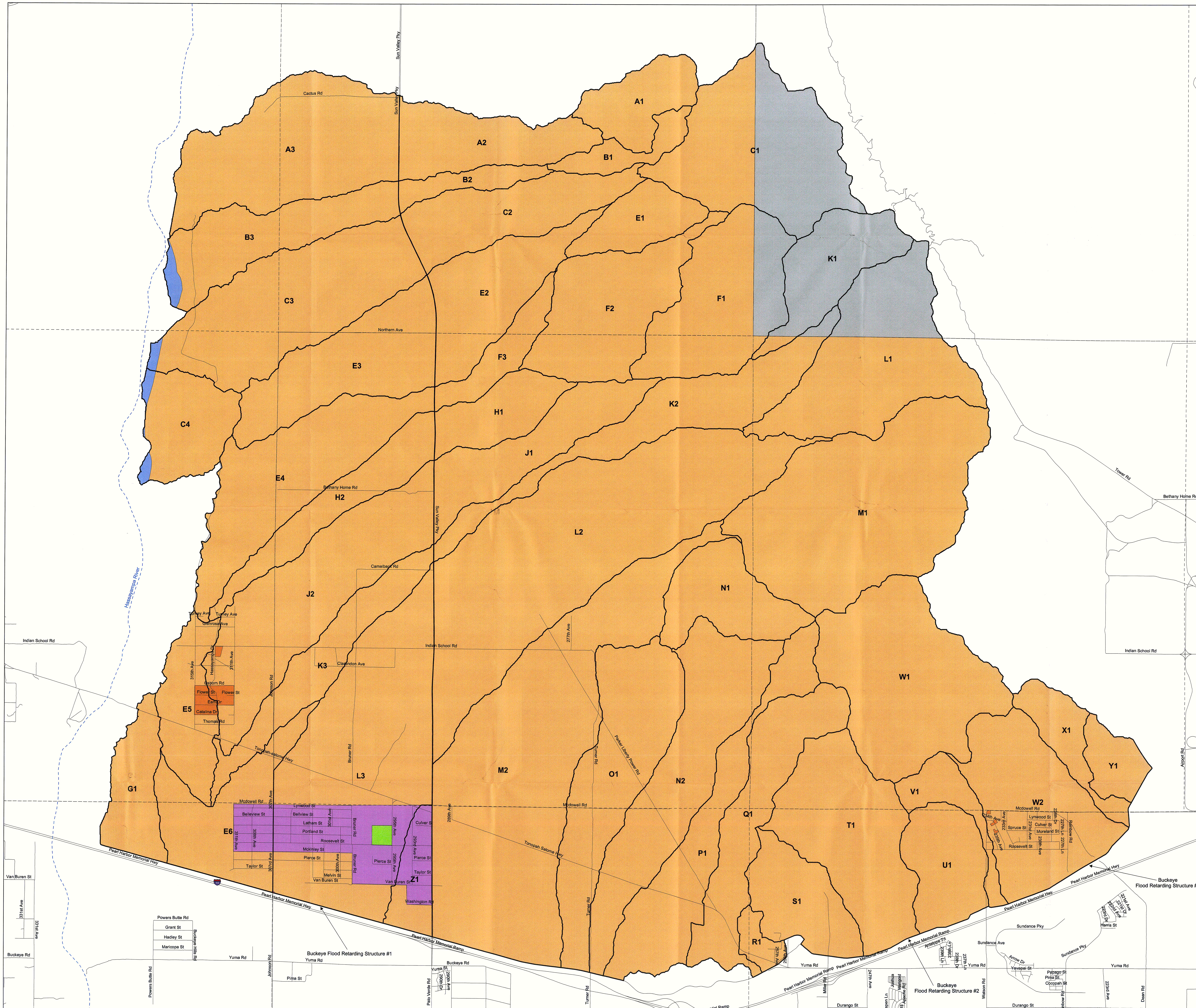


BUCKEYE/SUN VALLEY
AREA DRAINAGE MASTER STUDY
FCD CONTRACT NO. 2002C027
Figure 4-14
Area 3 Existing Conditions Land Use Map

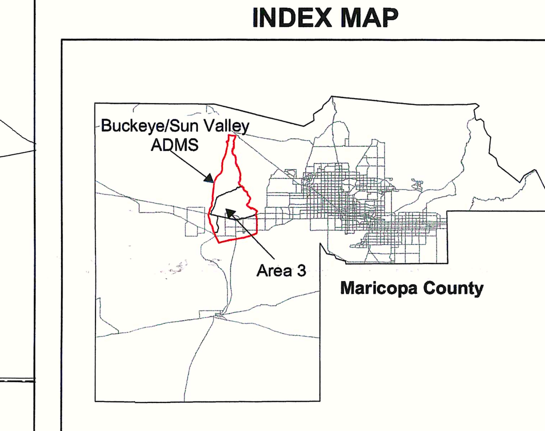
LEGEND

- E1 Sub-Basin Boundary
- Road
- Estate Residential
- Large Lot Residential - Single Family
- Transportation
- Active Open Space (Includes parks)
- Water
- Agriculture
- Vacant
- Township-Range

NOTES

Registered Professional Engineer (Civil) Certificate No. 42881 Stephen W. Rogers Date Signed 1-26-06 Arizona U.S.A.

INDEX MAP



0 2,000 4,000 6,000 Feet
1 inch equals 2,000 feet

N

Horizontal Coordinate System: NAD 1983 State Plane Arizona Central
Vertical Coordinate System: NAVD 1988

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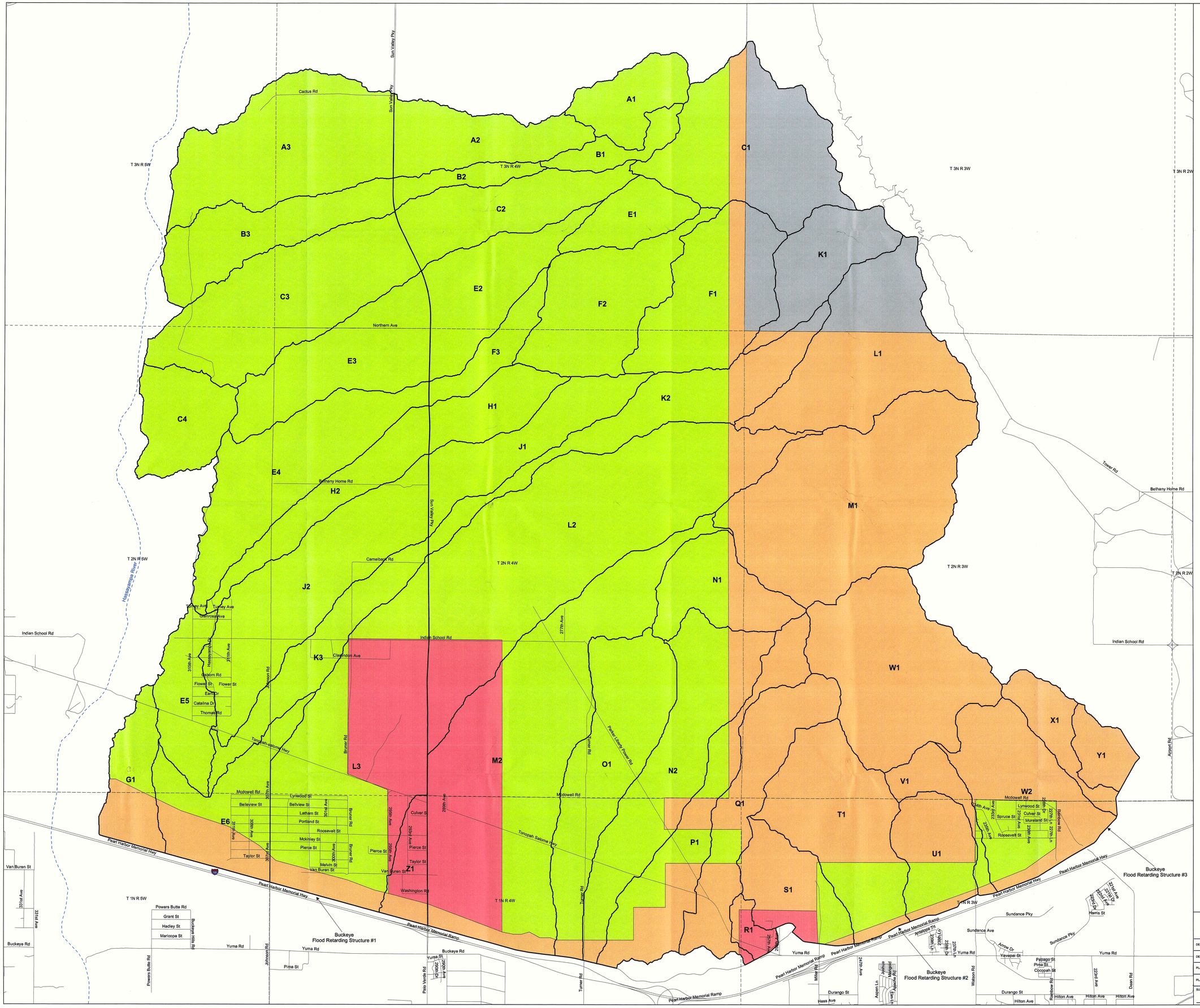


BUCKEYE/SUN VALLEY
AREA DRAINAGE MASTER STUDY
FCD CONTRACT NO. 2002C027

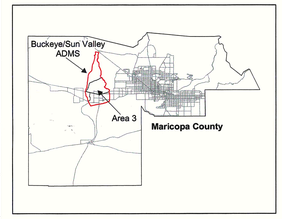
Figure 4-15
Area 3 Future Conditions Land Use Map

LEGEND

- E1 Sub-Basin Boundary
- Road
- Central, general, office, intermediate commerce
- Medium Density Residential (6K-12K sq ft lot size)
- Active Open Space (Includes parks)
- Vacant
- Township - Range

NOTES

INDEX MAP



0 2,000 4,000 6,000 Feet
1 inch equals 2,000 feet

N

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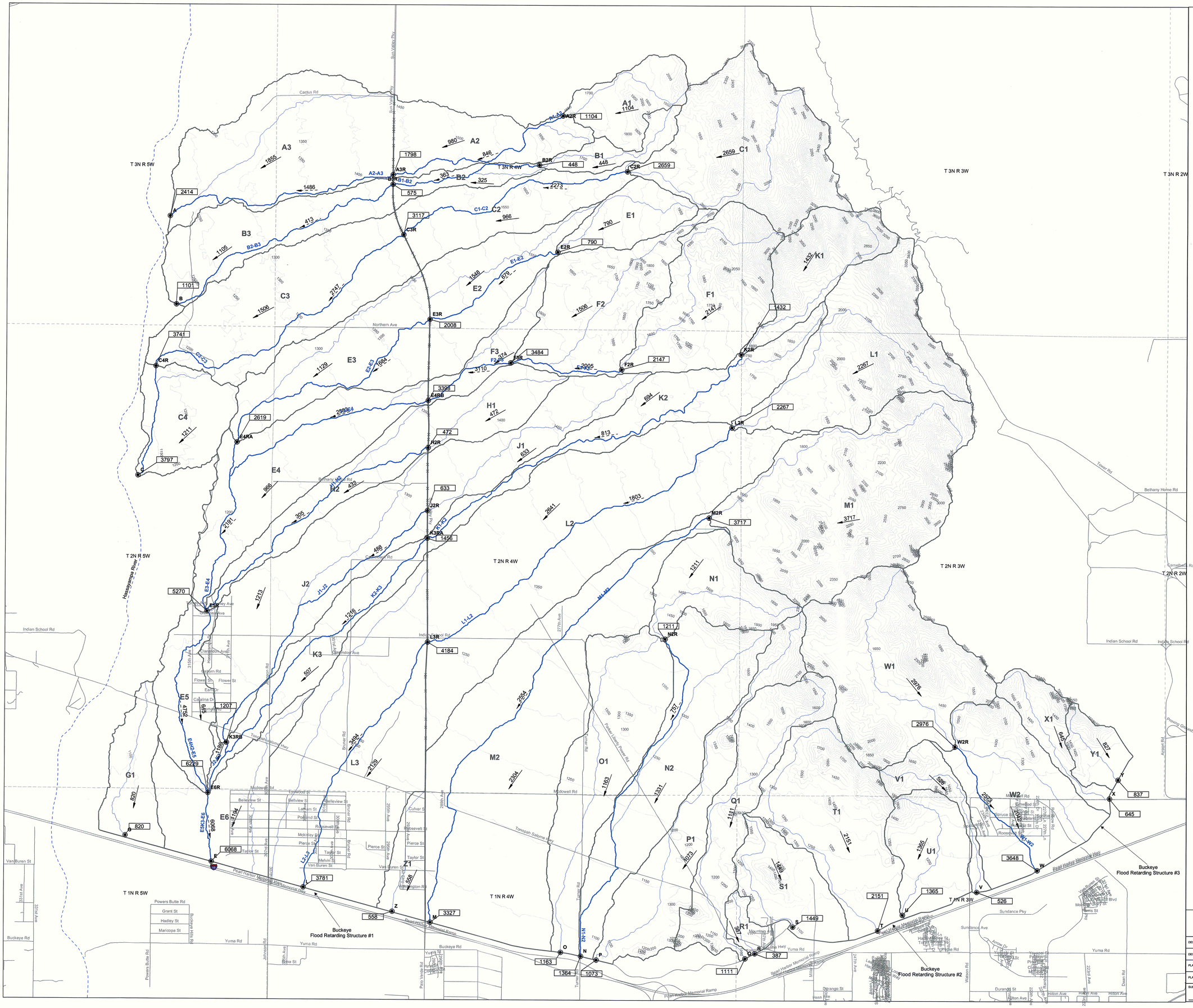


BUCKEYE/SUN VALLEY AREA DRAINAGE MASTER STUDY
FCD CONTRACT NO. 2002C027

Figure 4-16
Area 3 Existing Conditions Flow Map

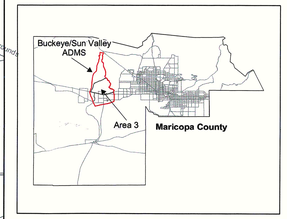
LEGEND

- E1 — Sub-Basin Boundary
- E1 — Concentration Point
- E1-E2 — Routing Channel
- Lag Time Path
- Culvert
- Contour (50ft)
- Township - Range
- Road
- 1254 — Existing 100-year 24-hour Combined Peak Flow (CFS)
- 548 — Existing 100-year 24-hour Sub-Basin Peak Flow (CFS)
- 674 — Existing 100-year 24-hour Routed Peak Flow (CFS)

NOTES

Please refer to Table 4-5A of Volume V-A1 Area 3 Hydrology Report for all other peak flows.

INDEX MAP



0 2,000 4,000 6,000 Feet
1 inch equals 2,000 feet

N

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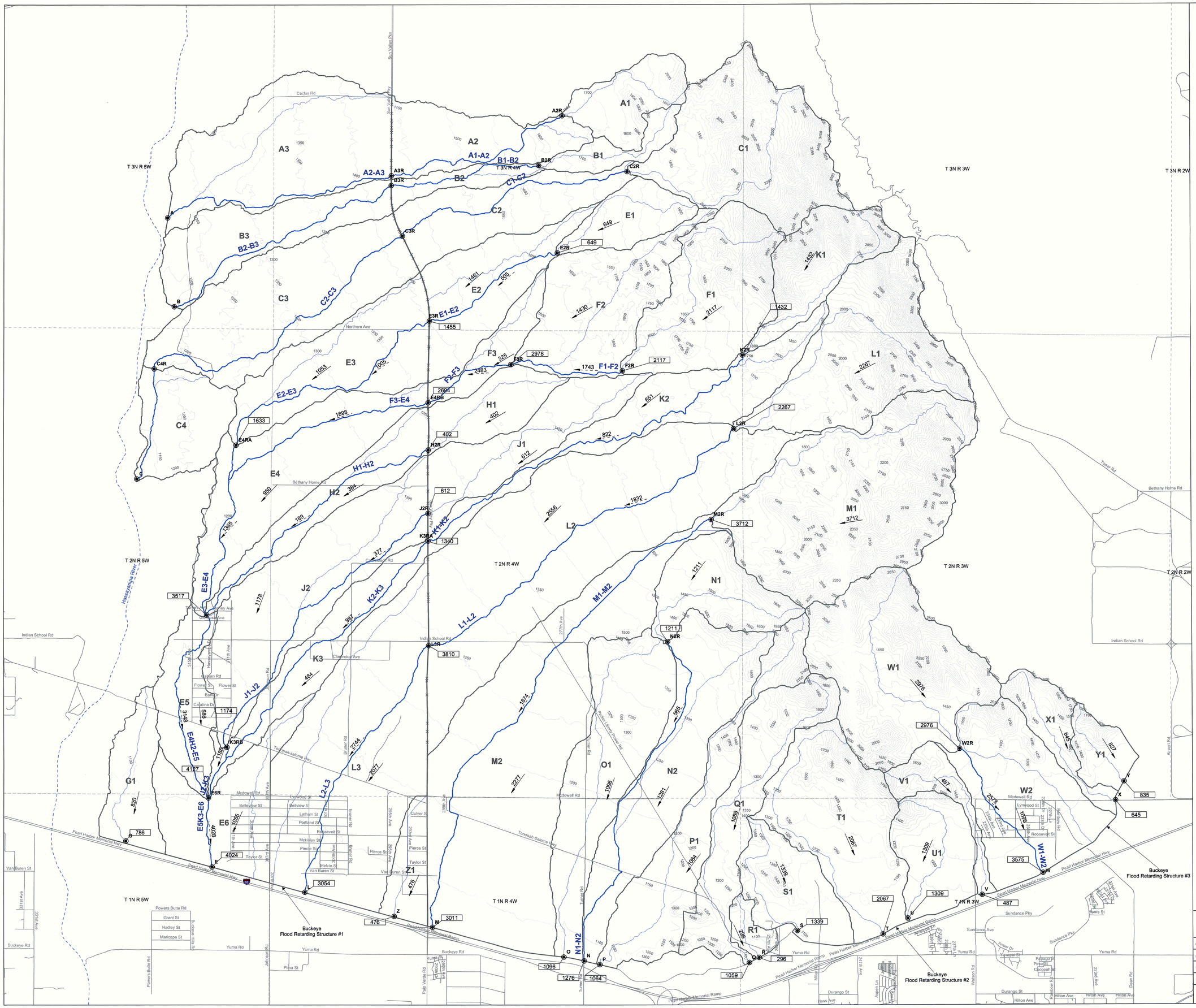
			SHEET 1 OF 1



BUCKEYE/SUN VALLEY AREA DRAINAGE MASTER STUDY
FCD CONTRACT NO. 2002C027
Figure 4-17
Area 3 Future Conditions Flow Map

LEGEND

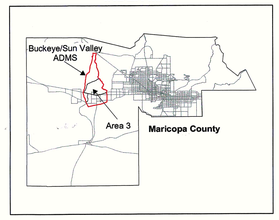
- E1 — Sub-Basin Boundary
- E — Concentration Point
- E1-E2 — Routing Channel
- Lag Time Path
- Culvert
- Contour (50ft)
- Township - Range
- Road
- 1254 — Future 100-year 24-hour Combined Peak Flow (CFS)
- 548 — Future 100-year 24-hour Sub-Basin Peak Flow (CFS)
- 874 — Future 100-year 24-hour Routed Peak Flow (CFS)

NOTES

Sub-basins A-C are not included in Area 3. However, the existing hydrologic conditions were simulated for sub-basins A-C to update Alpha Engineering's previous study (1996).

Please refer to Table 4-5A of Volume V-1A Area 3 Hydrology Report for all other peak flows.

INDEX MAP



Feet
0 2,000 4,000 6,000
1 inch equals 2,000 feet

N

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Vertical Coordinate System:
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