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JANUARY 2000

US Army Corps
of Engineers
Sacramento District

INCLINE VILLAGE
WASHOE COUNTY, NEVADA

FLOOD PLAIN MANAGEMENT SERVICES STUDY

HYDROLOGY REPORT

Volume 1 of 2

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1. PURPOSE

The purpose of this hydrology study is to estimate the 10-, 50-, 100-, and 500-year flows in the eight Incline Village area creeks along the north shore of Lake Tahoe, Nevada, with significant flooding potential. These values along with a detailed hydraulic analysis will be used by the Regional Planning Branch, Planning Division to estimate floodplains for some or all of these potential events. This final product will be submitted to the Tahoe Regional Planning Agency. This study was commissioned to provide a more detailed revision of a 1979 Internal Office Report. The 1979 report, "Lake Tahoe Basin California-Nevada Hydrology for Flood Plain Information Study," relied on a regional hydrologic analysis and only computed flows for some of the streams in the Incline Village area. The report was completed in February of 1979 by the Hydrology Section, Sacramento District. A brief 1991 floodplain analysis performed on several of the creeks in the Incline Village area relied entirely on the hydrology done for the 1979 study. The Tahoe Basin is an environmentally sensitive area under special Presidential mandate to assure the protection of its unique environmental resources.

2. SCOPE

This draft hydrology report presents the results of a HEC-1 model developed for the Incline Village area. The HEC-1 model computes flows for 21 concentration points on nine creeks, representing watersheds which range in size from 0.27 to 6.0 square miles. From west to east, the streams studied are: First Creek, Second Creek, Burnt Cedar Beach Creek, Burnt Cedar Creek, Wood (Rose) Creek, Third Creek, Incline Creek, and Mill Creek. 10-, 50-, 100-, and 500-year flood hydrographs were computed for each control point. Only preliminary hydrologic routings of flows using the Muskingum method were computed. These routings were computed only to assure a stable overall model. As significant flow obstructions are above nearly all the control points, refer to the final floodplain management study report for more accurate hydrographs and more detailed hydraulic analyses and routings.

3. BASIN DESCRIPTION

A. Location and Landmarks

Incline Village is in the Tahoe Basin, which lies between the north-south trending Sierra Nevada Mountains and Carson Ranges. The study area is along the north shore of Lake Tahoe in Washoe County, Nevada, at 120 03' W longitude, 39 17' N latitude. The westernmost watershed boundary in the study area is approximately 300 feet east of the California state line. The study area is accessible from the east and west via State Route (SR) 28, and from the north from SR 431. Several concentration points for the study are located where the streams cross these routes. Figure 1 contains a general location map of the study area.

B. Topography and Geology

Incline Village lies on a gentle to moderately sloping fan shaped plain with the apex to the north. Except for along the main fork of Third Creek, it is bounded on the west and north by steep to very steep sloped canyon tributaries with narrow valley floors and sharp ridges. The

main fork of Third Creek has been scoured by glaciers sufficiently to maintain a more constant grade in the channel for more than a mile above the apex of the fan. The east side of the plain is bounded by hilly to moderately steep canyon tributaries with more rounded ridges and narrow valley floors. Lake elevation is about 6,228 feet, and the plain rises from there to 7,000 feet at the northern apex of the fan. The northern and western bounding ridge lines are between 9,000 and 10,500 feet, those to the east slightly less at 8,500 to 9,300 feet. Stream slopes on the plain itself are generally about 0.05 near the lake, steepening to around 0.1 on the middle elevations of the plain, mostly rising to 0.1 to 0.15 where streams enter the plain.

To the north and east of Incline Village are mostly Mesozoic granodiorites intruded into tightly folded Triassic metasedimentary and metavolcanic rocks. This is overlain in places by late Tertiary Kate Peak formation, consisting of andesitic flows, tuff-breccias and flow breccias. Many slopes on steeper slopes above the fan are covered by colluvial deposits. The fan itself is covered by a layer of Pleistocene to Quaternary glacial outwash, stream deposits and alluvium.

C. Soils

Soils on the fan itself except in the extreme northern and eastern parts are generally moderately well to well drained, coarse loamy sands that are deep to very deep over a pan, are of the Inville - Jabu association, and are in Soil Conservation Service (SCS) hydrologic group C, with some class B and a few small areas of class D. Soils in the northern part of the fan and north of the fan along Third Creek are of the Meeks - Tallac association, are moderately well drained to somewhat excessively well drained gravelly to extremely stony loamy coarse sands that are deep to very deep over a pan and are in hydrologic group B, with smaller portions in groups C and D. Soils immediately along most of the eastern edge of the fan north of SR 28 and most areas immediately adjacent to the western edge south of SR 431 are of the Umpa - Fugawee association, are generally well drained very stony sandy loams that are moderately deep over andesite and andesitic conglomerate, are mostly in hydrologic group C, with small areas in groups B and D. Soils further to the east of the fan and middle elevation ranges to the west of the fan are of the Cagwin - Toem association and are somewhat excessively drained to excessively drained loamy coarse sands and gravelly coarse sands that are deep to very deep over a pan. Lands in the higher elevations to the west of the fan are Rock land - Stony colluvial association that are 50 to 90 percent rock outcrop, cobblestones, stones and boulders.

D. Vegetation

The vegetation in the western and northern portions of the study area consists of mostly forest with some brush and meadows; and mostly brush-range with some patches of forest in the southeastern portion of the study area. The forests are of Sierra Montane type, dominating areas in the more moist western and northern portions of the study area. This community is characterized by Ponderosa Pine at the lower elevations; higher elevations are populated by White Fir, Red Fir and Lodgepole Pines in uplands, and Lodgepole Pine, willows and other riparian species along the streams. Exposed, drier sites in the eastern portions of the study area, especially on south and west facing slopes, are mostly chaparral dominated by Ceanothus and Manzanita with patches of Sierra Montane forest. More moist, protected slopes with northern and eastern facing slopes in the eastern portion are covered by a more even mixture of Sierra Montane Forest and Chaparral.

E. Climate

1. General

The climate in Incline Village consists of warm, mostly dry summers and cold, damp winters. Average temperatures based on data from a gage at 836 McCourry Bl. from 1968 to 1985 are given in table 1.

Table 1
Average Monthly Maximum and Minimum Temperature
(°F)

Incline Village			
Month	Maximum	Minimum	Mean
January	39.4	22.3	30.8
February	42.4	23.7	33.0
March	46.1	25.1	35.6
April	51.7	27.7	39.7
May	65.2	36.3	50.8
June	73.9	43.5	58.7
July	82.2	49.8	66.0
August	80.4	49.5	65.0
September	74.1	44.6	59.4
October	60.7	36.6	48.6
November	47.5	28.6	39.1
December	40.9	23.0	32.0
Annual	58.7	34.3	46.5

2. Precipitation

Normal Annual Precipitation (NAP) ranges from about 21 inches at the mouth of Third Creek to about 55 inches at the top of Tamarack Peak, the highest point at the northern edge of the Third Creek watershed.

At the lower elevations in the village itself, over half of the precipitation falls as snow, mostly in the winter months. Rainfall occurs mostly in Fall, Winter and Spring, with a little less than 10 percent occurring in the Summer. Monthly average, low and high precipitation depths for the years 1968 to 1985 collected at a gage in the village proper at 836 McCourry Bl. from 1968 to 1985 comprise table 2. Table 3 contains the ten highest 1-, 3-, and 6-hour precipitation events, taken from a recording gage at the Mt Rose Highway Maintenance station, located next to SR 431 two miles north of Incline Village, at 7,360 feet.

Table 2
Average Monthly Precipitation
(inches)

Month	Precipitation		
	High	Low	Mean
January	14.95	0.65	5.02
February	7.00	1.54	3.61
March	6.91	0.46	2.62
April	2.34	0.01	1.29
May	2.49	0.07	0.58
June	2.47	0	0.71
July	2.47	0	0.51
August	2.27	0	0.57
September	1.82	0	0.58
October	2.76	0.10	1.16
November	6.57	0.73	2.26
December	5.57	0.11	3.27
Annual mean			22.05

Table 3
Ranked Largest Annual 1-, 3-, 6-hr Precipitation
(by water year, Oct 1 - Sept 30)

rank	1-hr		2-hr		3-hr		6-hr	
	date	inches	date	Inches	date	inches	date	inches
1	08/20/83	1.3	08/20/83	1.3	01/01/97	1.4	01/01/97	2.6
2	07/31/76	0.9	07/31/76	1.2	02/17/86	1.3	11/13/81	2.0
3	12/24/71	0.8	01/01/97	1.0	08/20/83	1.3	03/08/86	1.8
4	06/24/77	0.7	02/17/86	0.9	11/13/81	1.2	12/12/95	1.7
5	02/18/86*	0.6	11/13/81	0.9	07/31/76	1.2	11/11/83*	1.6
6	06/18/82	0.6	12/24/71	0.9	12/24/71	1.1	07/31/76	1.6
7	09/07/80	0.6	12/11/95	0.8	12/12/95	1.0	11/23/88	1.4
8	09/19/97*	0.5	06/24/77	0.7	11/23/88	0.9	08/20/83	1.3
9	02/04/96*	0.5	01/21/93	0.6	02/14/79	0.9	12/24/71	1.3
10	07/12/90	0.5	11/23/88	0.6	01/21/93	0.9	10/26/91	1.2

* More than one occurrence in the year, latest occurrence listed.

F. Storm Characteristics

Major flood-producing storms over the Incline Village generally are winter rain-on-snow events and summer cloudburst thunderstorms. The largest widespread floods result from major

winter storm systems that originate between 30 and 50 degrees north latitude and receive an influx of very moist air at about the latitude of the Hawaiian Islands. This very moist air mass lifts and cools as it moves easterly over the Sierra Nevada Mountain Range, and the moisture condenses and falls as precipitation. The origin point of the moist air influx of storms gives them their common name, "Pineapple Express." Week-long or longer periods of unusually wet weather can also be caused by so-called "Cutoff Low" winter storm systems originating in the Gulf of Alaska. These systems can stall over California or slightly offshore if a split in the jet stream develops and isolates the storm between the forks in the jet. Numerous bands of cloud producing precipitation from the stalled system can then be carried slowly inland at spacings of a few hours to a day apart.

G. Flood Characteristics

Excess rainfall from intense storms drains into the creeks that originate in the mountains above the village. The creeks typically have flood hydrographs with steep rising limbs, high peak flows, and fast recessions. The creeks flow southerly into town and to Lake Tahoe. The latest flood occurred in Incline Village in January 1997. The largest estimated flow for Third Creek is from the August 15, 1965 cloudburst storm. A peak flow estimate of 4,000 cfs was made by Nevada District USGS, based on a field survey. The point of analysis is approximately ½ mile north of SR 431, 0.2 miles north of a major tributary to Third Creek. The drainage area at this point is estimated at 3.4 square miles, which indicates a flow of 1,176 cfs per square mile.

The peak flow of official record on Third Creek at Crystal Bay is 150 cfs, which occurred in 1982. The peak flow of official record on Incline Creek, 179 cfs, happened during a rain-on-snow event on January 2, 1997. Although it is a smaller watershed, Incline Creek has a larger percentage of the watershed at a lower elevation than Third Creek and has a more compact shape than Third Creek. Therefore, should significant snowcover be present throughout the area, Incline Creek should produce a more rapid melting of the snow cover and therefore produce a more peaked response during an intense cloudburst.

H. Streamflow and Precipitation Gages

Few hourly streamflow and climatological gages are installed at the north end of the Tahoe Basin. A precipitation gage with 84 years of nearly complete daily record exists at Tahoe City California along the shore of Lake Tahoe about 10 miles west of Incline Village. An hourly precipitation gage was installed at the Mount Rose Highway Maintenance station in 1971, but has a much less continuous period of record. The station is about 2 miles north of Incline Village and within 1/4 mile of the Third Creek watershed. Stream gages collecting 15 minute data have recently been installed on Third and Incline Creeks. Table 4 shows known peak annual flow at the streamflow gages.

I. Land Use

Nearly all of the moderate to gently sloped areas on the plain have been developed. The lower elevations are devoted to medium to high density residential and light to medium commercial uses. The more steeply sloped areas adjacent to the plain are dedicated to light residential uses. Some light residential development also exists on the lower mountain slopes.

Table 4
Peak Annual Flow (cfs)
(bold text indicates peak of record)

Water Year	First Cr	Wood Cr	Third Cr	Incline Cr
1970	11.0	**16.0**	65.0	87.0
1971	10.0	15.0	110	38.0
1972	**22.0**	7.00	34.0	18.0
1973	9.00	13.0	80.0	40.0
1974	1.00	3.00	80.0	
1975				64.0
1976				
1977				
1978			62.0	
1979			66.0	
1980			74.0	
1981			24.0	
1982			150	
1983			86.0	
1984			78.0	
1985			37.0	
1986			**140**	
1987			31.0	
1988			9.90	6.50
1989			43.0	42.0
1990			20.0	9.00
1991			63.0	23.0
1992			23.0	23.0
1993			67.	40.0
1994			21.0	27.0
1995			122	73.0
1996			116	85.0
1997			108	**179**
1998			83	86

4. HEC-1 MODEL

A. General Considerations

A HEC-1 model of the Incline Village area was created to compute 10-, 50-, 100-, and 500-year flood hydrographs at each of the 24 subareas shown in figure 1. A computation time interval of 5 minutes was selected to assure good definition of the rising limb of the hydrograph on these relatively small watersheds. Preliminary hydrologic routing of the hydrographs done for this report used the Muskingum method, which uses mathematical means to attenuate peaks with downstream travel. The HEC-1 model includes separate precipitation for each event, with infiltration loss rates based on land use and previously measured soil parameters, and unit hydrographs based on S-graph patterns. Initial baseflow was included only on Mill and Incline Creeks to assure proper calculation of flood volumes.

B. Precipitation

1. Temporal Distributions

The temporal precipitation distribution is based on a 6-hour storm, and is nested so that it also includes the maximum 1, 3, and 6 hour precipitation amounts for the respective frequencies for which it is used. The temporal distributions for the return periods are given in tables 5 - 8.

Table 5
10-yr Temporal Storm Precipitation Distribution

15-min period	interval %	15-min period	interval %	15-min period	interval %
1	2	9	5	17	2
2	2	10	5	18	2
3	2	11	5	19	2
4	2	12	5	20	2
5	3	13	5	21	2
6	8	14	5	22	2
7	11	15	3	23	2
8	20	16	2	24	1

Table 6
50-yr Temporal Storm Precipitation Distribution

15-min period	interval %	15-min period	interval %	15-min period	interval %
1	2	9	7	17	3
2	2	10	5	18	3
3	2	11	4	19	2
4	2	12	4	20	2
5	3	13	4	21	2
6	7	14	4	22	2
7	11	15	4	23	2
8	18	16	3	24	2

Table 7
100-yr Temporal Storm Precipitation Distribution

15-min period	interval %	15-min period	interval %	15-min period	interval %
1	2	9	12	17	3
2	2	10	7	18	3
3	2	11	4	19	3
4	3	12	4	20	3
5	1	13	4	21	2
6	3	14	2	22	2
7	11	15	1	23	2
8	21	16	1	24	2

Table 8
500-yr Temporal Storm Precipitation Distribution

15-min period	interval %	15-min period	interval %	15-min period	interval %
1	3	9	6	17	3
2	3	10	3	18	3
3	3	11	6	19	3
4	3	12	6	20	2
5	3	13	6	21	2
6	3	14	6	22	2
7	6	15	6	23	1
8	17	16	3	24	1

2. Precipitation Depth

Precipitation depths for each of the subareas were calculated using precipitation frequency curves computed for a rain gage and were then adjusted for orographic effects using a map of Normal Annual Precipitation (NAP). The frequency curves were developed for 1, 3, 6 hour durations i (P_{FC}) from hourly data gathered at a recording rain gage at the Mt. Rose Highway Maintenance Station. The gage is situated along the Mt. Rose Highway (SR 431) at 7360' elevation, between Fairview Bl. and the view point, about 2 miles north of Incline Village. There is approximately 25 years of hourly data available at the gage, from 1971 through 1997. Points for the 10-, 50-, 100-, and 500-year events for each of the durations were drawn from the respective frequency curves. The NAP for the gage location (NAP_g) and for each subarea j (NAP_{sa}) were estimated from a map drawn from the 1979 Corps Tahoe Floodplain Study, included as figure 2. An area weighted average watershed precipitation (NAP_{ave}) was calculated for each creek from the subarea NAP values. Event precipitation (P_{sa}) for each duration and frequency for each of the respective subareas were then calculated from these initial calculations using the formula:

$$P_{sa} = P_{fci} * \frac{NAP_{saj}}{NAP_g} * \frac{NAP_{saj}}{NAP_{ave}} \qquad [1]$$

Six hour durations were selected for the total storm because it is of sufficient duration to saturate the soil and generate large excess, yet not so long as to reduce the peak flows, as would happen from a longer, less intense storm. This duration would generate the maximum flows that would impact Incline Village for a 100-year event. Table 9 shows the precipitation for all of the subareas. No depth-area reduction was made due to the small size of the watersheds. Third Creek is 6.0 square miles, Incline Creek is 6.7 square miles, all other creeks are less than 3 square miles.

Table 9 Precipitation Depths for
(inches)

		10-yr			50-yr			100-yr			500-yr	
Subarea	1-hr	3-hr	6-hr	1-hr	3-hr	6-hr	1-hr	3-hr	6-hr	1- hr	3-hr	6-hr
First Cr	1.10	1.39	2.08	1.56	1.88	2.86	1.74	2.07	3.19	2.18	2.53	3.93
Second Cr	1.13	1.43	2.13	1.60	1.93	2.94	1.79	2.12	3.27	2.24	2.60	4.04
Burnt Cedar Beach Cr	0.84	1.06	1.59	1.19	1.44	2.18	1.33	1.58	2.43	1.67	1.93	3.00
Burnt Cedar Cr	0.77	0.97	1.44	1.08	1.31	1.99	1.21	1.44	2.21	1.52	1.76	2.73
Wood Cr ab SR 431	1.33	1.68	2.50	1.88	2.27	3.45	2.10	2.49	3.84	2.63	3.05	4.74
Wood Cr at SR 28	0.49	0.62	0.93	0.70	0.84	1.28	0.78	0.93	1.43	0.98	1.13	1.76
Wood Cr at Mouth	0.44	0.55	0.82	0.62	0.74	1.13	0.69	0.82	1.26	0.86	1.00	1.56
Third Cr ab Ophir Diversion	2.19	2.77	4.12	3.09	3.74	5.68	3.46	4.11	6.33	4.34	5.03	7.81
Third Cr Ginny Lake	1.96	2.48	3.69	2.77	3.35	5.09	3.10	3.68	5.67	3.89	4.51	7.00
Third Cr Incline Lake	1.54	1.95	2.90	2.18	2.63	4.00	2.44	2.89	4.46	3.06	3.54	5.50
Third Cr ab SR 431	1.42	1.79	2.66	2.00	2.41	3.67	2.23	2.65	4.09	2.80	3.25	5.04
Third Cr at Village Blvd	0.63	0.79	1.18	0.89	1.07	1.63	0.99	1.18	1.82	1.24	1.44	2.24
Third Cr at SR 28	0.44	0.55	0.82	0.62	0.74	1.13	0.69	0.82	1.26	0.86	1.00	1.56
WF Third Cr ab Village Blvd	0.81	1.02	1.52	1.14	1.38	2.09	1.28	1.51	2.33	1.60	1.85	2.88
WF Third Cr at SR 28	0.42	0.53	0.79	0.59	0.72	1.09	0.66	0.79	1.21	0.83	0.96	1.50
Third Cr at Mouth	0.37	0.47	0.70	0.52	0.63	0.96	0.58	0.69	1.07	0.73	0.85	1.32
WF Incline Cr ab Village Blvd	1.04	1.32	1.96	1.47	1.78	2.70	1.65	1.95	3.01	2.06	2.39	3.71
WF Incline Cr at SR 28	0.71	0.89	1.33	1.00	1.21	1.83	1.12	1.32	2.04	1.40	1.62	2.52
Incline Cr ab Ski Way	1.23	1.56	2.32	1.74	2.11	3.20	1.95	2.31	3.56	2.44	2.83	4.40
Incline Cr at SR 28	0.52	0.66	0.98	0.73	0.89	1.35	0.82	0.97	1.50	1.03	1.19	1.85
Incline Cr at Mouth	0.48	0.60	0.90	0.67	0.81	1.24	0.75	0.89	1.38	0.94	1.09	1.70
Mill Cr ab Dam	1.05	1.33	1.98	1.48	1.79	2.72	1.66	1.97	3.04	2.08	2.41	3.75
Mill Cr at SR 28	0.63	0.80	1.19	0.89	1.07	1.63	0.99	1.18	1.82	1.25	1.45	2.24
Mill Cr at Mouth	0.58	0.99	1.09	0.82	0.99	1.50	0.91	1.08	1.67	1.14	1.33	2.06

C. Loss Rates

The SCS curve number method was used to calculate loss rates for all areas, using the protocol in the USDA National Engineering Handbook, Chapter 4, Section 9. Hydrologic soil groups (e.g. A, B, C, D) are those mapped in the 1974 (latest) soil survey completed by the Soil Conservation Service (now Natural Resource Conservation Service) in cooperation with other agencies. Curve numbers (CN) for forested, un-developed areas were calculated using equations developed for western forests and published by Branson et al, reported therein as originally derived from unpublished USFS data. The equations for hydrologic soil groups B, C, and D are computed using equation 2:

$$CN = E - F * X \qquad [2]$$

Where E is the base curve number, F is a correction factor, and X is the fractional groundcover density. Branson and Gifford give the applicable range of X for this equation as between 10 and 80 percent cover density. Coefficients for equation 2 are given in table 10.

Table 10
Curve Number Equation Coefficients

Hydrologic Soil Group	E	F
Group B soil	71.5	0.229
Group C soil	81.5	0.229
Group D soil	87	0.21

Equation 2 modifies the base curve number value to account for individual deviations in infiltration capacities due to variations in forest cover density. Analysis of available aerial photography led to the conclusion that most forested areas were approximately 80 percent forest cover density. However, many areas near ridges and other rocky areas exhibited a significantly lower cover density. The forest cover density for these areas was estimated at 50 percent. Curve number values for developed lands were drawn from the USDA National Engineering Handbook. These curve number values for individual land covers and soil types are given in table 11. Adopted curve numbers for the subareas were calculated as areally weighted averages of the applicable curve numbers in table 11. These adopted curve number values used for different hydrologic soil groups and vegetation/land use classes are in table 12.

Table 11
Curve Numbers for Individual Soil and Land Cover Classes

Vegetation - land cover density/imperviousness	Curve numbers by hydrologic soil class		
	B	C	D
Conifer forest - 80% cover density	53.18	63.18	70.20
Conifer forest - 50% cover density	60.05	70.05	76.50
Light density urban - (15-18% impervious)	75	82	86
Medium density urban - (21-27% impervious)	77	84	86
High density urban - (50-75% impervious)	79	86	90

Table 12. Adopted Watershed Curve Numbers.

Subarea	CN
First Cr	65.14
Second Cr	69.79
Burnt Cedar Beach Cr	74.31
Burnt Cedar Cr	79.74
Wood Cr ab SR 431	68.67
Wood Cr at SR 28	82.01
Wood Cr at Mouth	85.14
Third Cr ab Ophir Diversion	61.84
Third Cr Ginny Lake	69.60
Third Cr Incline Lake	62.30
Third Cr at SR 431	69.44
Third Cr at Village Blvd	75.22
Third Cr at SR 28	80.68
WF Third Cr ab Village Blvd	72.23
WF Third Cr at SR 28	83.73
Third Cr at Mouth	83.58
WF Incline Cr ab Village Blvd	64.74
WF Incline Cr at SR 28	70.58
Incline Cr ab Ski Way	66.58
Incline Cr at SR 28	79.59
Incline Cr at Mouth	83.17
Mill Cr ab Reservoir	66.32
Mill Cr at SR 28	74.12
Mill Cr at Mouth	74.43

D. Unit Hydrographs

The 5-minute unit hydrograph developed for each subarea of the HEC-1 model converts excess rainfall into runoff. A S-graph provided the pattern for constructing unit hydrographs. The DOS based computer program developed by the Corps, UHG.EXE, computed the hydrographs using an established pattern S-graph and five basin parameters: drainage area (DA), length of the longest channel from outlet to uppermost discernible channel (L), distance from the outlet to the point opposite the longest channel that is closest to the basin centroid (LCA), total elevation change of the main stream (DELTAH), and a basin drainage efficiency parameter (NBAR). NBAR values of 0.03 and 0.04 were selected for valley floor areas, values of 0.05 for watersheds of mixed valley and foothill/mountain subareas, and 0.07 for mountainous subareas. Testing of pattern S-graphs for mountainous watersheds of the Truckee River Basin, South Fork American River, and Martis Creek watersheds revealed that the Truckee River, Truckee Meadows Average Mountain pattern (sgr47.dat) produced hydrograph shapes on average most similar to available short term storm hydrographs from USGS gages on Third and Incline

Creeks. This method computes the time distribution of runoff as a ratio of lag time. Figure 3 shows the Truckee River, Truckee Meadows Average Mountain S-graph plotted as a percentage of lag time. UHG.EXE also calculates basin lag (LAG) in hours.

Table 13 shows the unit hydrograph parameters. Figures 4 to 27 are the computed 5-minute unit hydrographs for each of the subareas.

Table 13
Unit Hydrograph Parameters

Subarea	DA (sq. mi.)	L (mi.)	LCA (mi.)	DELTAH (feet)	NBAR	LAG (hrs)
First Cr	1.72	2.35	1.72	2712	0.07	0.77
Second Cr	1.03	2.75	1.78	2612	0.07	0.85
Burnt Cedar Beach Cr	0.43	0.76	0.66	452	0.05	0.30
Burnt Cedar Cr	0.27	1.14	0.76	452	0.04	0.31
Wood Cr ab SR 431	1.70	2.59	1.61	2300	0.07	0.81
Wood Cr at SR 28	0.19	0.87	0.38	360	0.04	0.23
Wood Cr at Mouth	0.08	0.53	0.36	192	0.03	0.15
Third Cr ab Ophir Diversion	1.03	1.80	1.17	1140	0.07	0.67
Third Cr Ginny Lake	1.01	1.25	0.76	760	0.07	0.52
Third Cr Incline Lake	0.46	0.57	0.38	280	0.03	0.15
Third Cr at SR 431	1.78	2.31	1.29	1290	0.07	0.78
Third Cr at Village Blvd	0.07	0.76	0.38	380	0.04	0.21
Third Cr at SR 28	0.38	1.14	0.78	375	0.03	0.24
WF Third Cr ab Village Blvd	0.84	1.40	1.14	885	0.05	0.44
WF Third Cr at SR 28	0.15	0.66	0.42	367	0.04	0.21
Third Cr at Mouth	0.16	0.76	0.45	142	0.03	0.20
WF Incline Cr ab Village Blvd	1.03	1.91	1.25	1550	0.05	0.48
WF Incline Cr at SR 28	0.93	1.61	1.42	960	0.05	0.50
Incline Cr ab Ski Way	4.20	3.60	2.12	2080	0.07	1.10
Incline Cr at SR 28	0.25	0.57	0.38	275	0.05	0.25
Incline Cr at Mouth	0.26	0.68	0.45	117	0.03	0.19
Mill Cr ab Reservoir	1.26	1.04	0.78	1200	0.07	0.44
Mill Cr at SR 28	0.06	0.28	0.28	252	0.05	0.19
Mill Cr at Mouth	0.70	1.21	0.57	1492	0.05	0.30

5. RESULTS

The Incline Village HEC-1 model computed the 10-, 50-, 100-, and 500-year flood hydrographs for each of the subareas using the precipitation, loss rates, and unit hydrographs described above. Tables 14-18 lists the predicted peak flow, 6, and 24 hour volumes for the 10-, 50-, 100-, and 500-yr events. Figures 28 to 52 are the computed 10-, 50-, 100-, and 500-year flood hydrographs for each of the subareas. Some entries in tables 14-18 represent flow combinations, routings or reservoir regulation effects that were necessary to calculate for inputs to the hydraulic routing which is be performed using this hydrologic analysis.

Table 14
Predicted 10-yr 6-hr Storm Flows

Subarea	10-yr peak flow	10-yr 6-hr volume	10-yr 1 day volume
First Cr	52 cfs	15 AF	15 AF
Second Cr	93 cfs	26 AF	27 AF
Burnt Cedar Beach Cr	20 cfs	4 AF	4 AF
Burnt Cedar Cr	16 cfs	4 AF	4 AF
Wood Cr ab SR 431	134 cfs	37 AF	38 AF
Wood Cr at SR 28	5 cfs	1 AF	1 AF
Wood Cr at mouth	2 cfs	0 AF	0 AF
Third Cr ab Ophir diversion	194 cfs	51 AF	62 AF
Third Cr bl Ophir diversion [1]	144 cfs	34 AF	43 AF
Third Cr Ginny Lk	234 cfs	61 AF	73 AF
Third Cr bl Incline diversion [1, 2]	257 cfs	61 AF	71 AF
Third Cr Incline Lake	45 cfs	9 AF	9 AF
Third Cr Incline Lake outflow [1, 2, 3]	12 cfs	6 AF	17 AF
Third Cr at SR 431	178 cfs	48 AF	50 AF
Third Cr at Village Bl	1 cfs	0 AF	0 AF
Third Cr at SR 28	4 cfs	1 AF	1 AF
WF Third Cr ab Village Bl	24 cfs	6 AF	6 AF
WF Third Cr at SR 28	3 cfs	1 AF	1 AF
Third Cr at mouth	2 cfs	0 AF	0 AF
WF Incline Cr ab Village Bl	27 cfs	7 AF	7 AF
WF Incline Cr at SR 28	11 cfs	3 AF	3 AF
Incline Cr ab Ski Way	193 cfs	60 AF	63 AF
Incline Cr at SR 28	5 cfs	1 AF	1 AF
Incline Cr at mouth	7 cfs	1 AF	1 AF
Mill Cr ab reservoir	49 cfs	13 AF	17 AF
Mill Cr reservoir outflow [3]	5 cfs	2 AF	10 AF
Mill Cr at SR 28	1 cfs	0 AF	0 AF
Mill Cr at mouth	7 cfs	2 AF	2 AF

Notes:
1 Flow reflects a roughly approximated upstream diversion
2 Combined flow given uses unverified approximate hydrologic routings upstream.
3 Flow has significant regulation, estimated regulated flow given.

Table 15
Predicted 50-yr 6- Storm Flows

Subarea	50-yr peak flow	50-yr 6-hr volume	50-yr 1 day volume
First Cr	137 cfs	41 AF	42 AF
Second Cr	193 cfs	61 AF	64 AF
Burnt Cedar Beach Cr	36 cfs	10 AF	11 AF
Burnt Cedar Cr	29 cfs	8 AF	8 AF
Wood Cr ab SR 431	255 cfs	82 AF	84 AF
Wood Cr at SR 28	9 cfs	2 AF	2 AF
Wood Cr at Mouth	4 cfs	1 AF	1 AF
Third Cr ab Ophir Diversion	322 cfs	103 AF	120 AF
Third Cr bl Ophir Diversion [1]	272 cfs	82 AF	95 AF
Third Cr Ginny Lk	419 cfs	113 AF	135 AF
Third Cr bl Incline Diversion [1, 2]	481 cfs	137 AF	156 AF
Third Cr Incline Lake	81 cfs	22 AF	22 AF
Third Cr Incline Lake Outflow [1, 2, 3]	81 cfs	28 AF	53 AF
Third Cr at SR 431	318 cfs	102 AF	105 AF
Third Cr at Village Blvd	3 cfs	1 AF	1 AF
Third Cr at SR 28	11 cfs	3 AF	3 AF
WF Third Cr ab Village Blvd	53 cfs	15 AF	16 AF
WF Third Cr at SR 28	6 cfs	2 AF	2 AF
Third Cr at Mouth	4 cfs	1 AF	1 AF
WF Incline Cr ab Village Blvd	72 cfs	20 AF	21 AF
WF Incline Cr at SR 28	35 cfs	10 AF	10 AF
Incline Cr ab Ski Way	448 cfs	147 AF	154 AF
Incline Cr at SR 28	10 cfs	3 AF	3 AF
Incline Cr at Mouth	16 cfs	4 AF	4 AF
Mill Cr ab Reservoir	106 cfs	31 AF	37 AF
Mill Cr Reservoir Outflow [3]	38 cfs	6 AF	13 AF
Mill Cr at SR 28	2 cfs	1 AF	1 AF
Mill Cr at Mouth	22 cfs	6 AF	6 AF

Notes:
1 Flow reflects a roughly approximated upstream diversion
2 Combined flow given uses unverified approximate hydrologic routings upstream.
3 Flow has significant regulation, estimated regulated flow given.

Table 16
Predicted 100-yr 6-hr Storm Flows

Subarea	100-yr peak flow	100-yr 6-hr volume	100-yr 1 day volume
First Cr	176 cfs	55 AF	57 AF
Second Cr	262 cfs	79 AF	81 AF
Burnt Cedar Beach Cr	65 cfs	14 AF	14 AF
Burnt Cedar Cr	53 cfs	10 AF	10 AF
Wood Cr ab SR 431	358 cfs	103 AF	107 AF
Wood Cr at SR 28	16 cfs	3 AF	3 AF
Wood Cr at Mouth	8 cfs	1 AF	1 AF
Third Cr ab Ophir Diversion	513 cfs	127 AF	154 AF
Third Cr bl Ophir Diversion [1]	463 cfs	106 AF	125 AF
Third Cr Ginny Lk	675 cfs	137 AF	172 AF
Third Cr bl Incline Diversion [1, 2]	888 cfs	180 AF	209 AF
Third Cr Incline Lake	167 cfs	29 AF	29 AF
Third Cr Incline Lake Outflow [1, 2, 3]	109 cfs	39 AF	70 AF
Third Cr at SR 431	465 cfs	128 AF	132 AF
Third Cr at Village Blvd	5 cfs	1 AF	1 AF
Third Cr at SR 28	16 cfs	4 AF	4 AF
WF Third Cr ab Village Blvd	77 cfs	20 AF	21 AF
WF Third Cr at SR 28	10 cfs	2 AF	2 AF
Third Cr at Mouth	6 cfs	1 AF	1 AF
WF Incline Cr ab Village Blvd	96 cfs	28 AF	28 AF
WF Incline Cr at SR 28	45 cfs	13 AF	14 AF
Incline Cr ab Ski Way	562 cfs	189 AF	198 AF
Incline Cr at SR 28	17 cfs	4 AF	4 AF
Incline Cr at Mouth	20 cfs	5 AF	5 AF
Mill Cr ab Reservoir	151 cfs	41 AF	50 AF
Mill Cr Reservoir Outflow [3]	95 cfs	16 AF	25 AF
Mill Cr at SR 28	4 cfs	1 AF	1 AF
Mill Cr at Mouth	30 cfs	8 AF	8 AF

Notes:
1 Flow reflects a roughly approximated upstream diversion
2 Combined flow given uses unverified approximate hydrologic routings upstream.
3 Flow has significant regulation, estimated regulated flow given.

Table 17
Predicted 500-yr 6-hr Storm Flows

Subarea	500-yr peak flow	500-yr 6-hr volume	500-yr 1 day volume
First Cr	363 cfs	91 AF	94 AF
Second Cr	468 cfs	123 AF	128 AF
Burnt Cedar Beach Cr	100 cfs	22 AF	22 AF
Burnt Cedar Cr	67 cfs	15 AF	16 AF
Wood Cr ab SR 431	602 cfs	158 AF	163 AF
Wood Cr at SR 28	25 cfs	5 AF	5 AF
Wood Cr at Mouth	10 cfs	2 AF	2 AF
Third Cr ab Ophir Diversion	734 cfs	187 AF	226 AF
Third Cr bl Ophir Diversion [1]	685 cfs	166 AF	191 AF
Third Cr Ginny Lk	764 cfs	194 AF	235 AF
Third Cr bl Incline Diversion [1, 2]	1193 cfs	283 AF	321 AF
Third Cr Incline Lake	214 cfs	45 AF	46 AF
Third Cr Incline Lake Outflow [1, 2, 3]	186 cfs	63 AF	102 AF
Third Cr at SR 431	732 cfs	191 AF	198 AF
Third Cr at Village Blvd	10 cfs	2 AF	2 AF
Third Cr at SR 28	35 cfs	7 AF	7 AF
WF Third Cr ab Village Blvd	155 cfs	34 AF	35 AF
WF Third Cr at SR 28	17 cfs	3 AF	3 AF
Third Cr at Mouth	13 cfs	2 AF	3 AF
WF Incline Cr ab Village Blvd	214 cfs	47 AF	49 AF
WF Incline Cr at SR 28	111 cfs	24 AF	25 AF
Incline Cr ab Ski Way	1057 cfs	303 AF	316 AF
Incline Cr at SR 28	31 cfs	6 AF	6 AF
Incline Cr at Mouth	40 cfs	7 AF	7 AF
Mill Cr ab Reservoir	301 cfs	67 AF	83 AF
Mill Cr Reservoir Outflow [3]	8 cfs	2 AF	2 AF
Mill Cr at SR 28	76 cfs	15 AF	16 AF
Mill Cr at Mouth			

Notes:
1 Flow reflects a roughly approximated upstream diversion
2 Combined flow given uses unverified approximate hydrologic routings upstream.
3 Flow has significant regulation, estimated regulated flow given.

6. REASONABLENESS OF RESULTS

A comparison with other, less detailed studies of the flood flows of the area indicate that these results are in the mid-range of all studies. Table 18 compares the 100 year results for all studies for which data was available.

Table 18
Comparison of 100-yr Peak Flows from Various Sources
(cfs)

Creek	Current HEC-1	USACE 1979	W & B 1970
First Cr	176	275	758
Second Cr	162	275	1,080
Burnt Cedar Beach Cr	65	60	N/A
Burnt Cedar Cr	53	38	N/A
Wood Cr	368 [1]	350	894
Third Cr	1,333 [1,2,3]	1,040	2,560
Incline Cr	698 [1]	1,150	2,750
Mill Cr	117 [1,2]	350	N/A

Notes:
1 Combined flow given uses unverified approximate hydrologic routings upstream.
2 Flow has significant regulation, estimated regulated flow given.
3 Flow reflects a roughly approximated upstream diversion

Table 18 is a comparison of results from the HEC-1 model, the 1979 Corps study, and a study by John Webster Brown, a private engineering firm.

Figure 53 is a comparison plot of the 100-year 6-hr cubic feet per square mile (csm) value for each subarea. The figure shows that the computed gage and model csm values are widely scattered. The cause of the scatter is presumed to be due to the scaling of storm precipitation according to the NAP, which varies more than 100 percent within the study area, from 22 inches at the lake shore to 55 inches at the northern edge of Third Creek. The computed 100- year flood hydrographs are reasonable, as are the computed 10-, 50-, and 500-year flood hydrographs. The computed 10-, 50-, 100-, and 500-year flood hydrographs should be used to determine the 10-, 50-, 100-, and 500-year floodplains in the Incline Village area.

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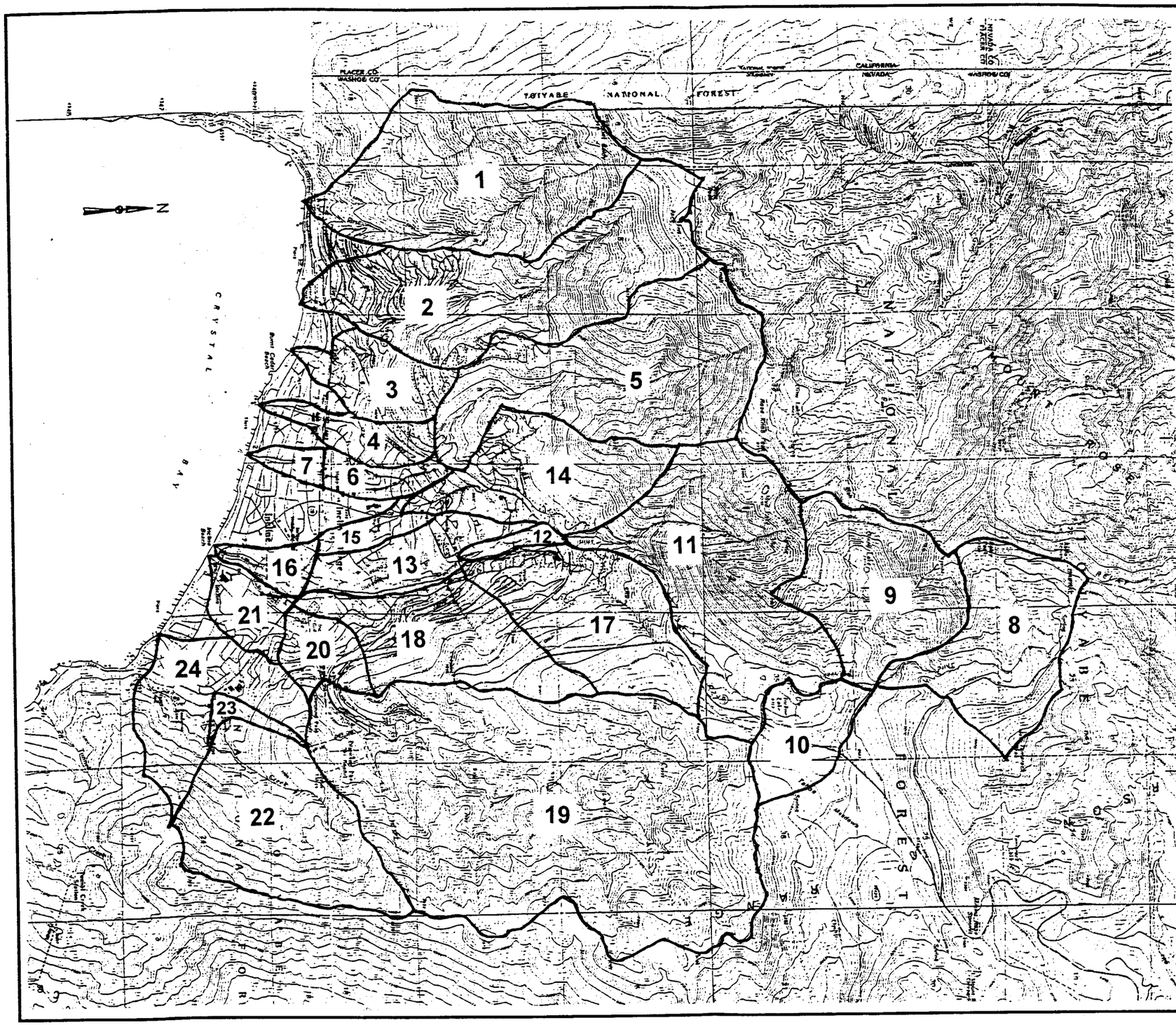

#	Subarea
1	First Cr
2	Second Cr
3	Burnt Cedar Beach Cr
4	Burnt Cedar Cr
5	Wood Cr ab SR 431
6	Wood Cr at SR 28
7	Wood Cr at Mouth
8	Third Cr ab Ophir Diversion
9	Third Cr Ginny Lk
10	Third Cr Incline Lk
11	Third Cr at SR431
12	Third Cr at Village Blvd
13	Third Cr at SR28
14	WF Third Cr ab Village Blvd
15	WF Third Cr at SR28
16	Third Cr at Mouth
17	WF Incline Cr ab Village Blvd
18	WF Incline Cr at SR28
19	Incline Cr ab Ski Way
20	Incline Cr at SR28
21	Incline Cr at Mouth
22	Mill Cr ab Dam
23	Mill Cr at SR28
24	Mill Cr at Mouth

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Location Map and Subarea Boundaries

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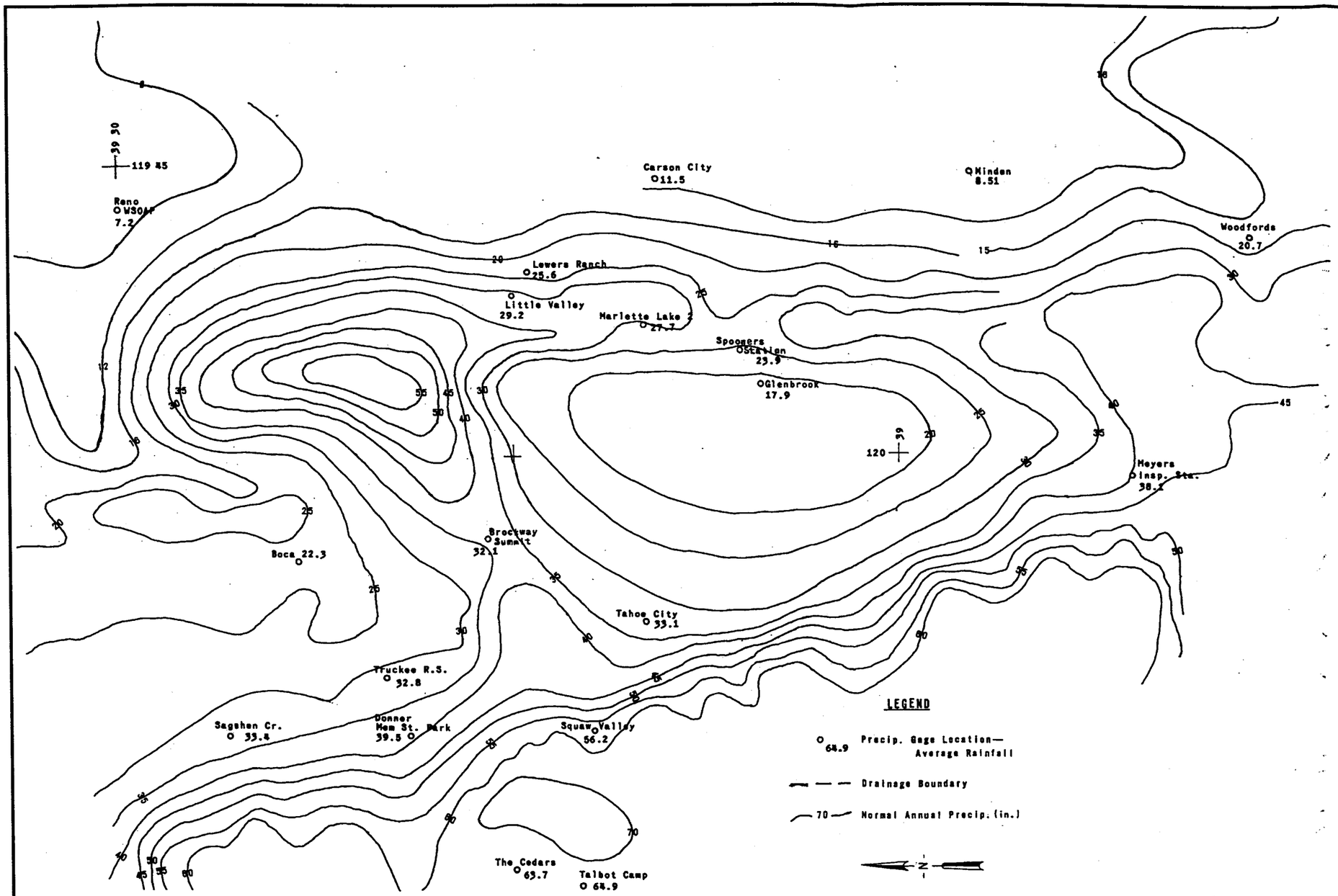
Figure 1



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Normal Annual Precipitation
Tahoe Basin

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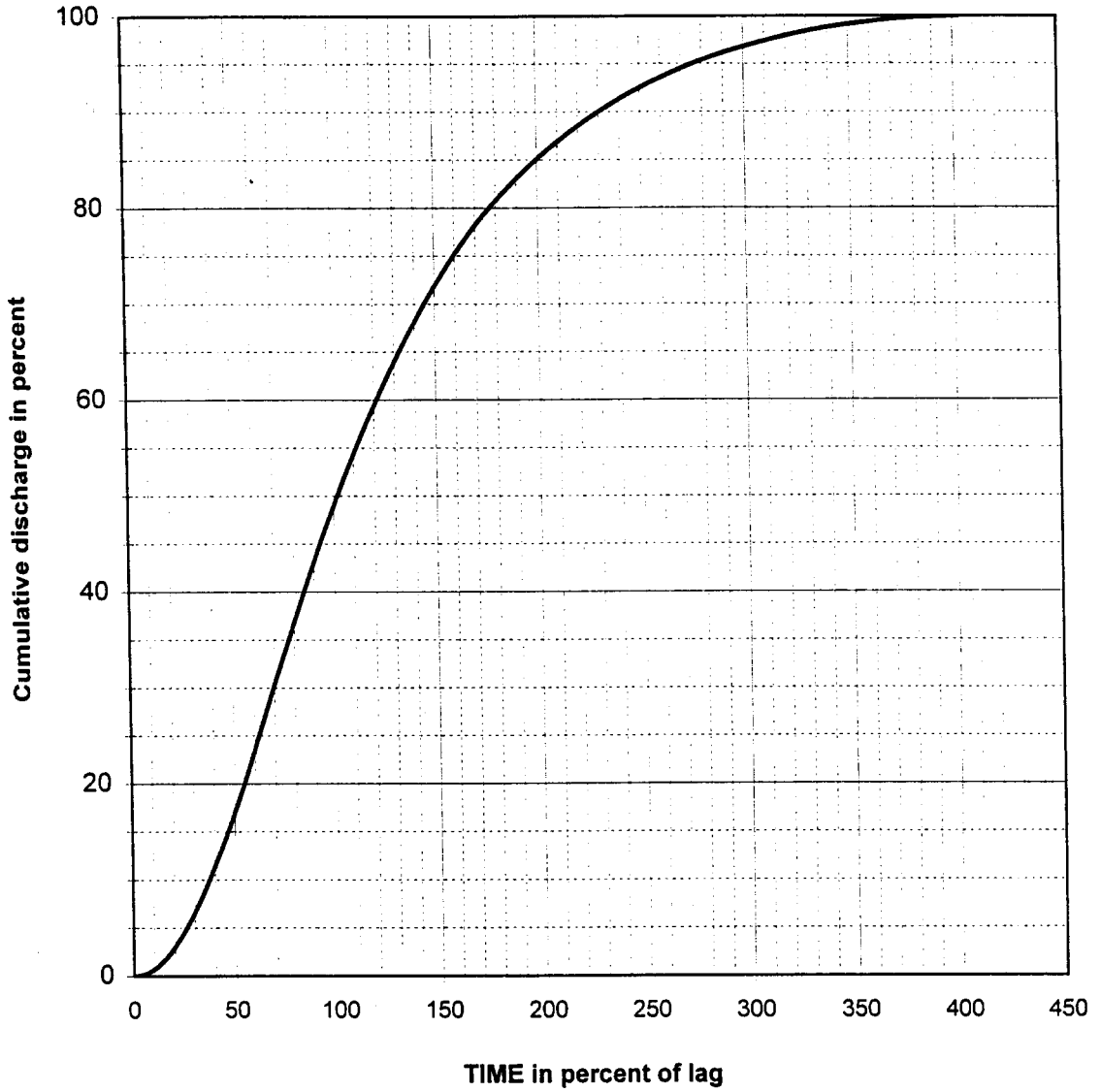
Prepared by JH

Feb 1979

Figure 2



Notes:

1. Total lag is 404.76 percent
2. Curve was developed for Truckee Meadows Project

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Truckee Meadows Average Mountain S-Graph

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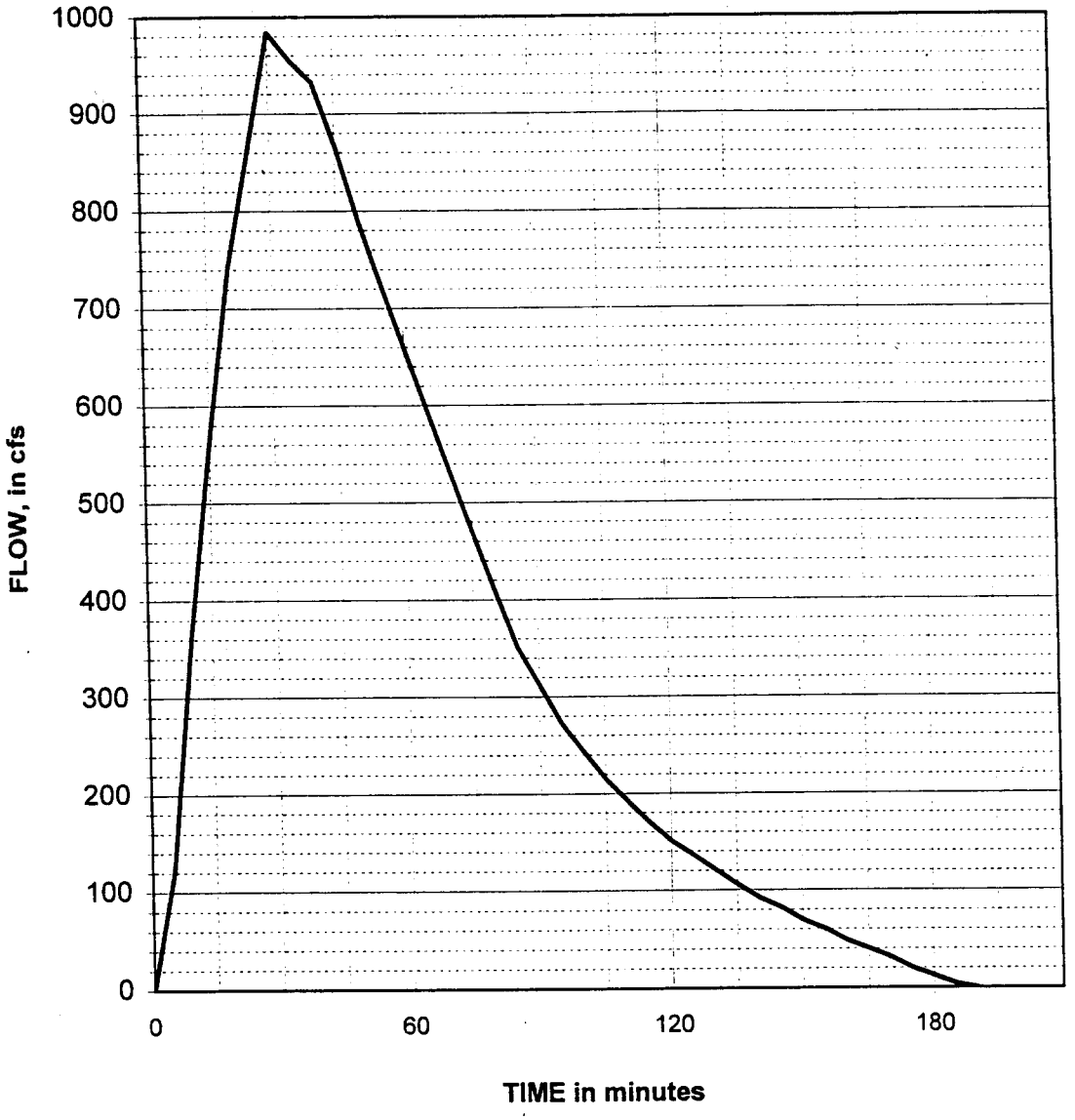
Figure 3



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First Creek
Unit Hydrograph

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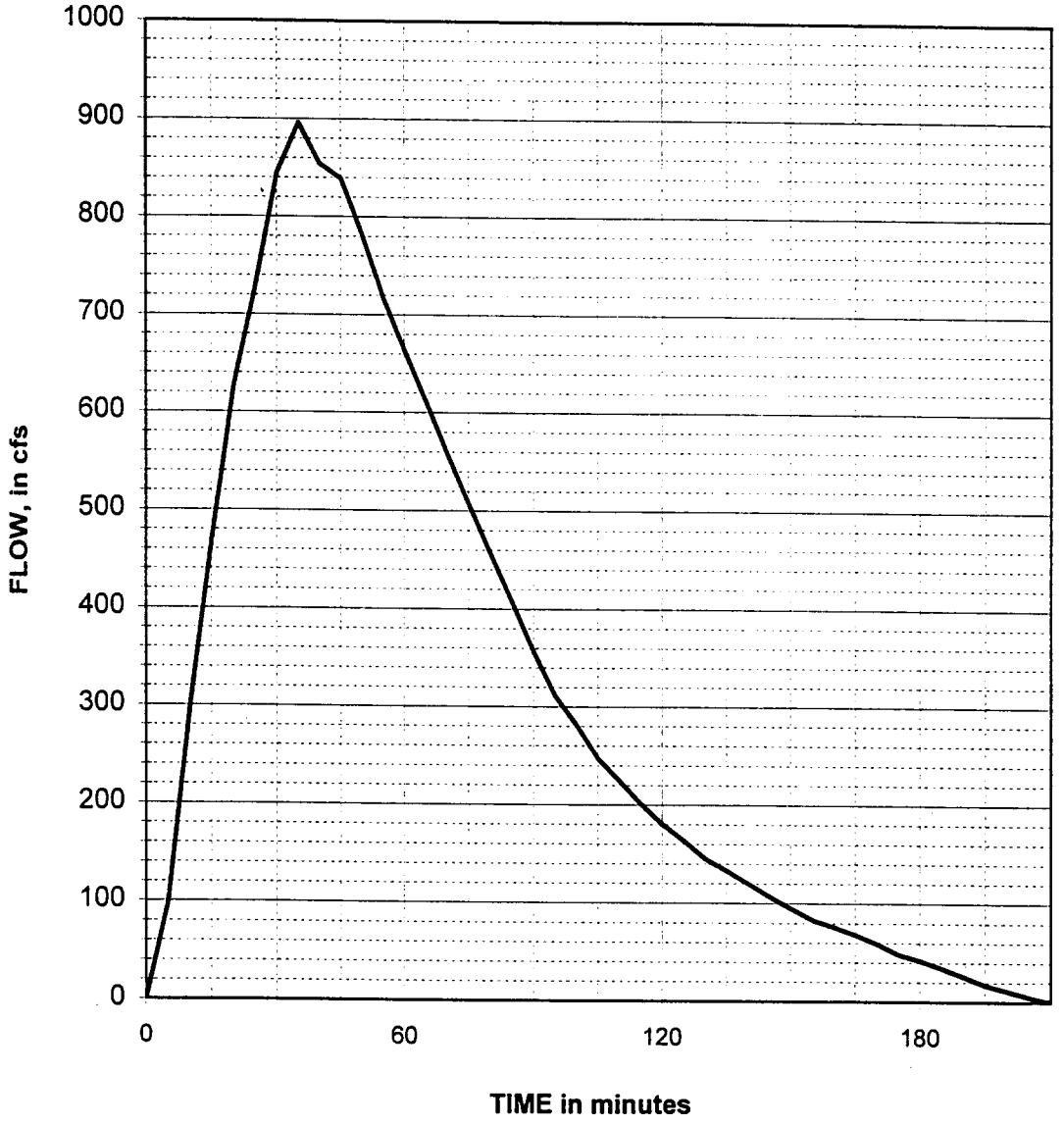
Figure 4



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Second Creek
Unit Hydrograph

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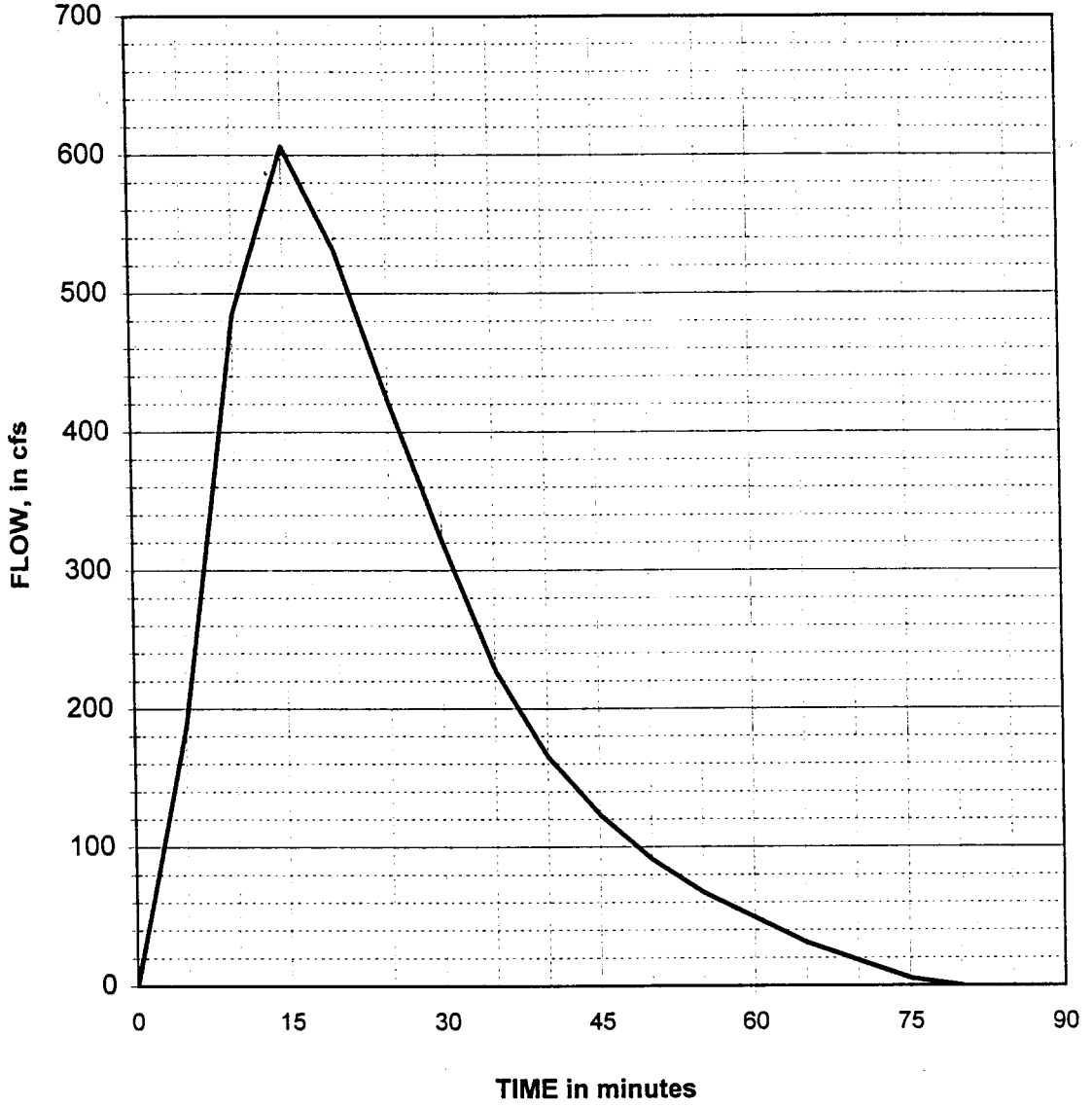
Figure 5



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Burnt Cedar Beach Creek
Unit Hydrograph

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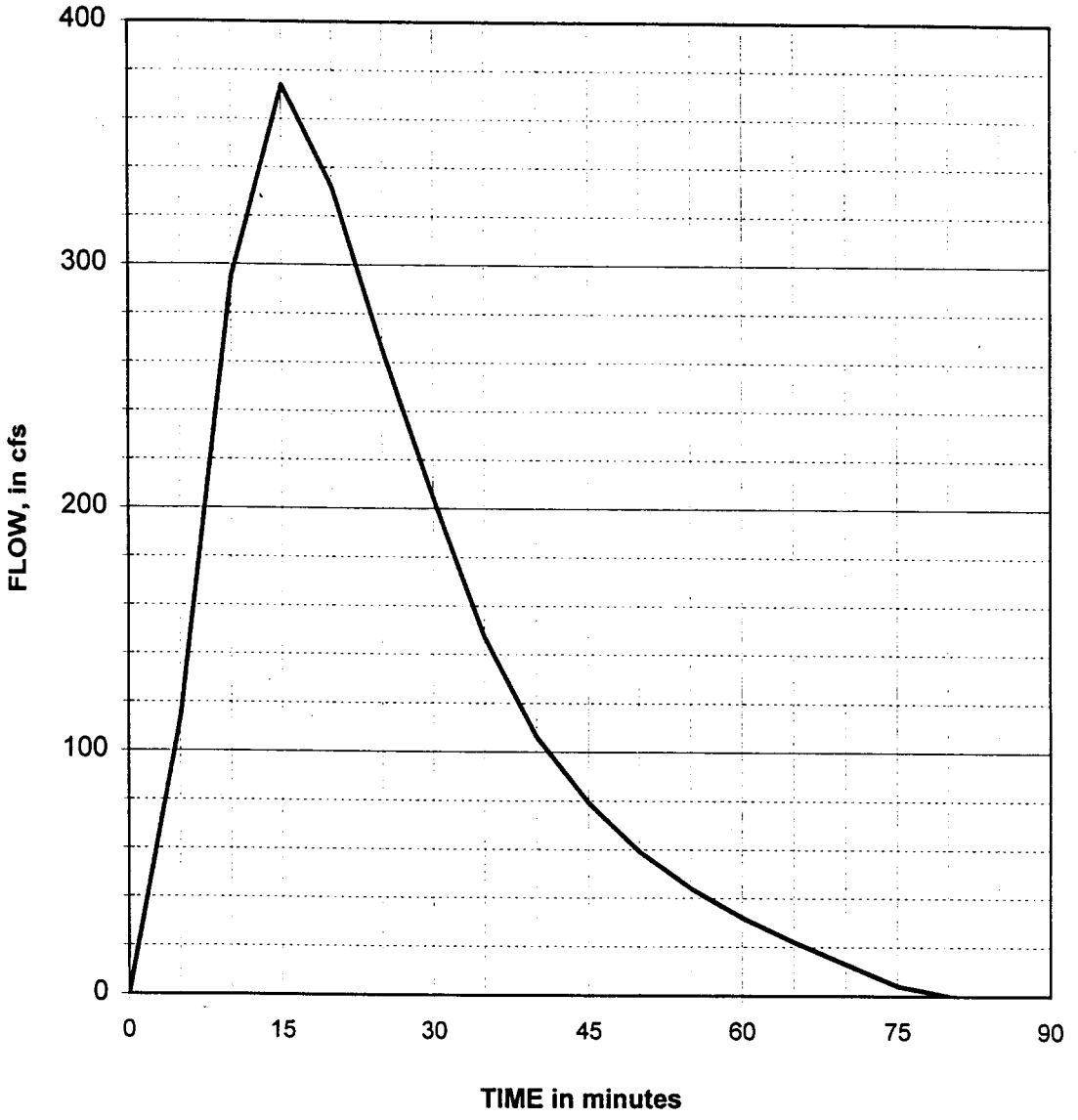
Figure 6



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Burnt Cedar Creek
Unit Hydrograph

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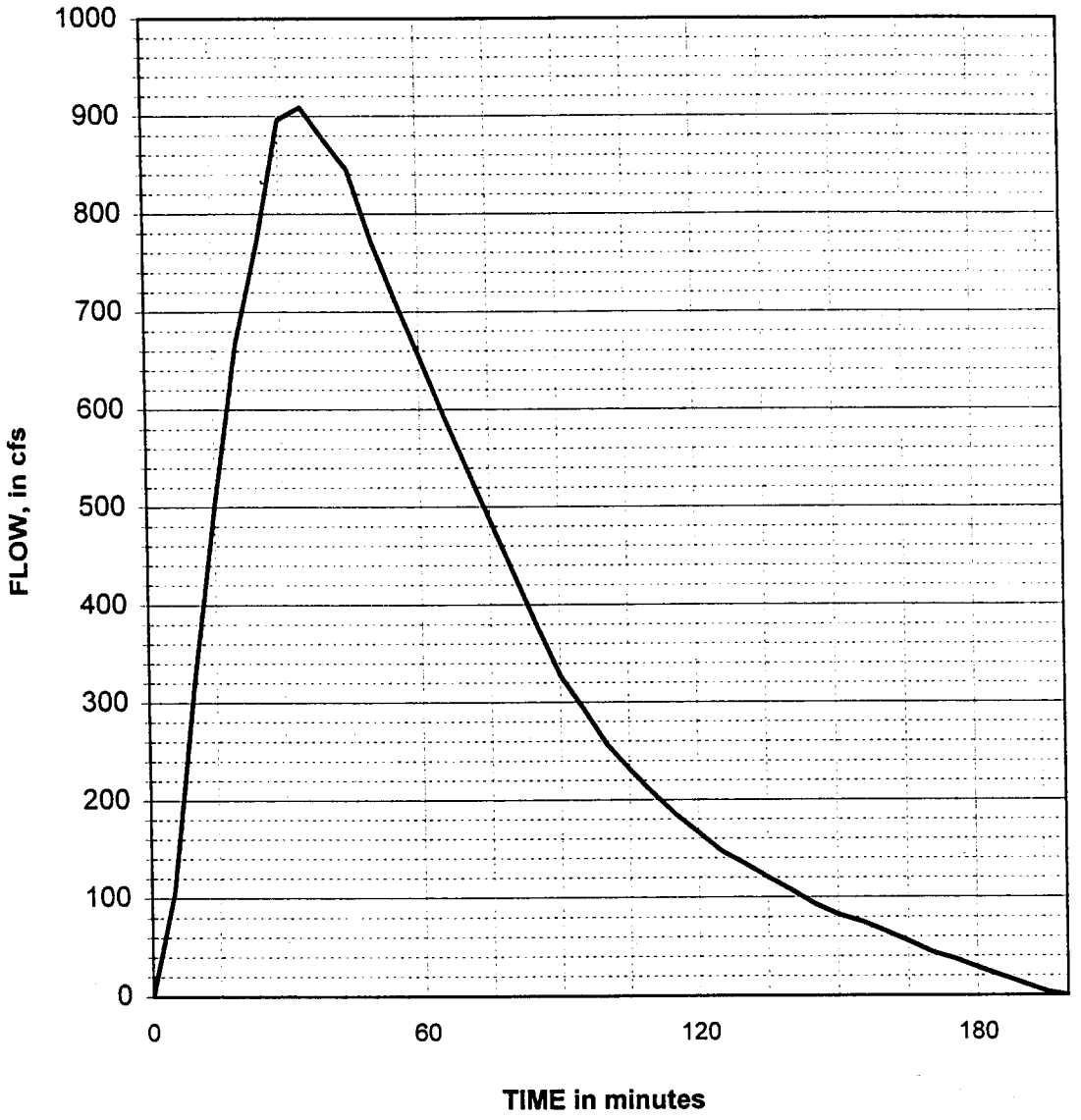
Figure 7



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Wood Creek ab SR 431
Unit Hydrograph

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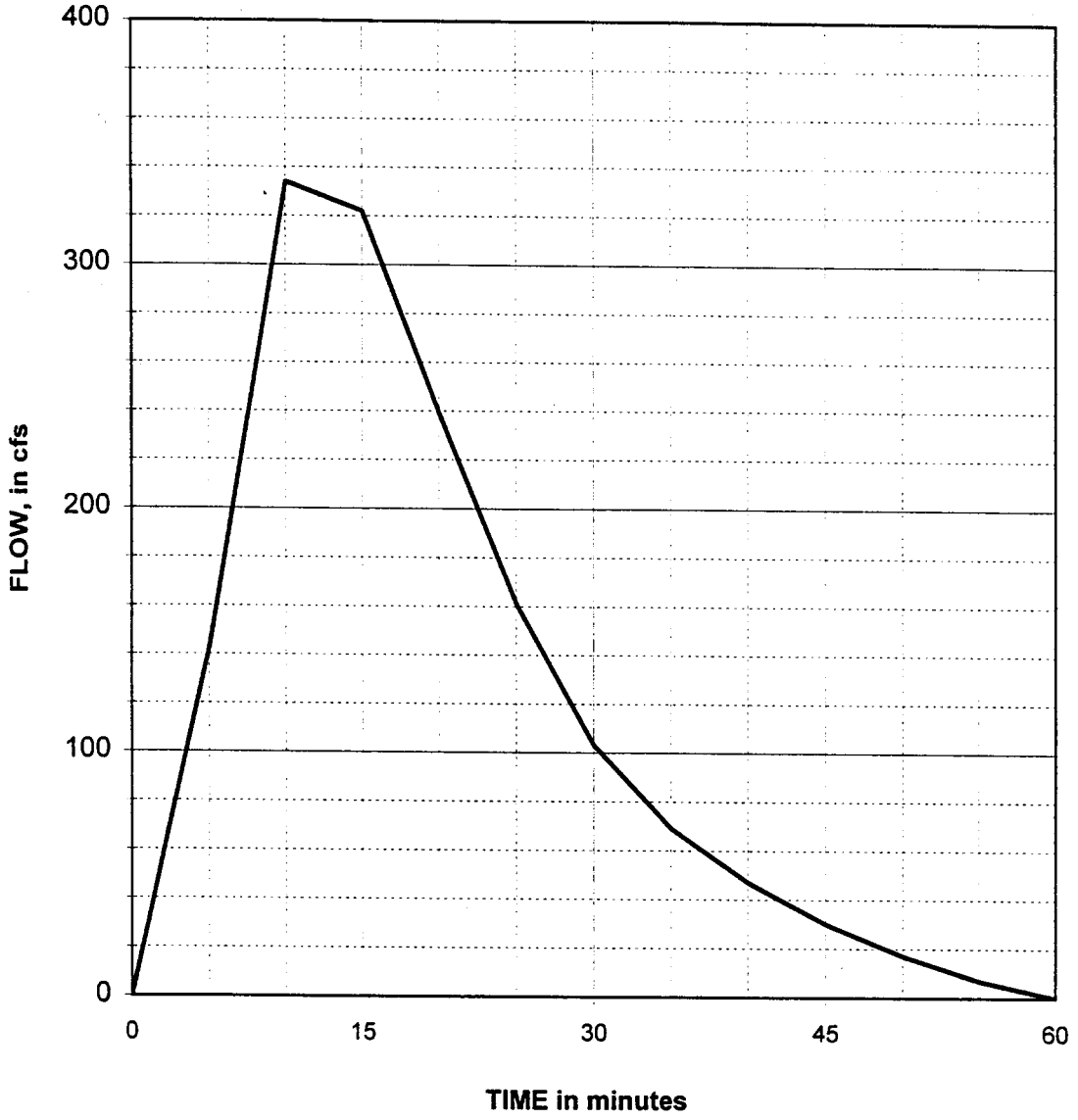
Figure 8



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Wood Creek at SR 28
Unit Hydrograph

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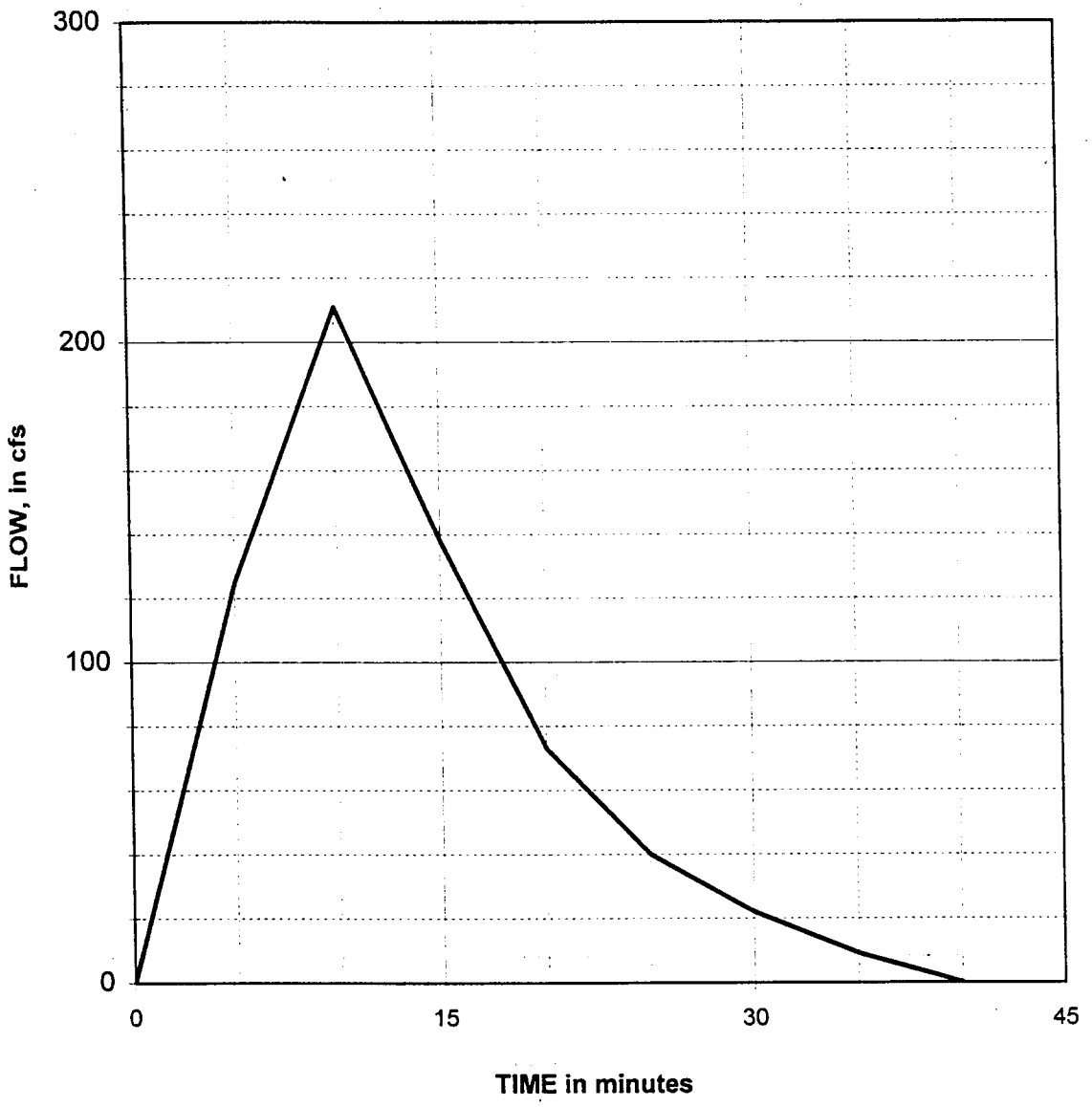
Figure 9



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Wood Creek at Mouth
Unit Hydrograph

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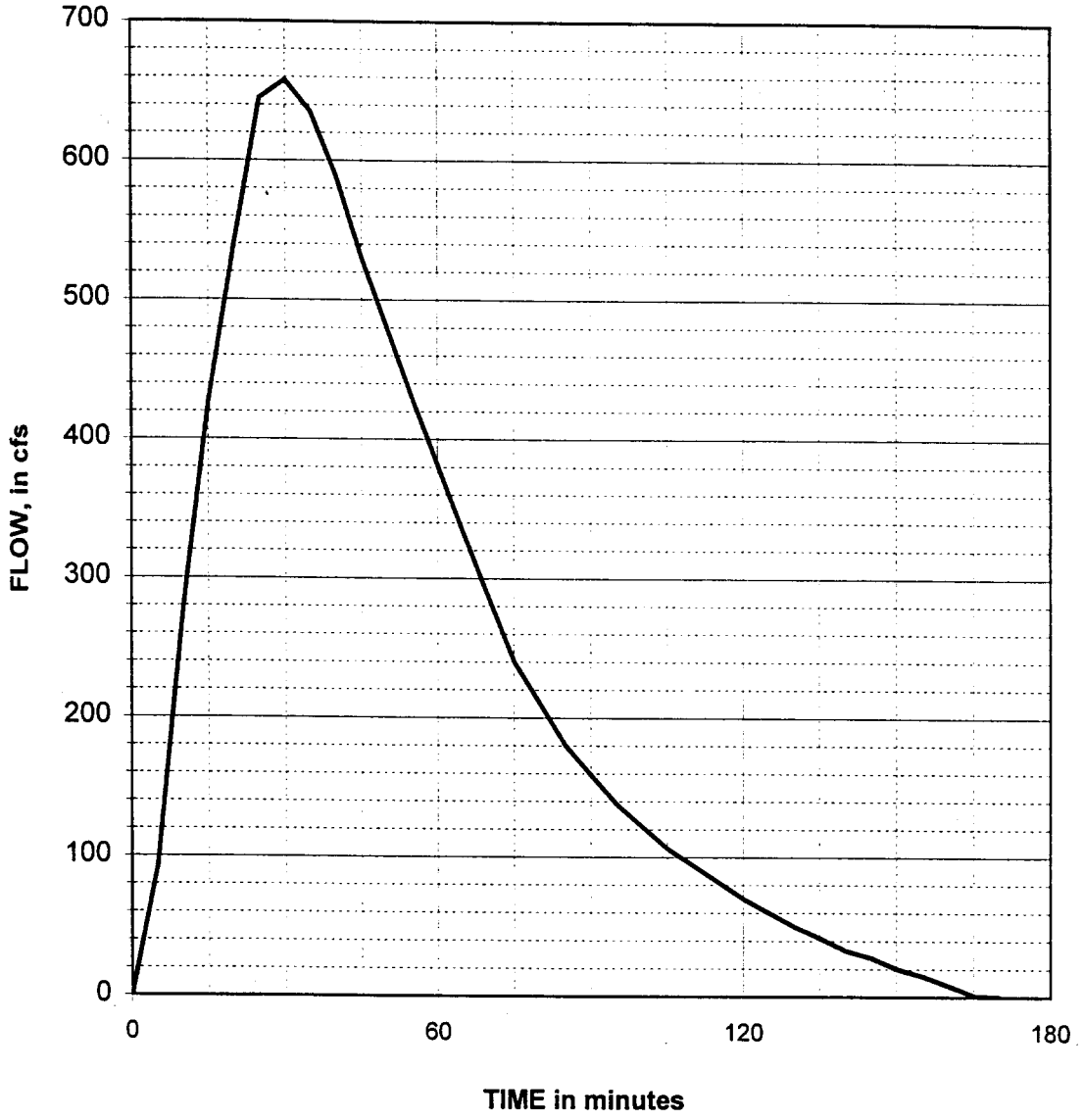
Figure 10



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Third Cr ab Ophir Diversion
Unit Hydrograph

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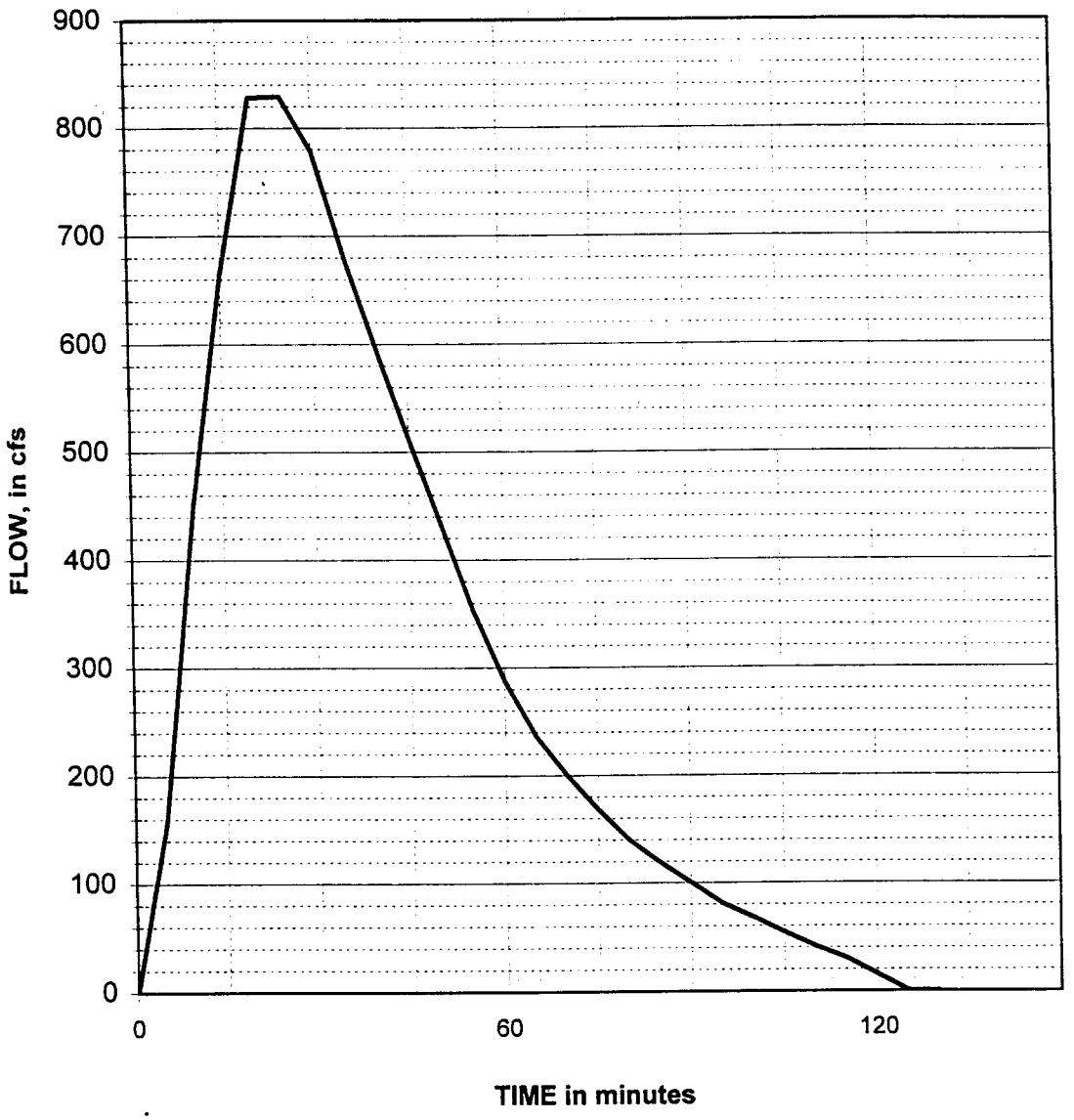
Figure 11



Tahoe Basin
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Third Creek Ginny Lake Unit Hydrograph

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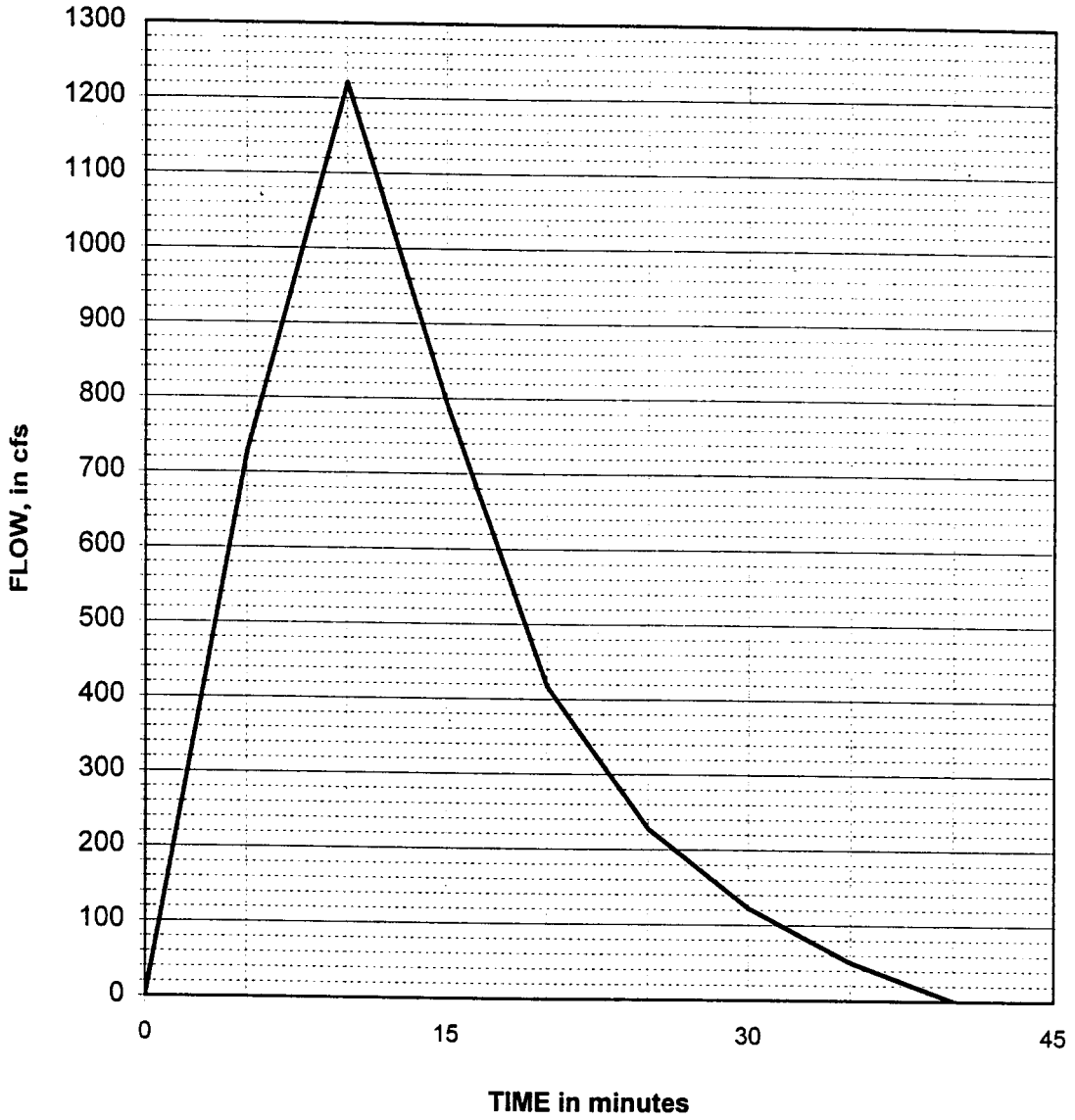
Figure 12



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Third Creek Incline Lake
Unit Hydrograph

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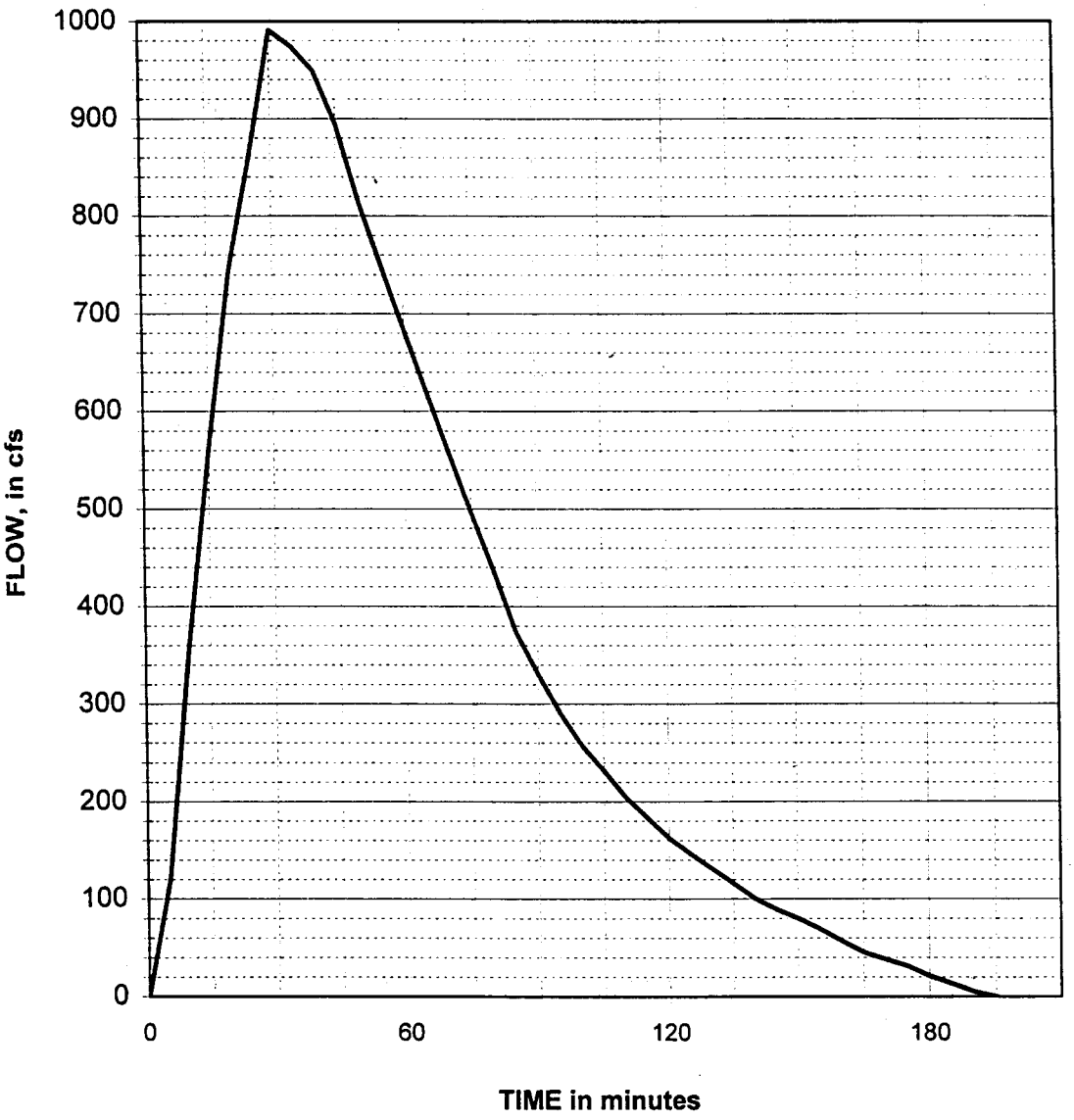
SACRAMENTO DISTRICT

Prepared by JAL

Dec 99

Figure 13



Tahoe Basin
Incline Village Hydrology Report

Third Cr at SR 431
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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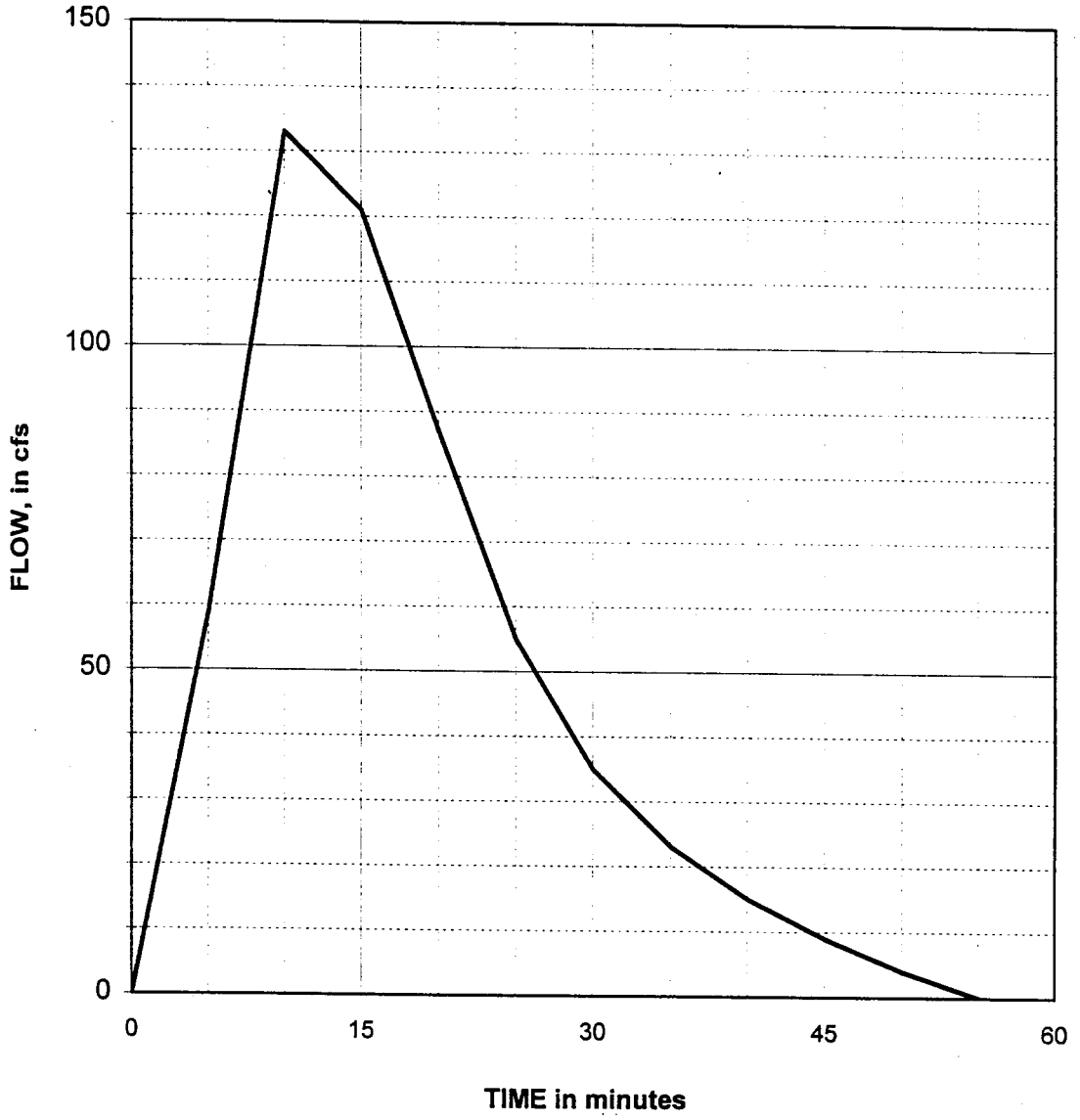
Figure 14



Tahoe Basin
Incline Village Hydrology Report

Third Cr at Village Blvd
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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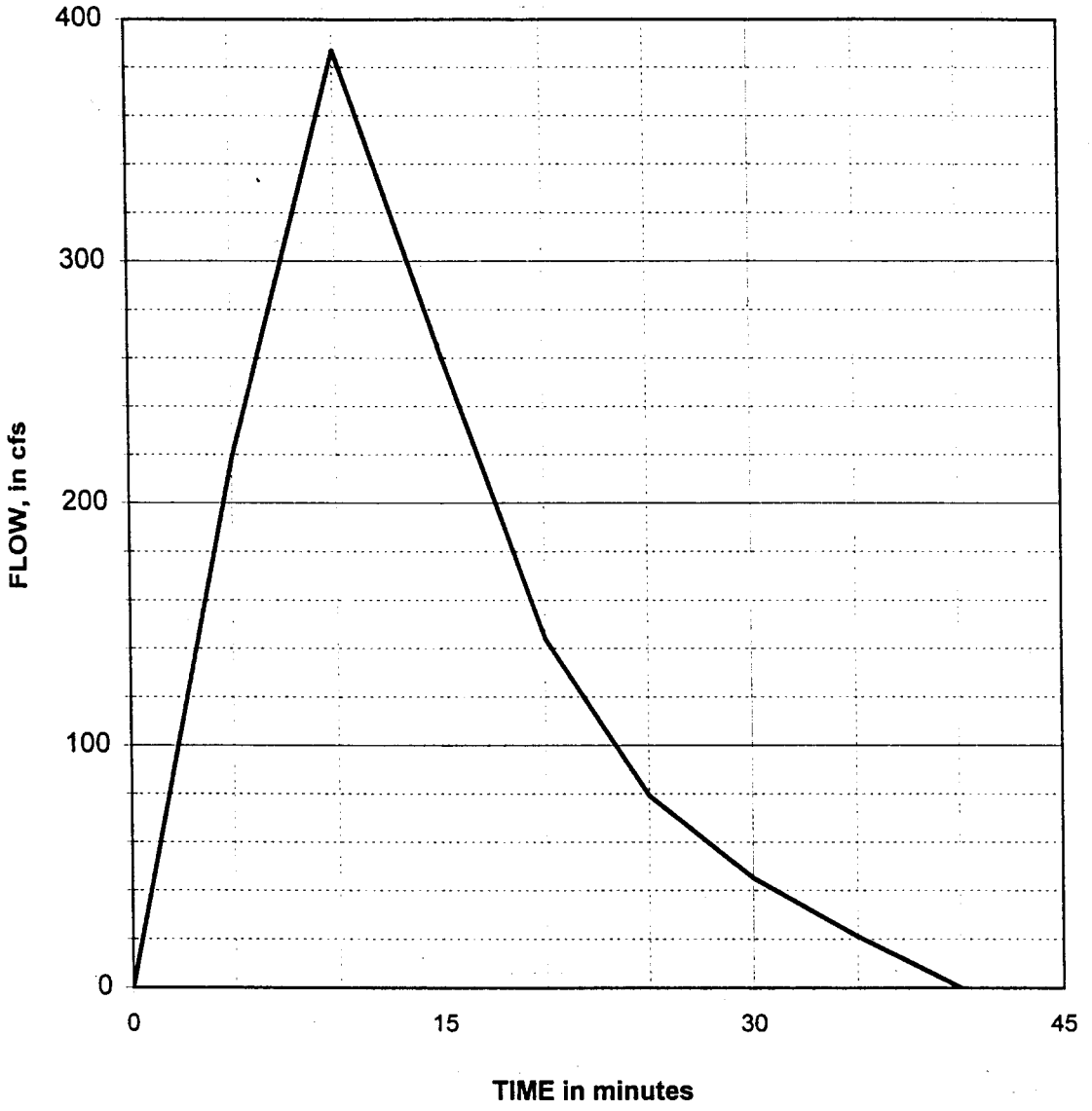
Figure 15



Tahoe Basin
Incline Village Hydrology Report

Third Cr at SR 28
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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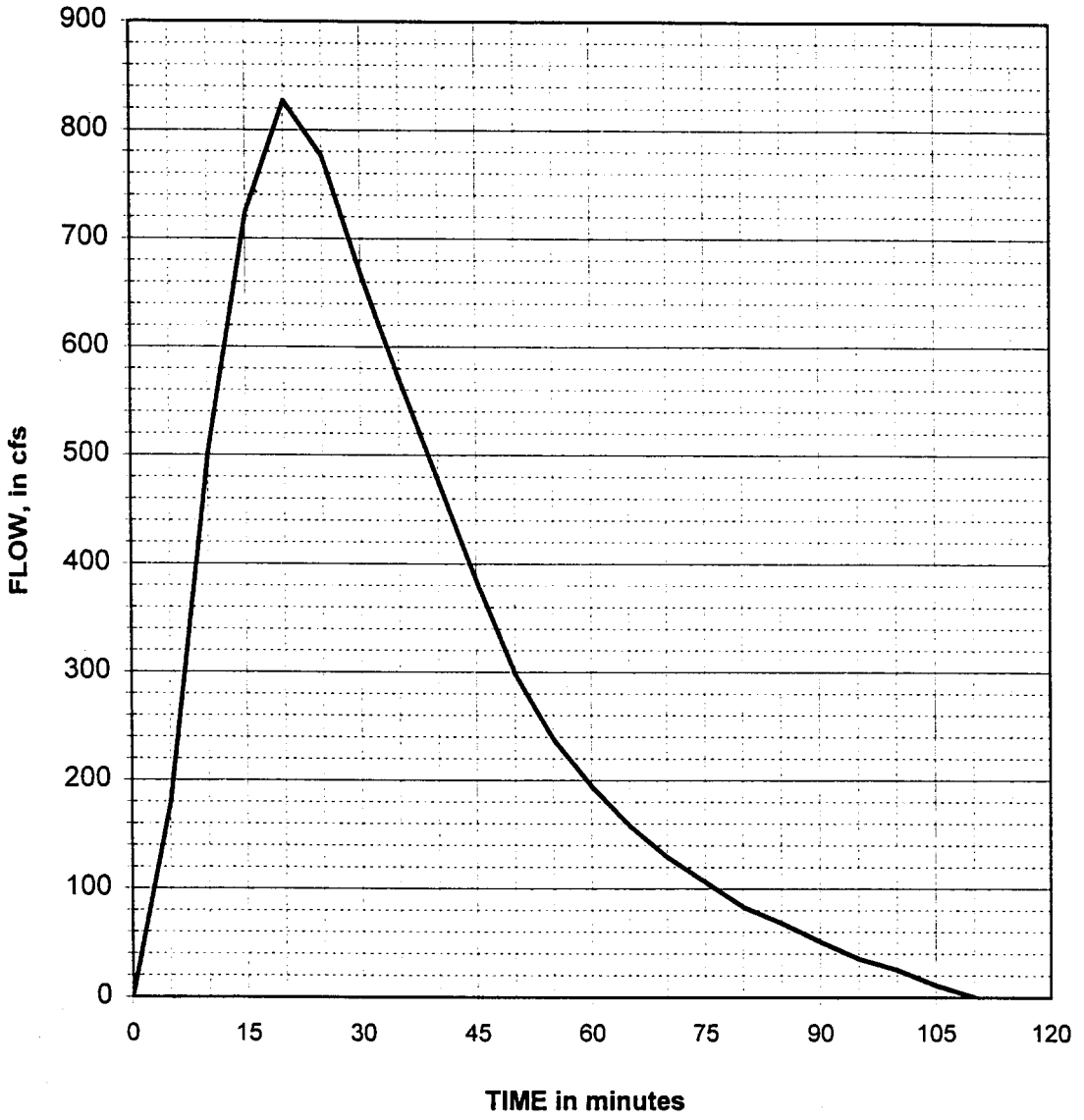
Figure 16



Tahoe Basin
Incline Village Hydrology Report

WF Third Cr ab Village Blvd
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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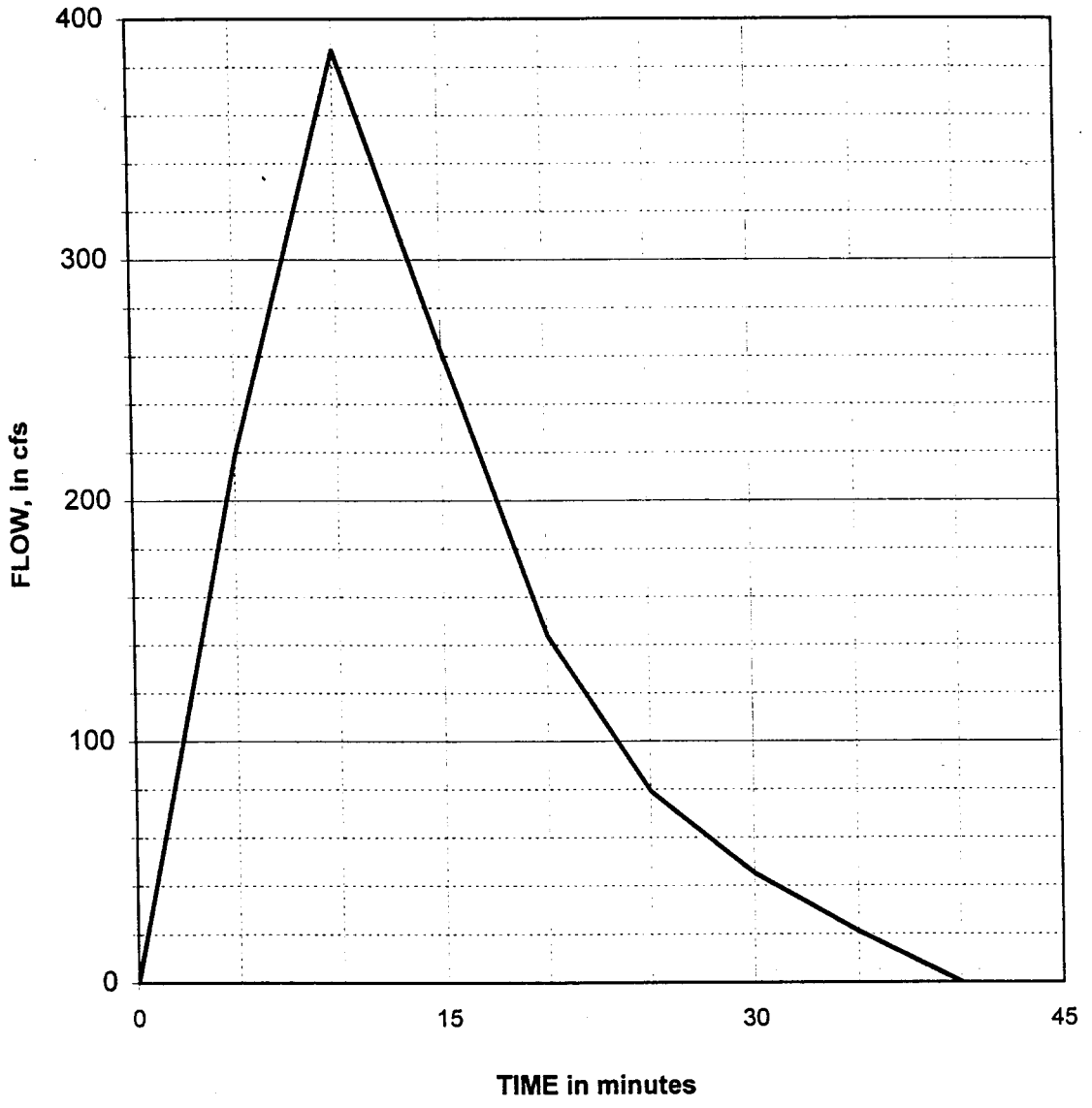
Figure 17



Tahoe Basin
Incline Village Hydrology Report

WF Third Cr at SR 28
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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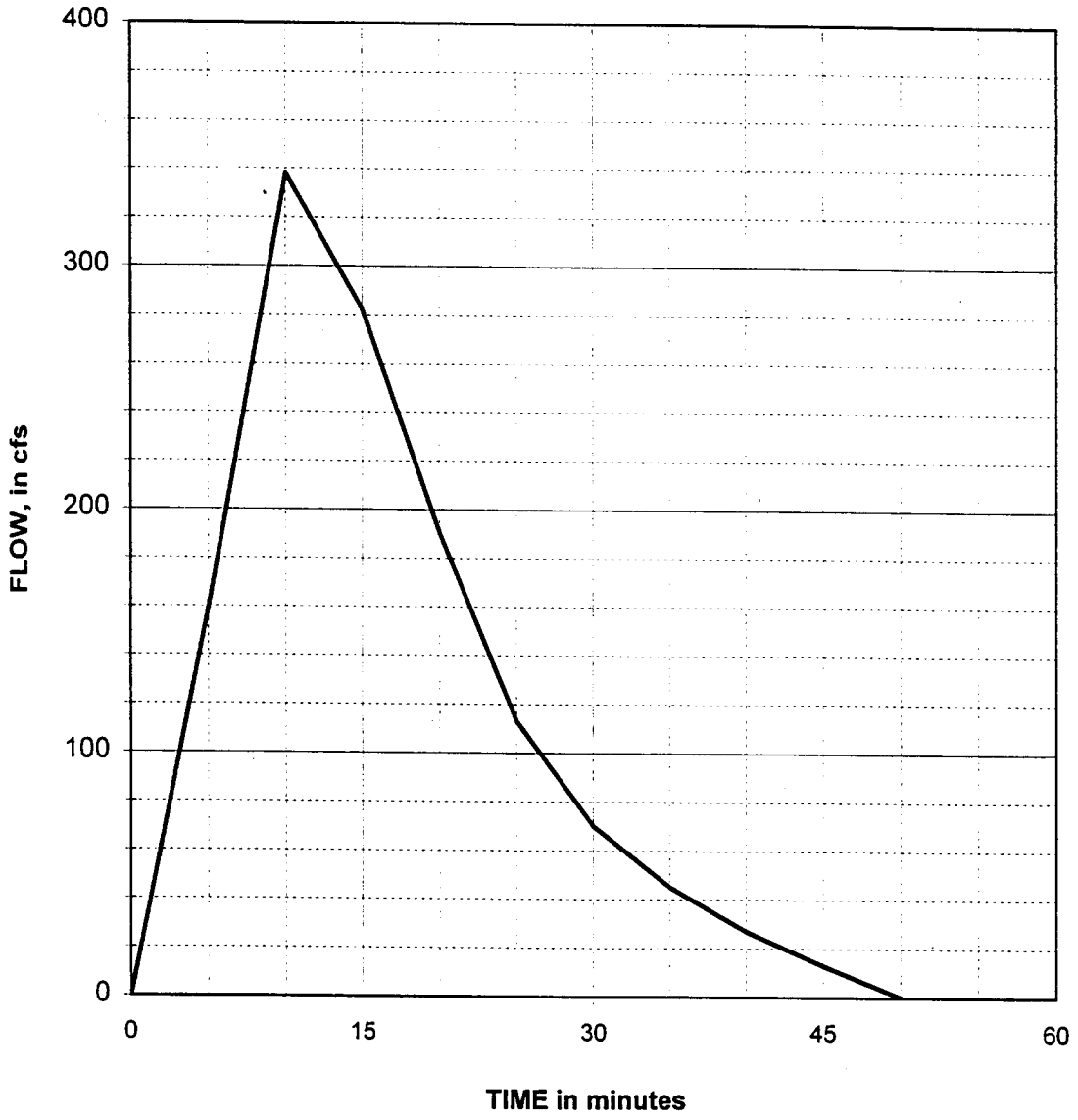
Figure 18



Tahoe Basin
Incline Village Hydrology Report

Third Cr at Mouth
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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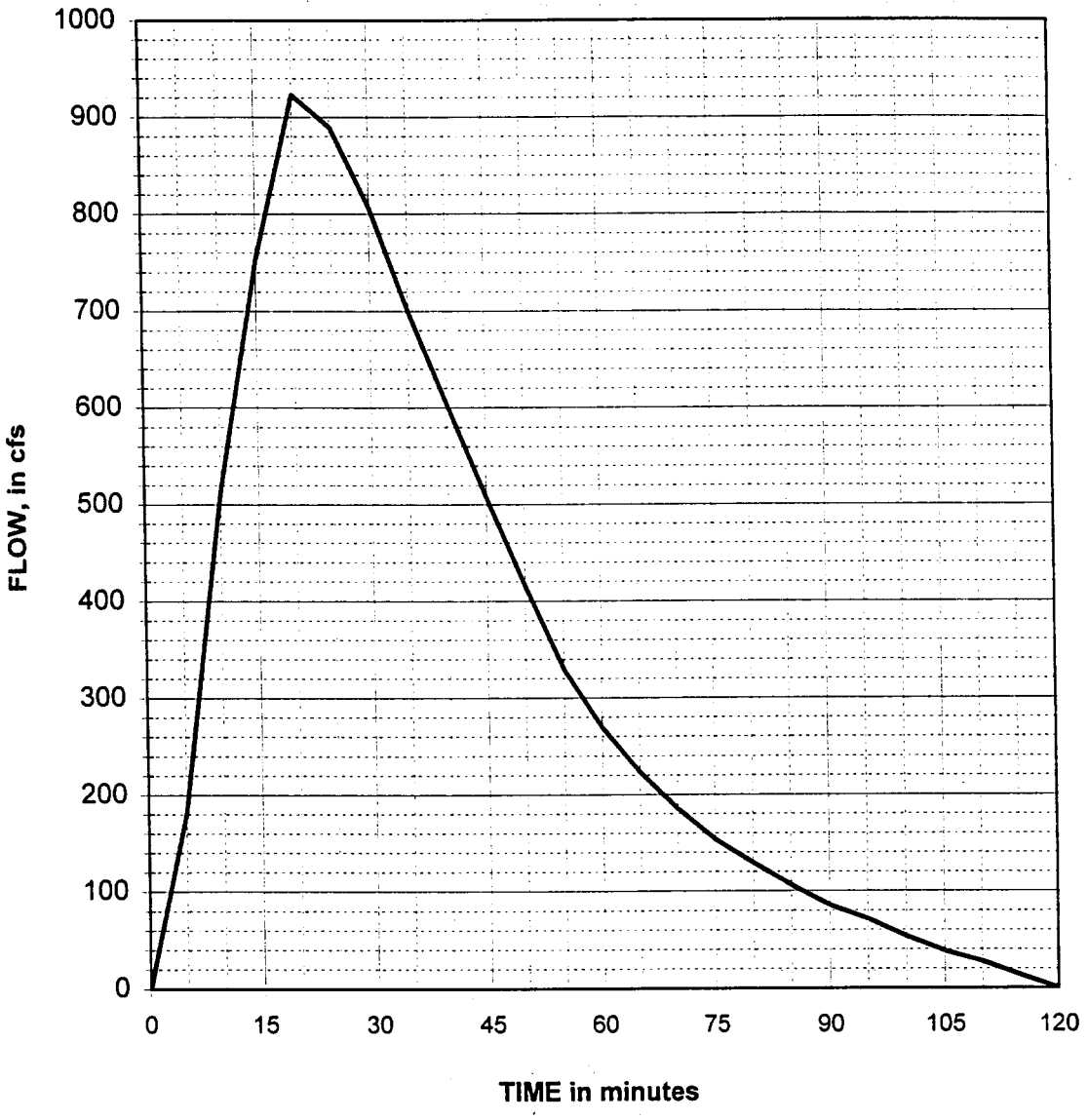
Figure 19



Tahoe Basin
Incline Village Hydrology Report

WF Incline Cr ab Village Blvd
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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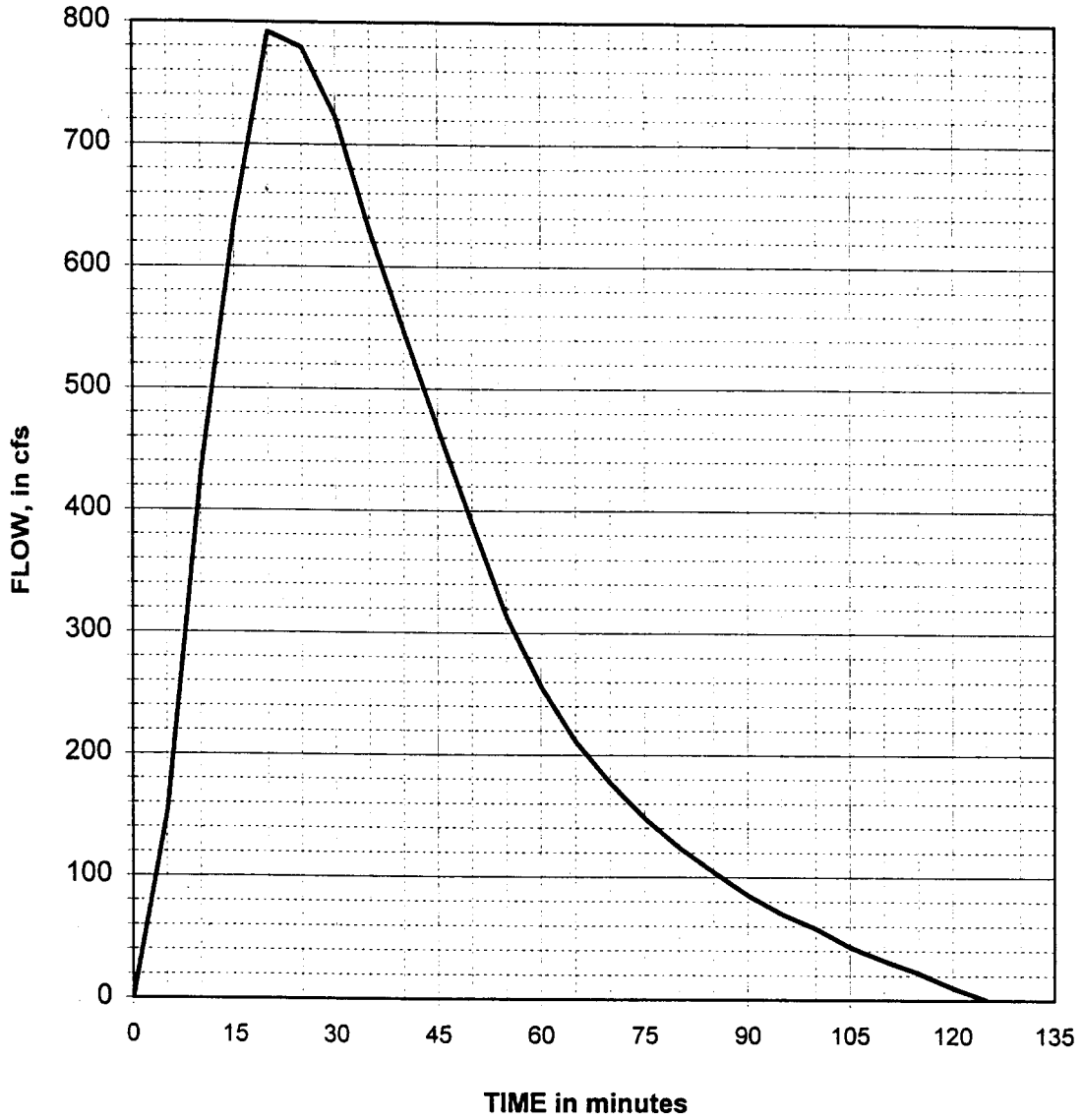
Figure 20



Tahoe Basin
Incline Village Hydrology Report

WF Incline Cr at SR 28
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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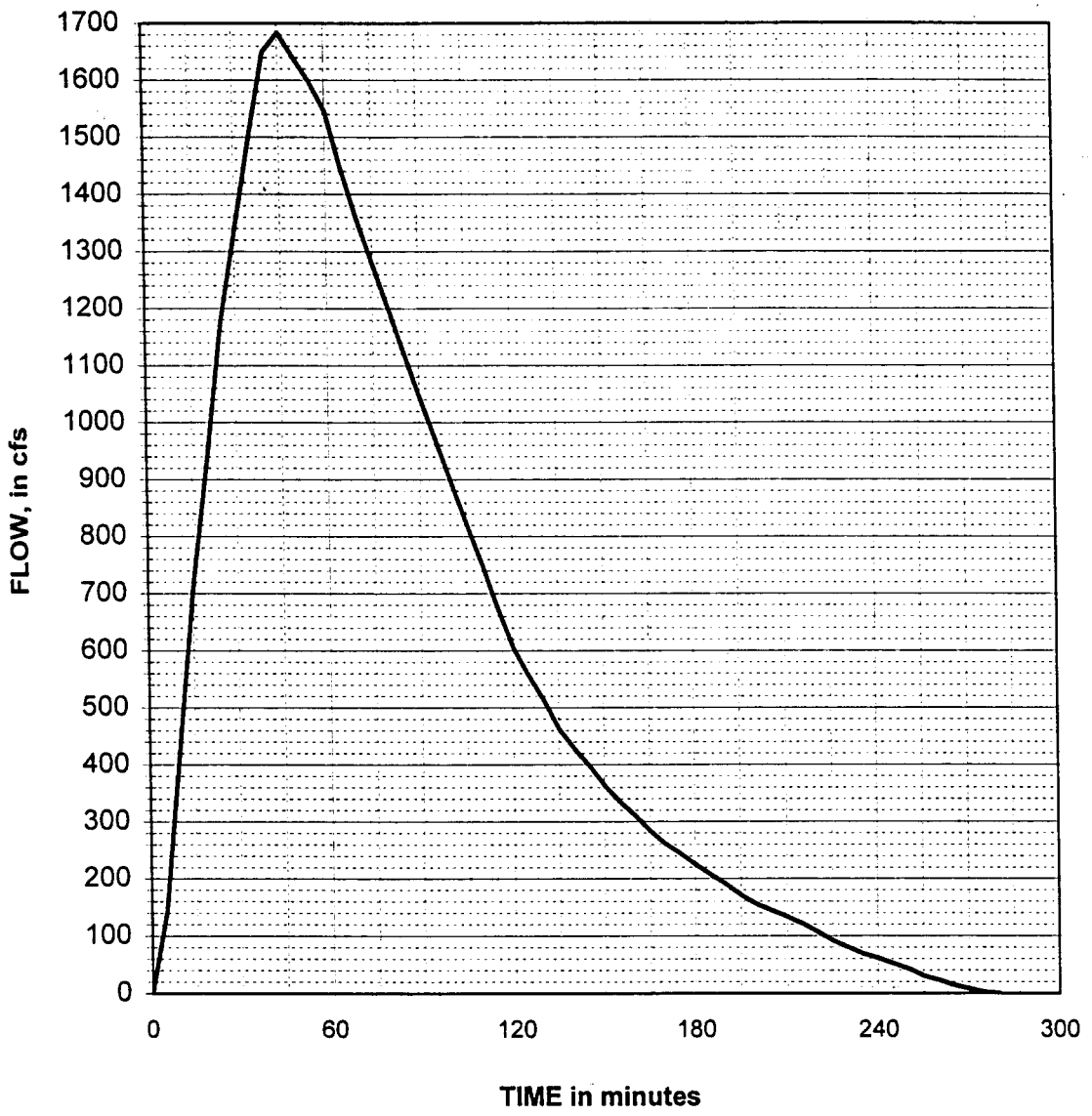
Figure 21



Tahoe Basin
Incline Village Hydrology Report

Incline Cr ab Ski Way
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

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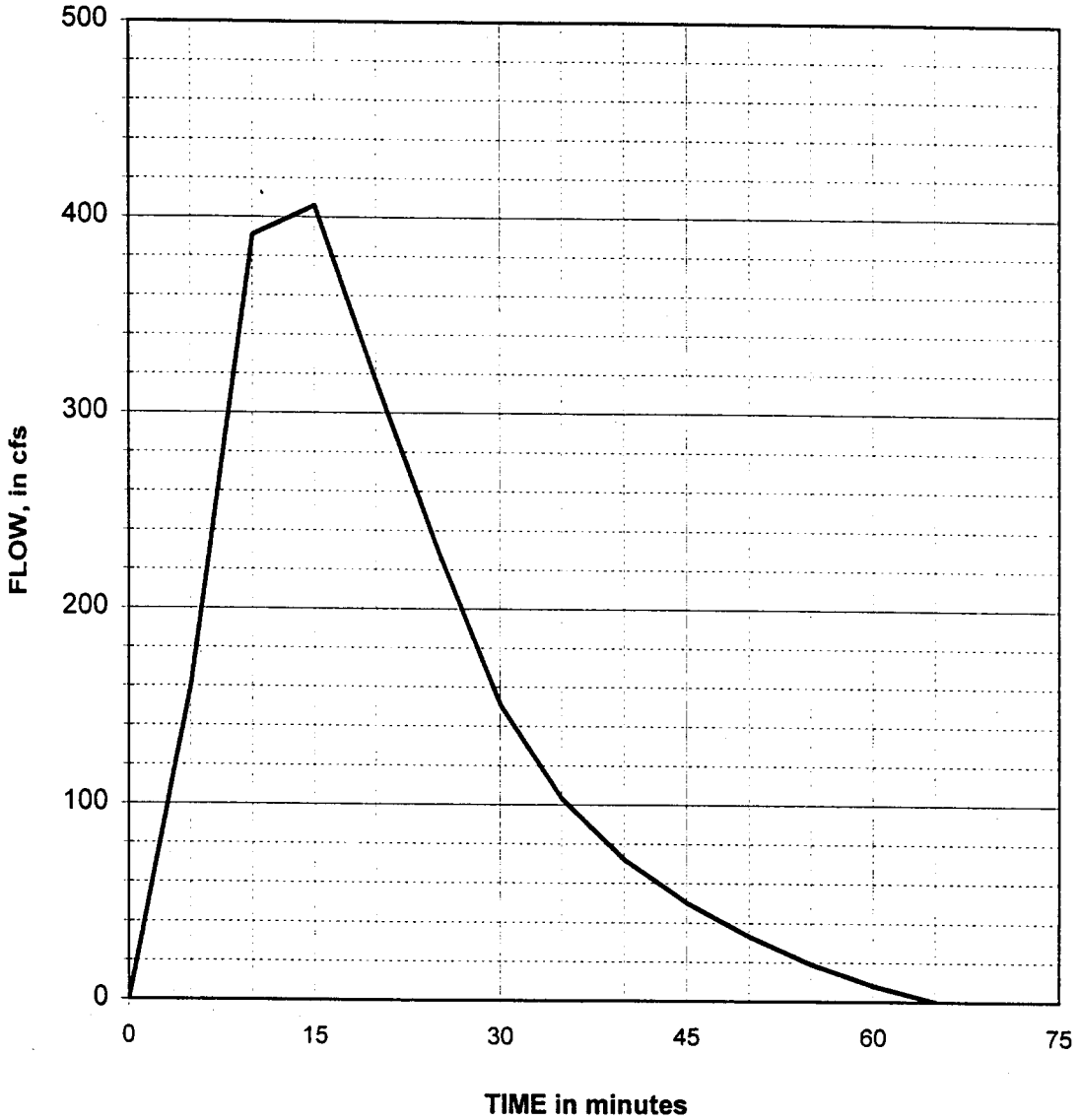
Figure 22



Tahoe Basin
Incline Village Hydrology Report

Incline Cr at SR 28
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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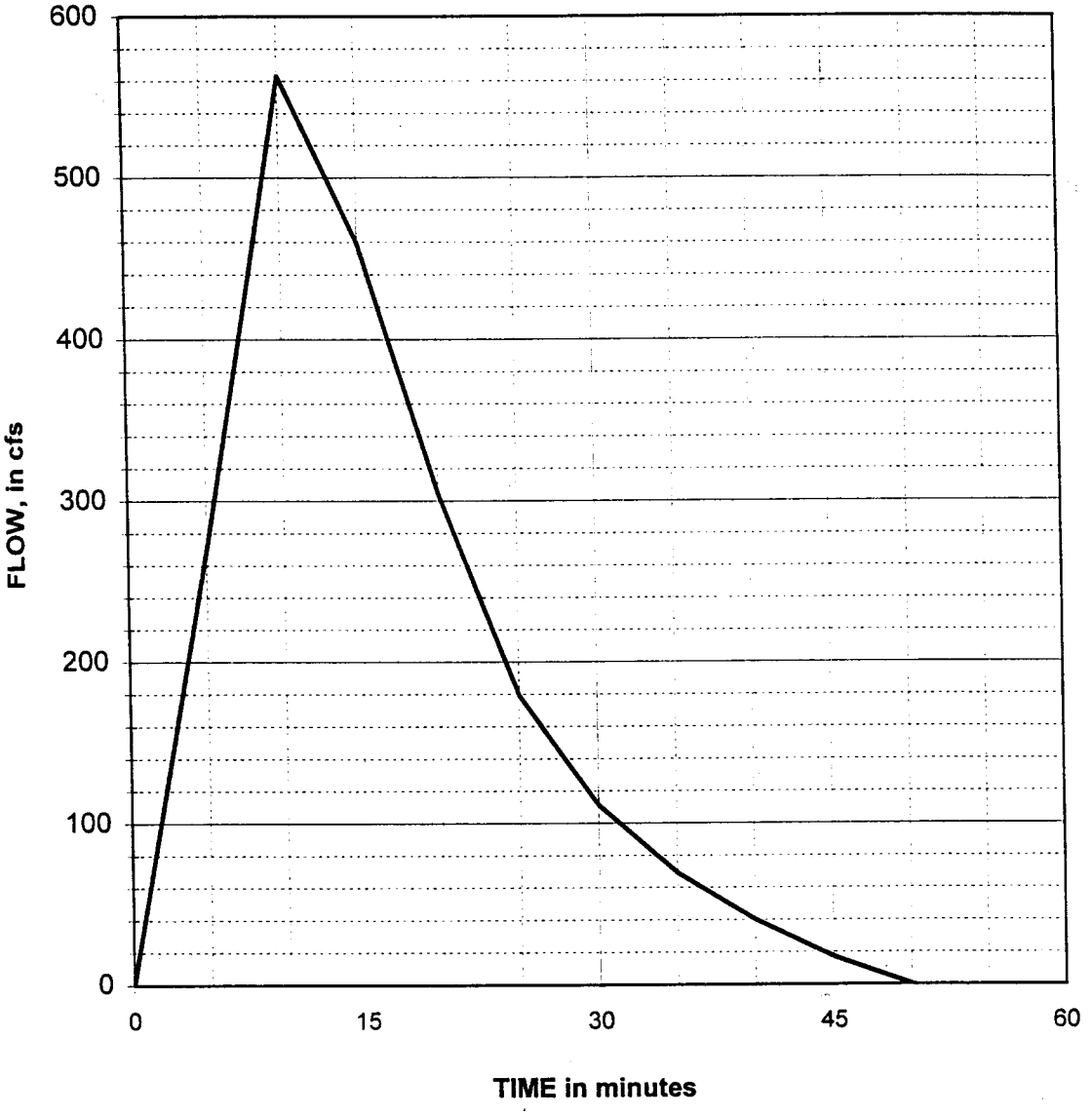
Figure 23



Tahoe Basin
Incline Village Hydrology Report

Incline Cr at Mouth
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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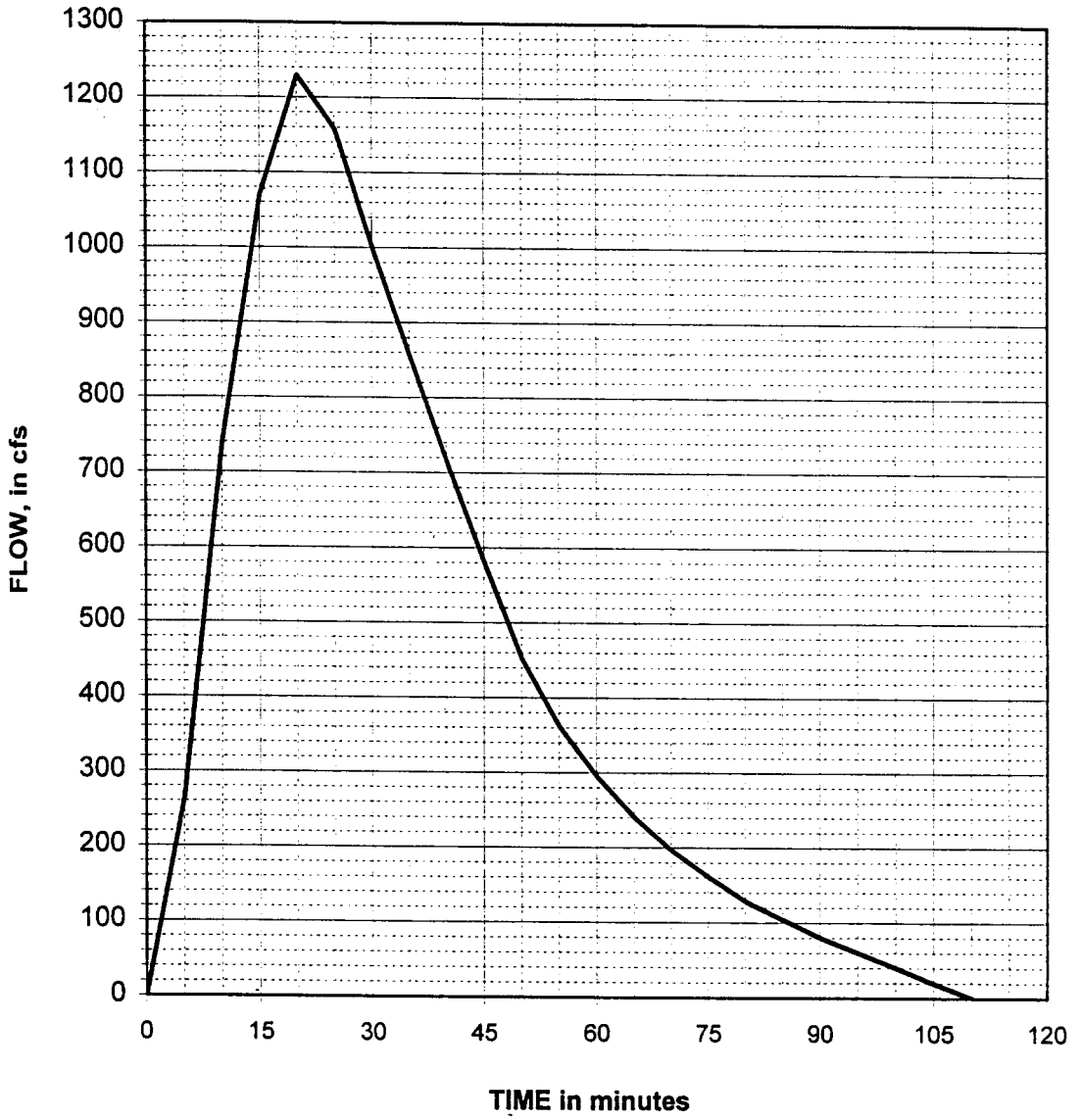
Figure 24



Tahoe Basin
Incline Village Hydrology Report

Mill Cr ab Dam
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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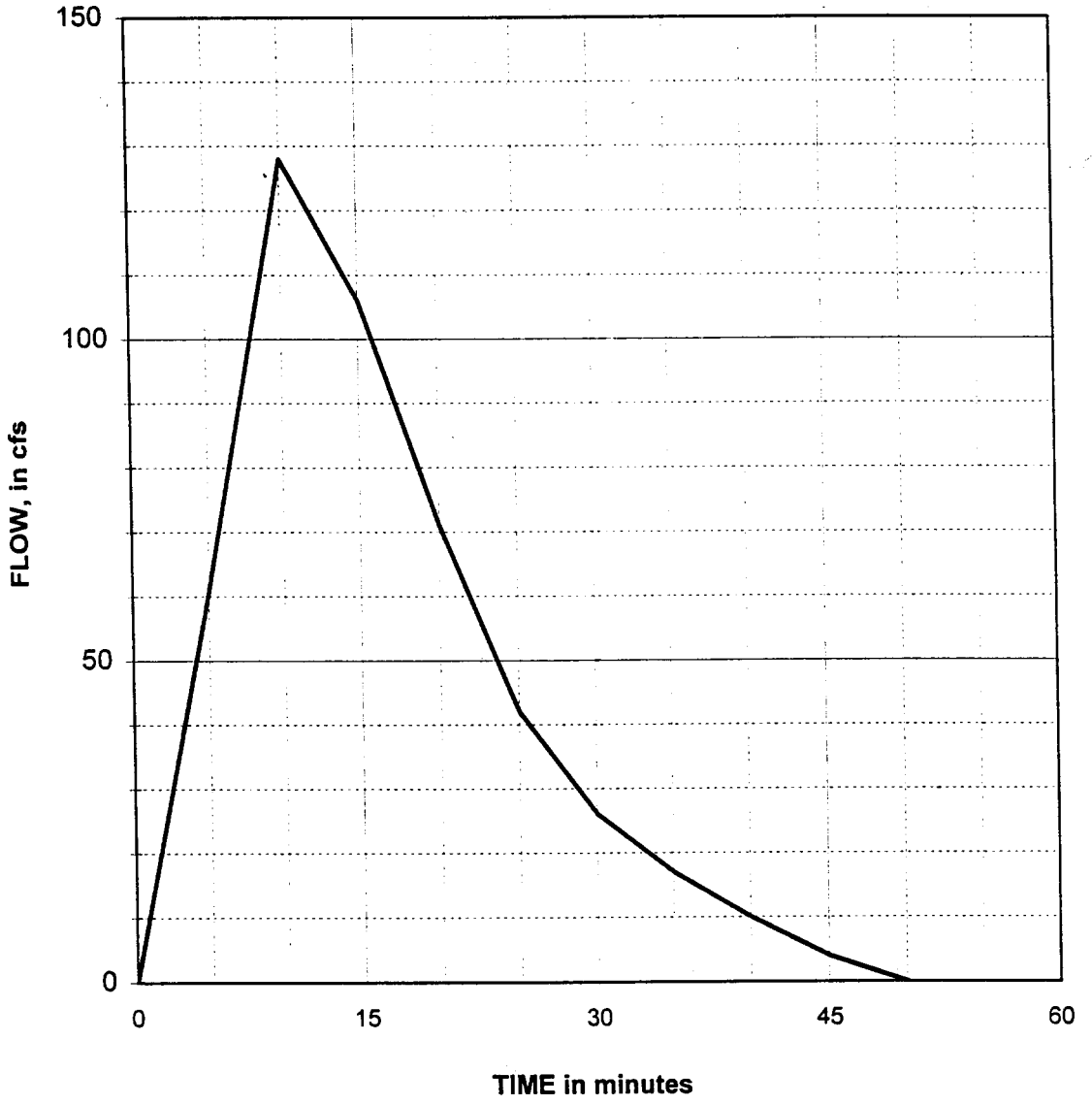
Figure 25



Tahoe Basin
Incline Village Hydrology Report

Mill Cr at SR 28
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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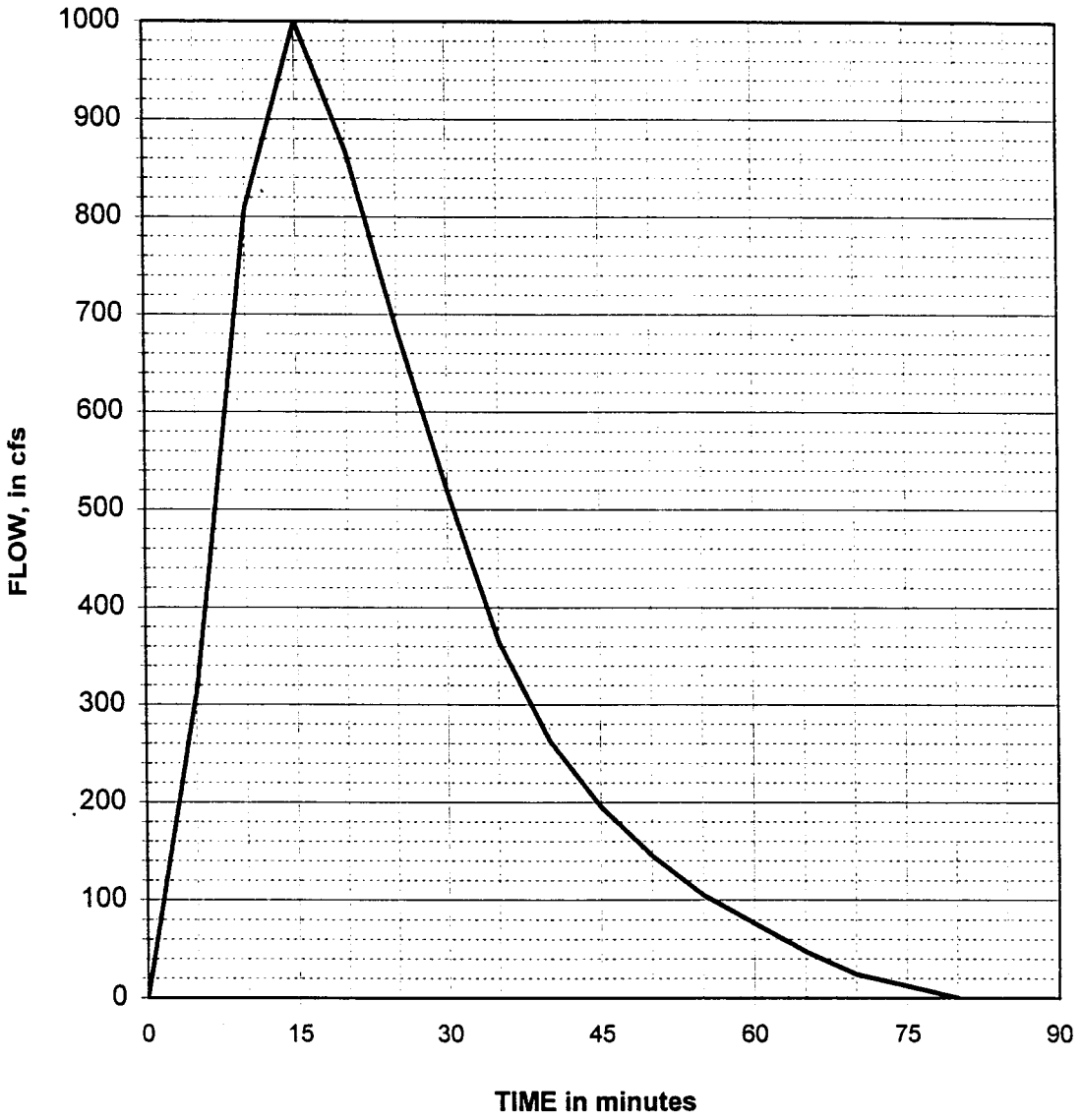
Figure 26



Tahoe Basin
Incline Village Hydrology Report

Mill Cr at Mouth
Unit Hydrograph

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

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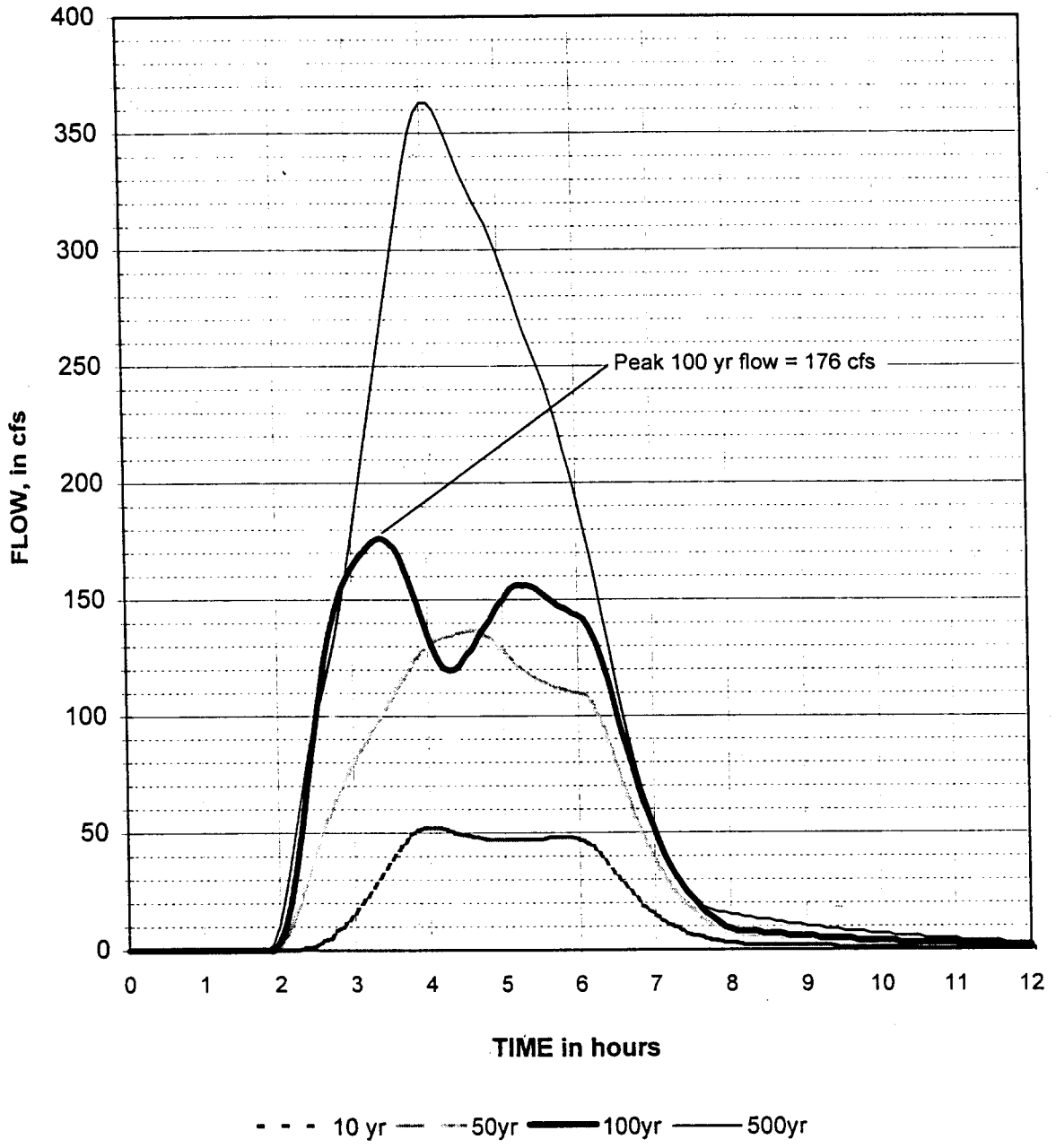
Figure 27



Tahoe Basin
Incline Village Hydrology Report

First Creek
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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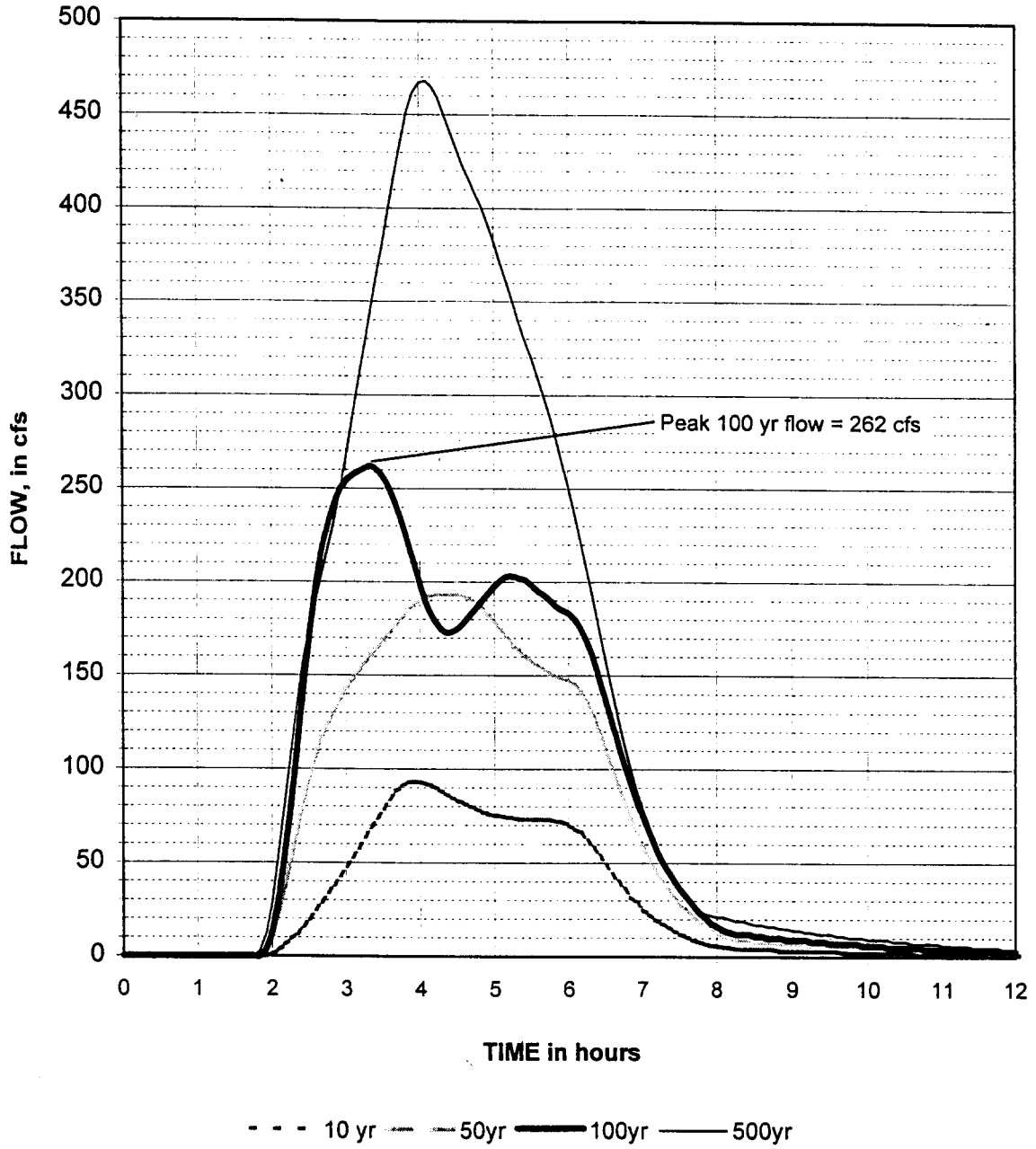
Figure 28



Tahoe Basin
Incline Village Hydrology Report

Second Creek
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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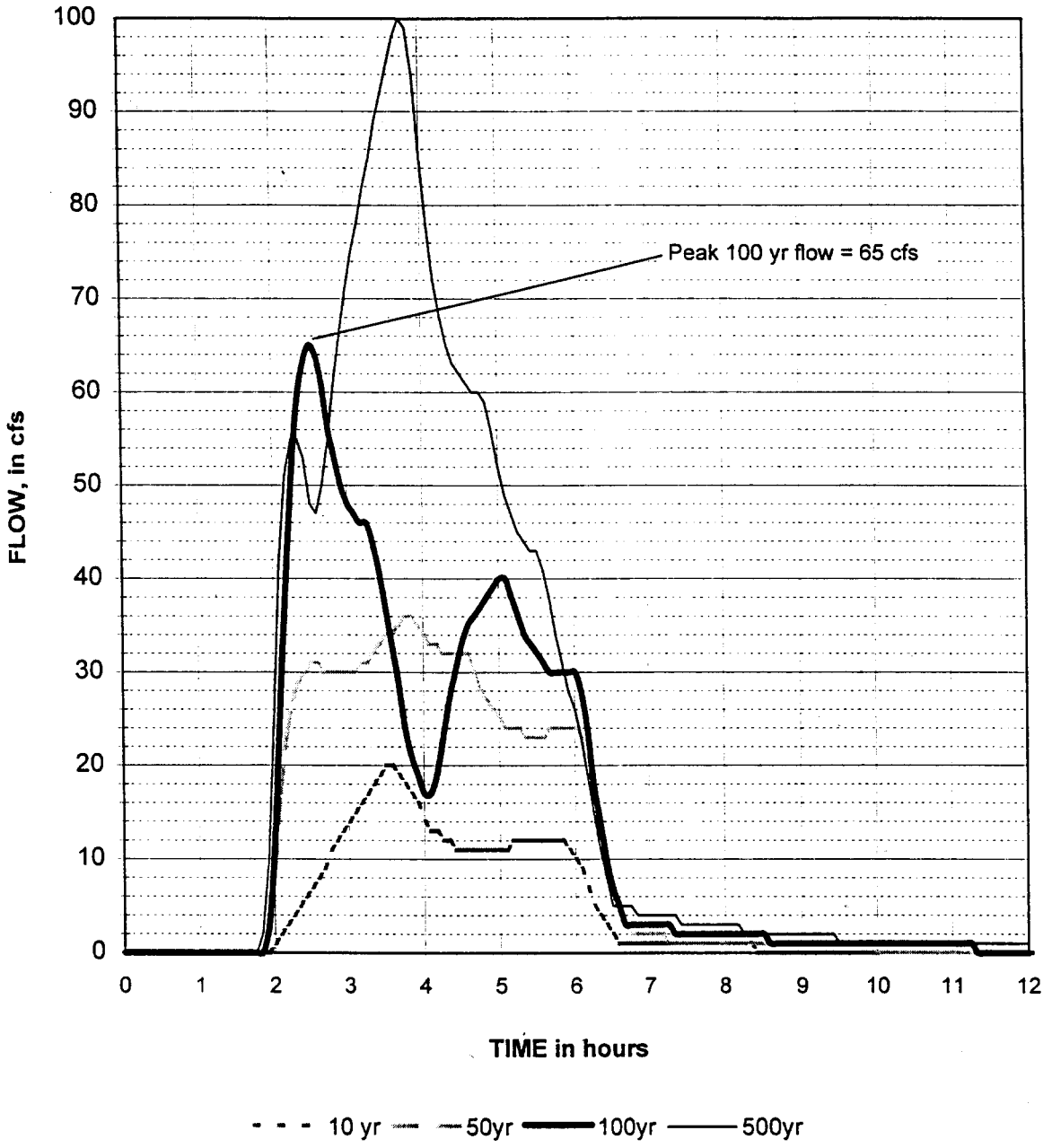
Figure 29



Tahoe Basin
Incline Village Hydrology Report

Burnt Cedar Beach Creek
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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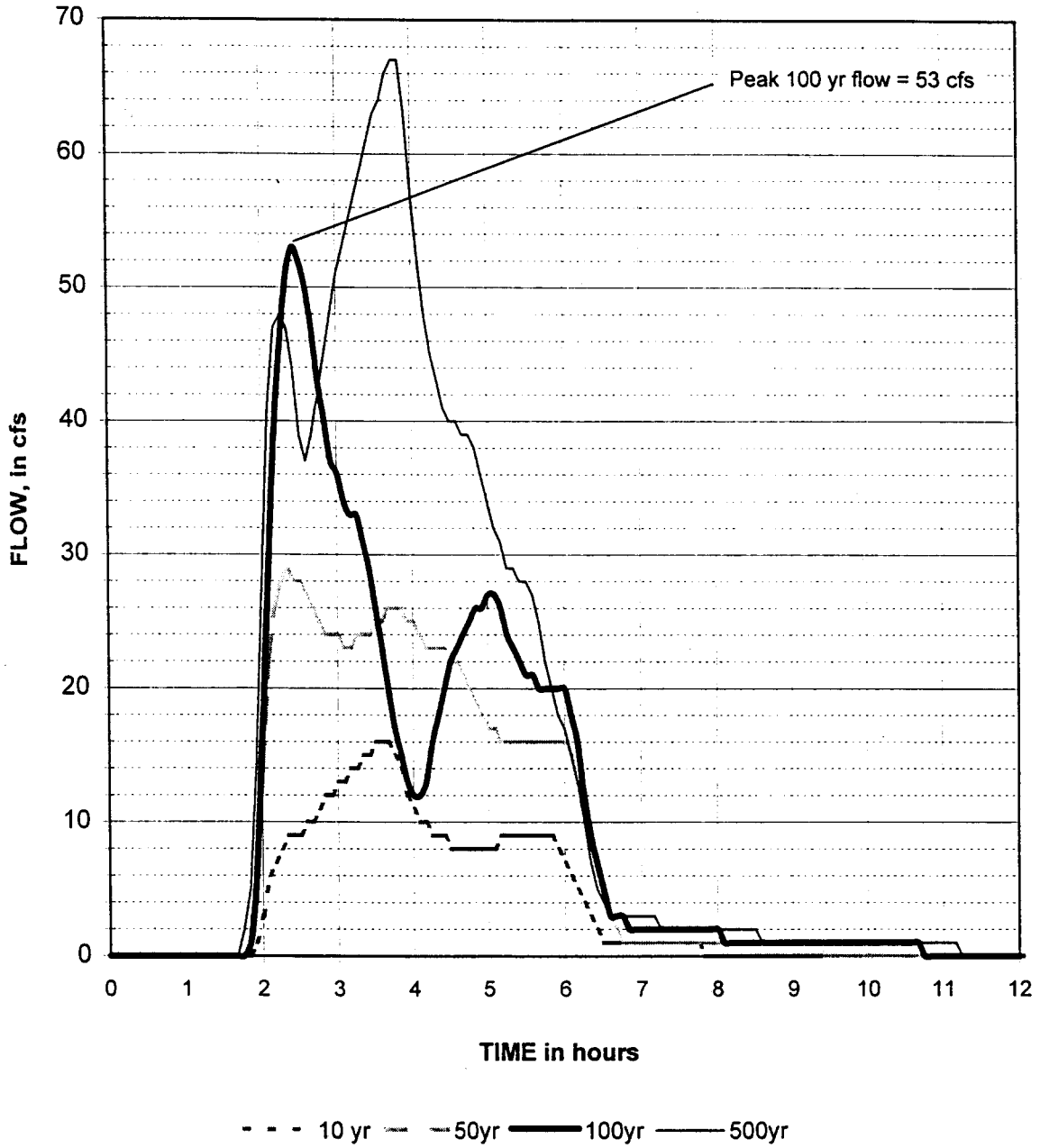
Figure 30



Tahoe Basin
Incline Village Hydrology Report

Burnt Cedar Creek
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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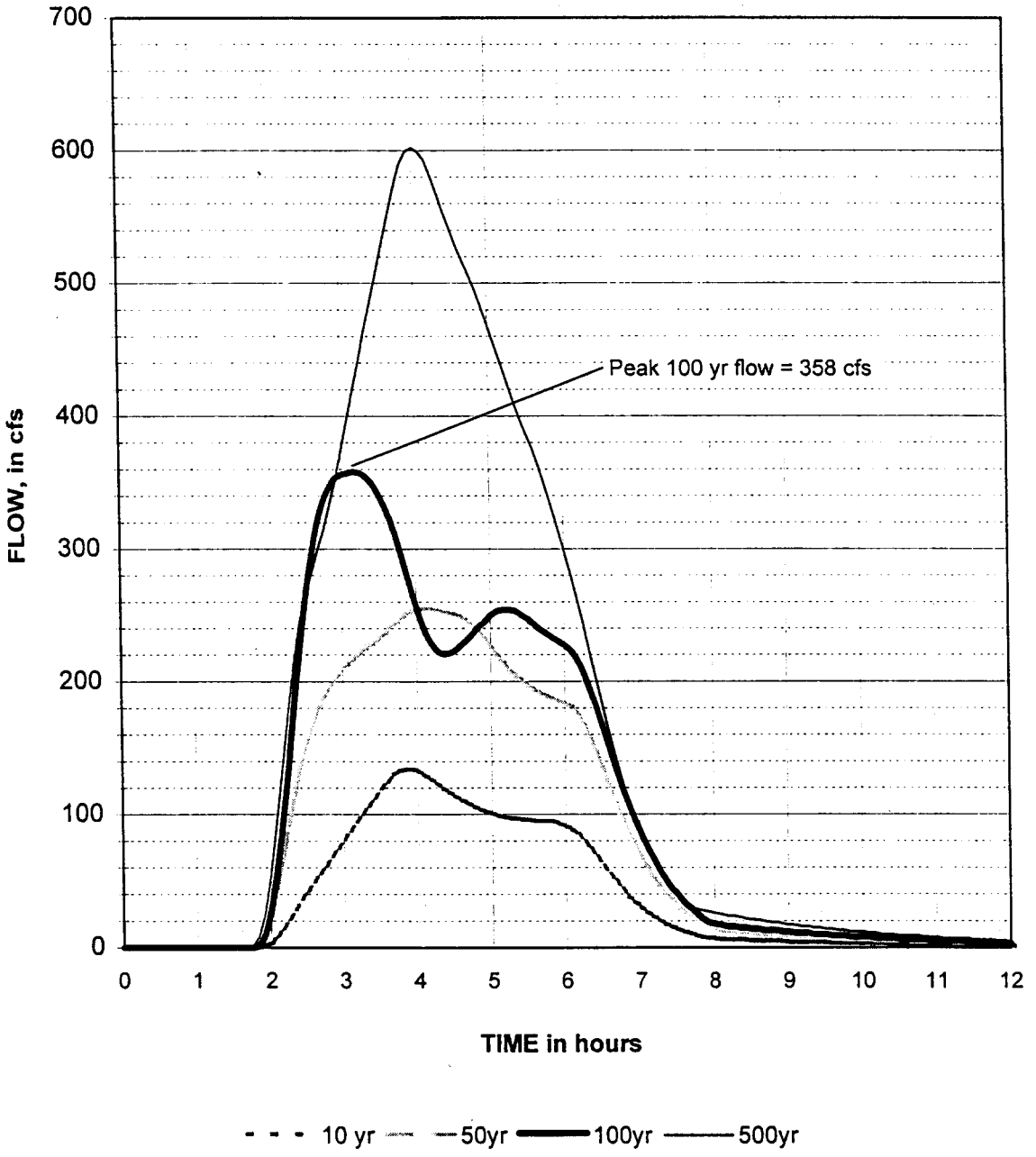
Figure 31



Tahoe Basin
Incline Village Hydrology Report

Wood Creek ab SR 431
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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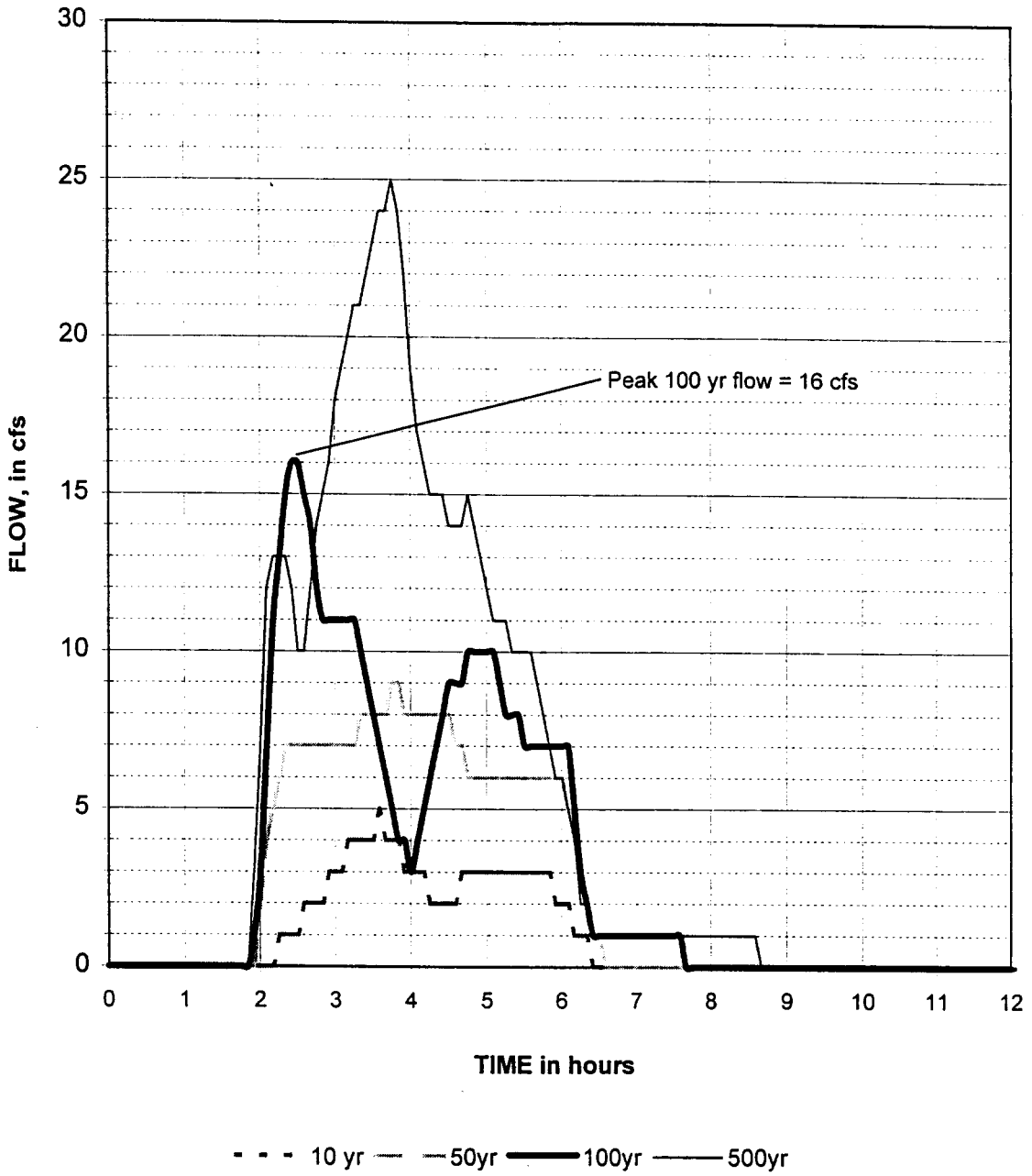
Figure 32



Tahoe Basin
Incline Village Hydrology Report

Wood Creek at SR 28
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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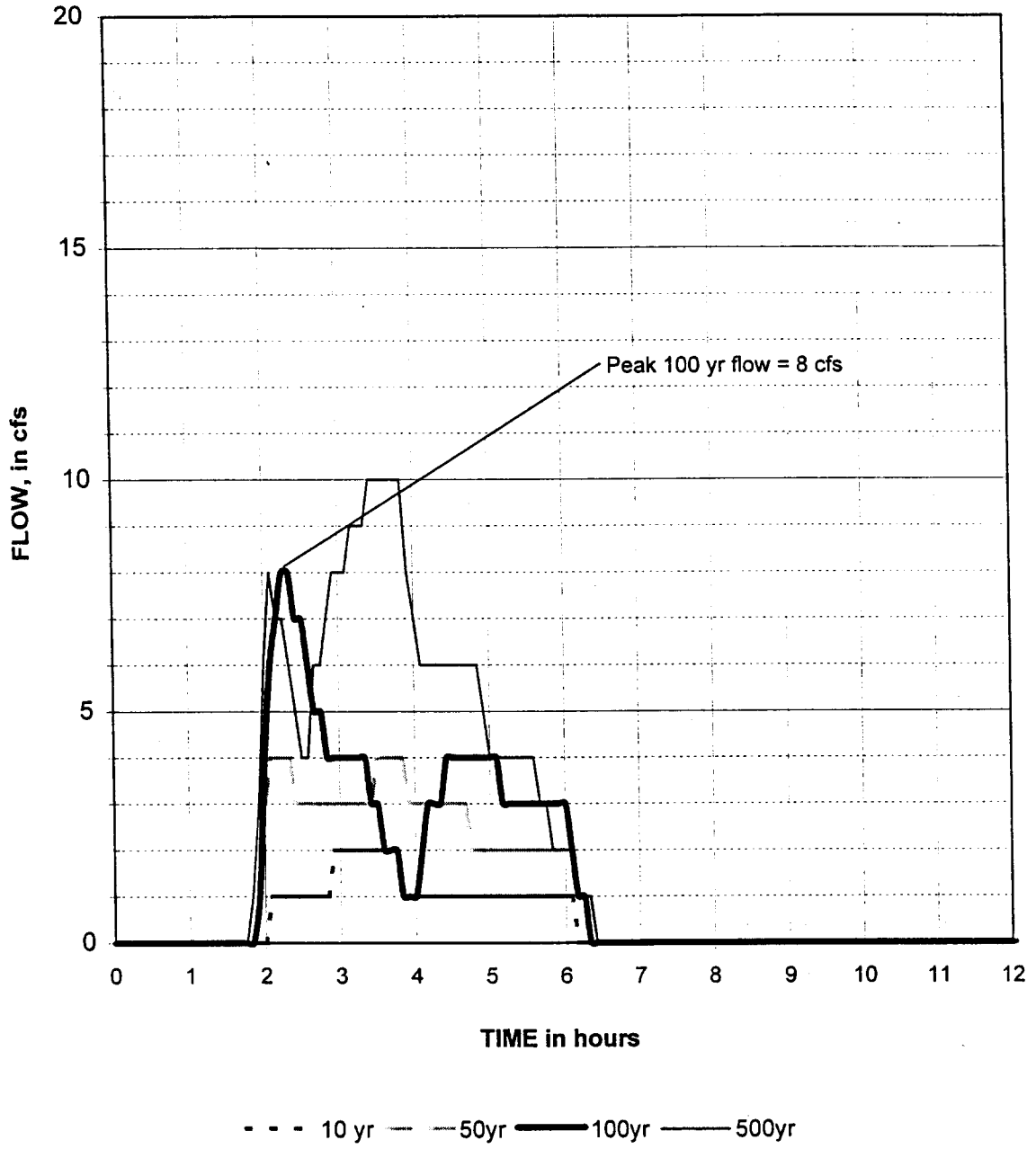
Figure 33



Tahoe Basin
Incline Village Hydrology Report

Wood Creek at Mouth
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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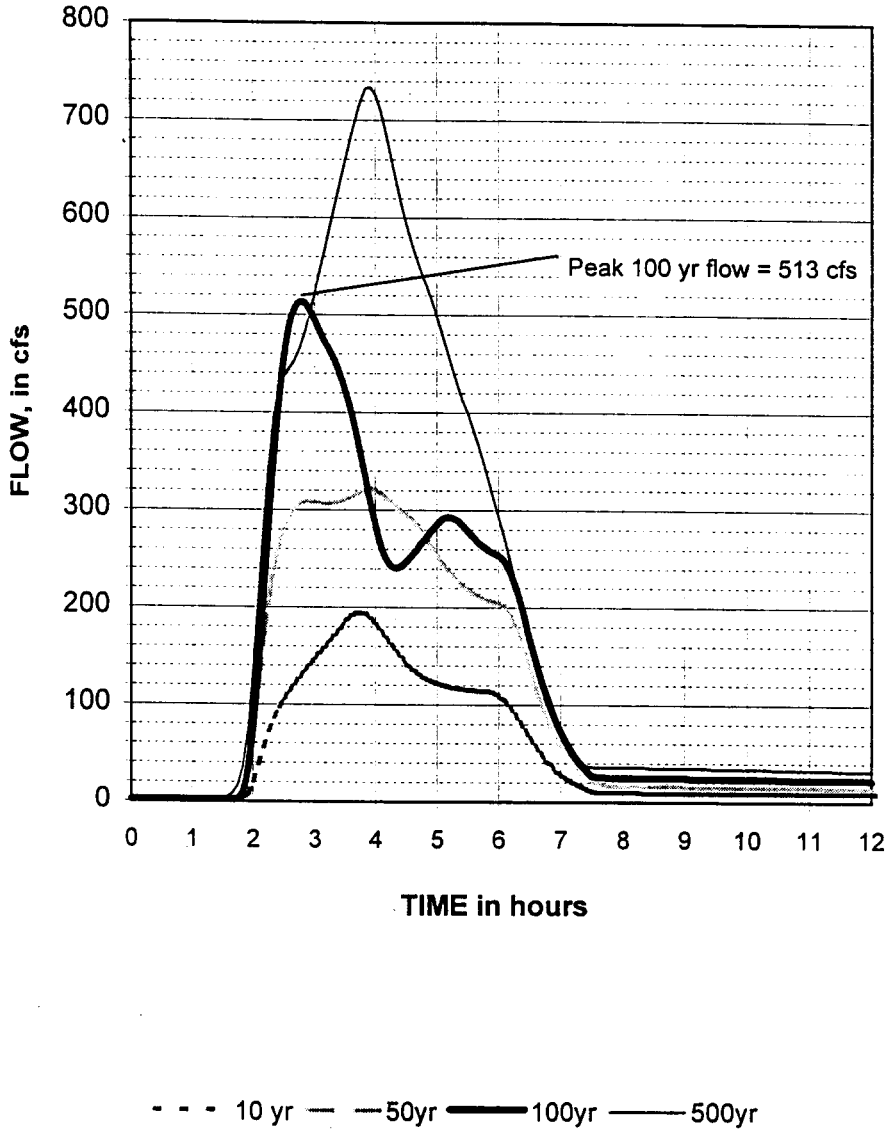
Figure 34



Tahoe Basin
Incline Village Hydrology Report

Third Cr ab Ophir Diversion
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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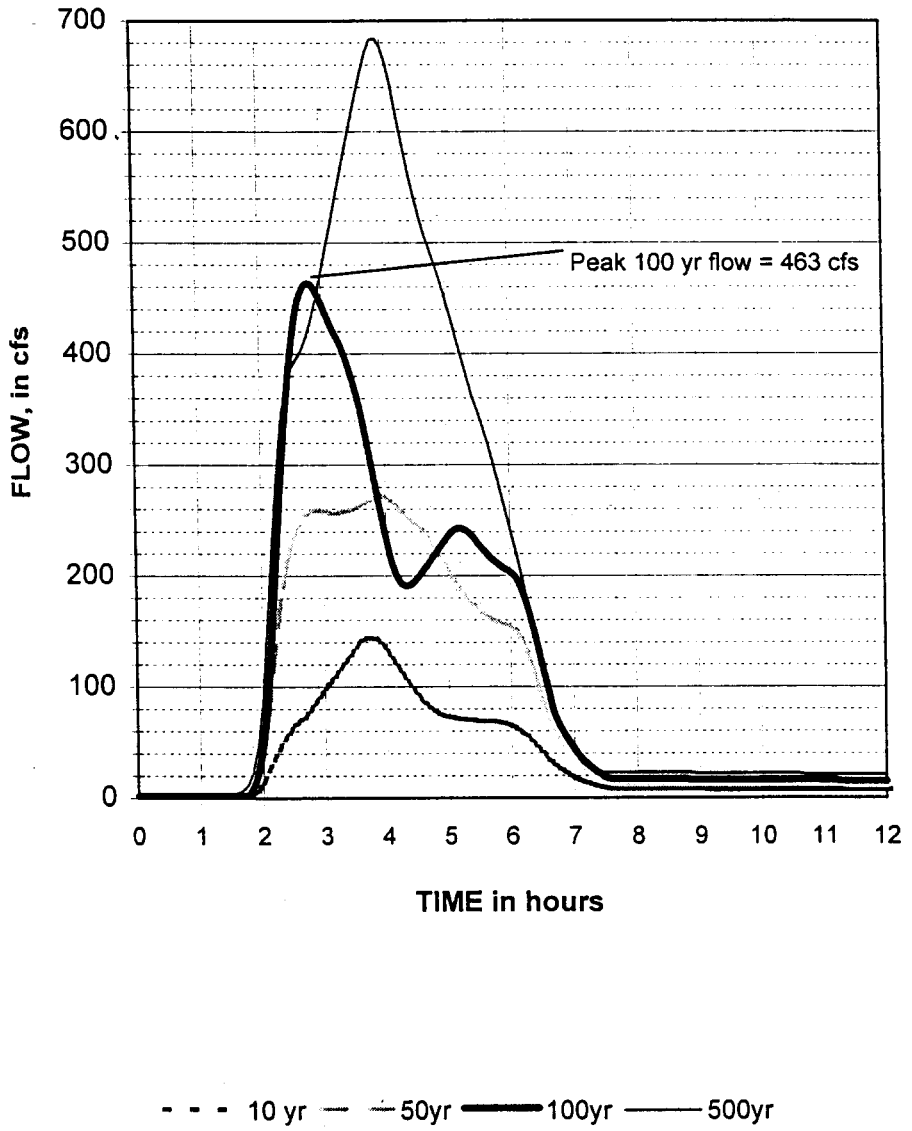
Figure 35



Tahoe Basin
Incline Village Hydrology Report

Third Cr bl Ophir Diversion
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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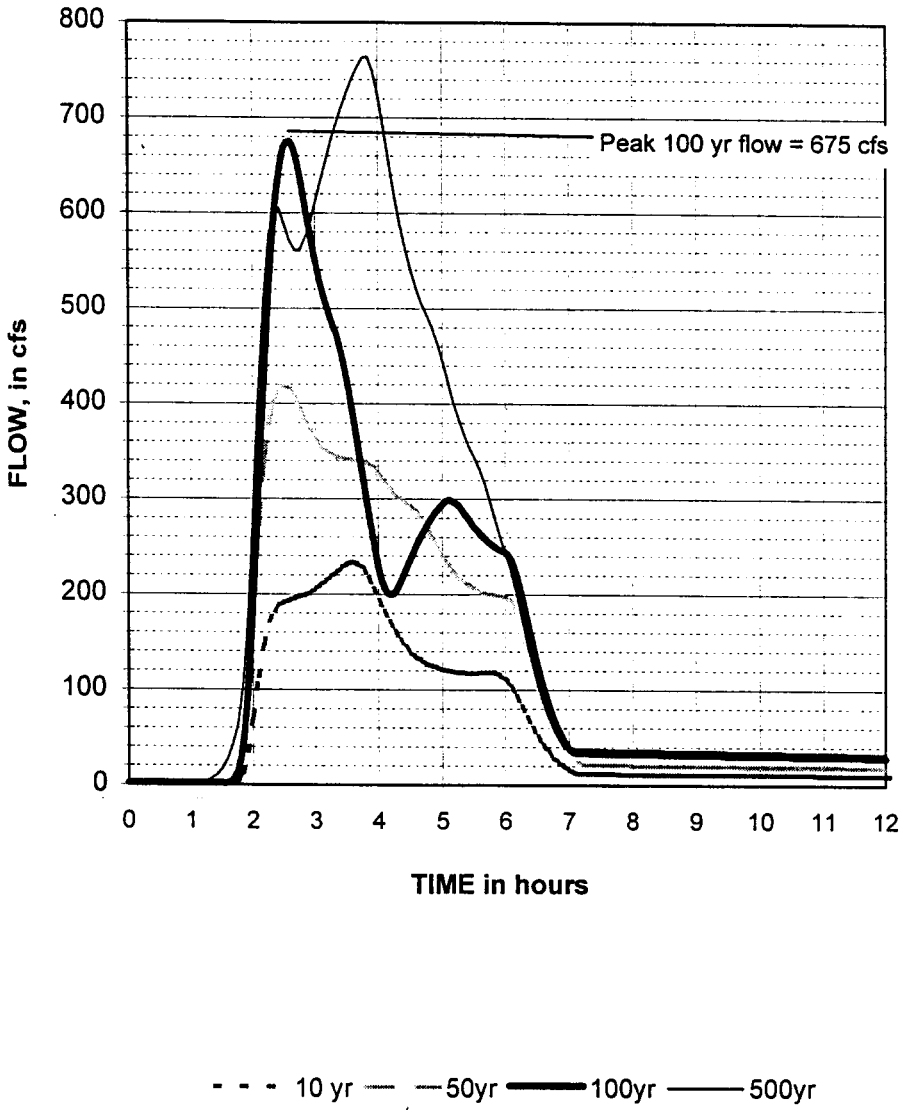
Figure 36



Tahoe Basin
Incline Village Hydrology Report

Third Cr Ginny Lake
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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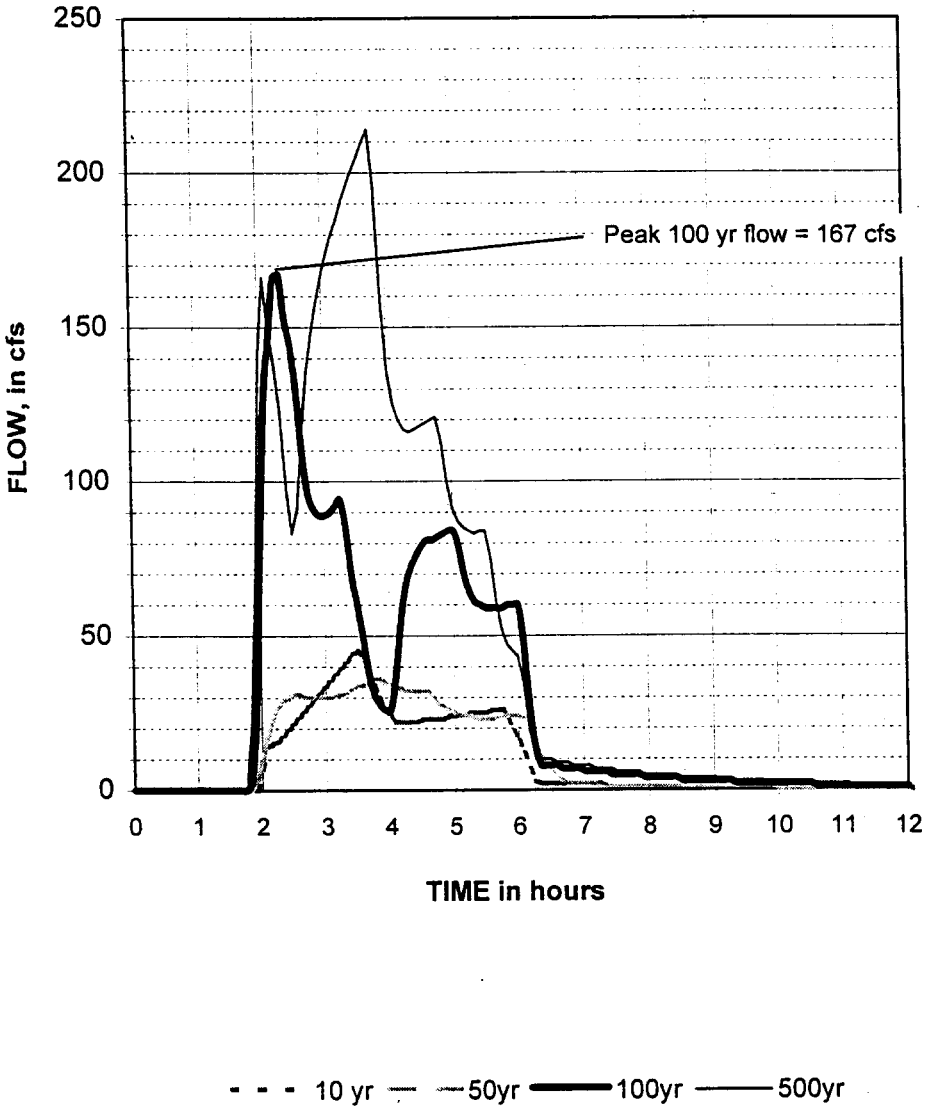
Figure 37



Tahoe Basin
Incline Village Hydrology Report

Third Cr Incline Lake
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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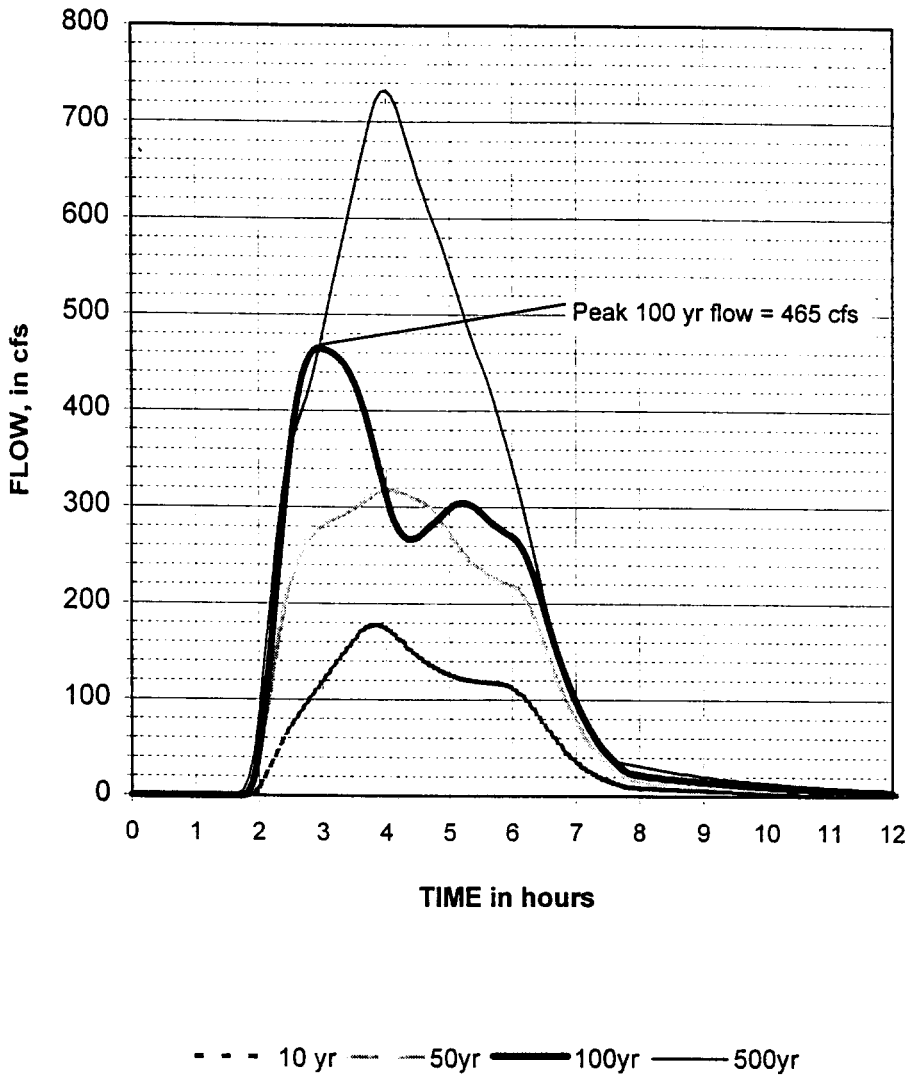
Figure 38



Tahoe Basin
Incline Village Hydrology Report

Third Cr at SR 431
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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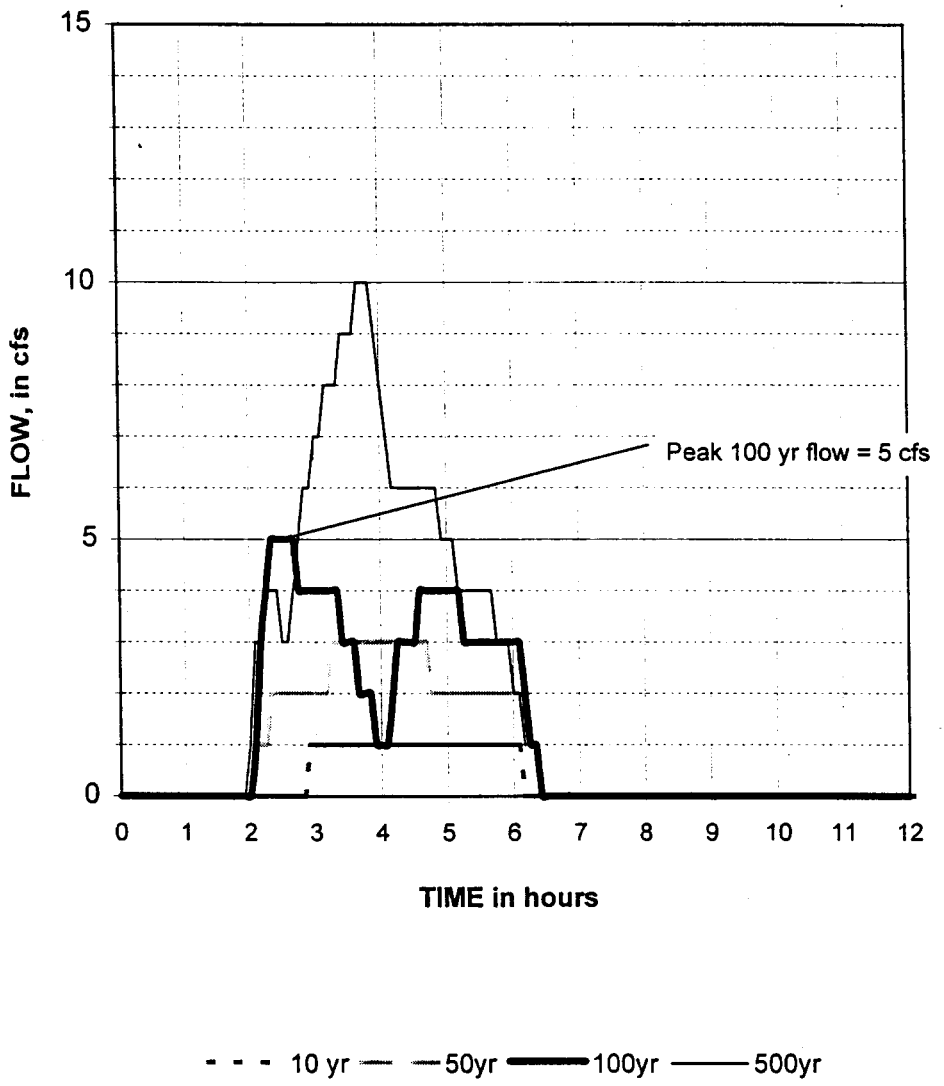
Figure 39



Tahoe Basin
Incline Village Hydrology Report

Third Cr at Village Blvd
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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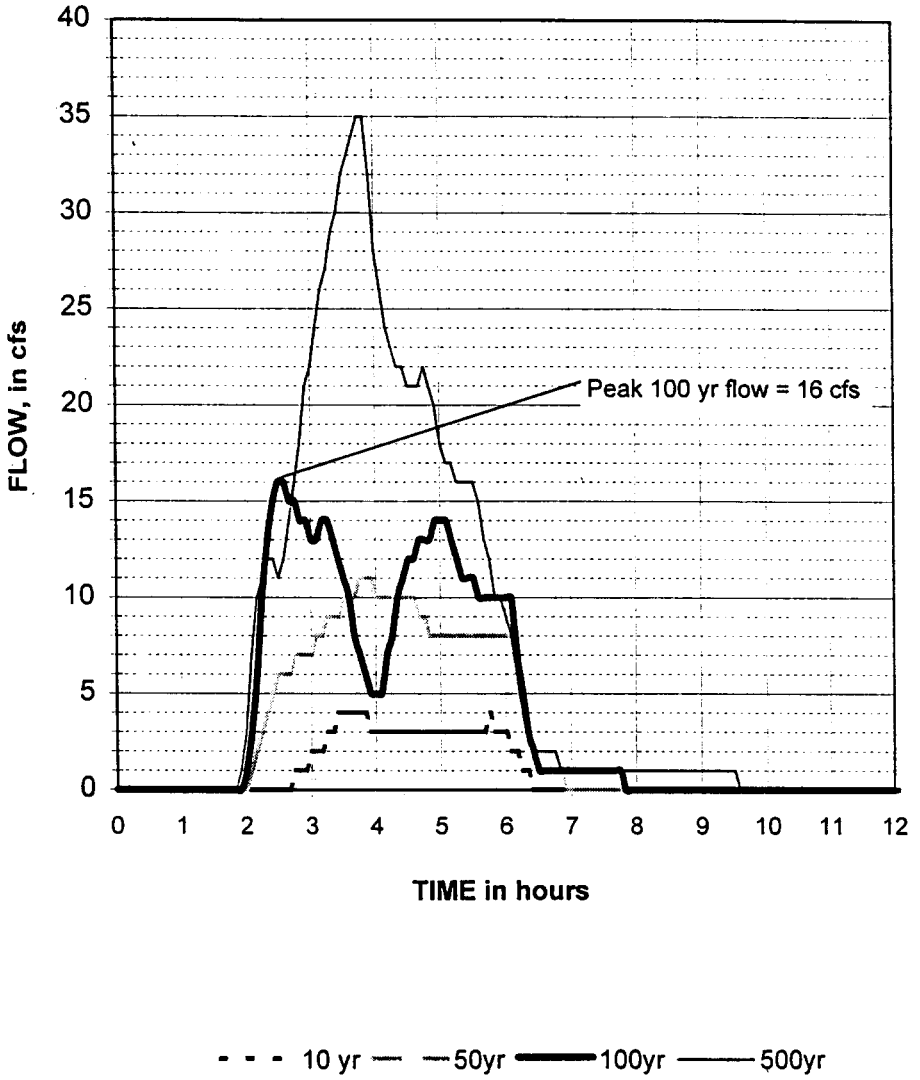
Figure 40



Tahoe Basin
Incline Village Hydrology Report

Third Cr at SR 28
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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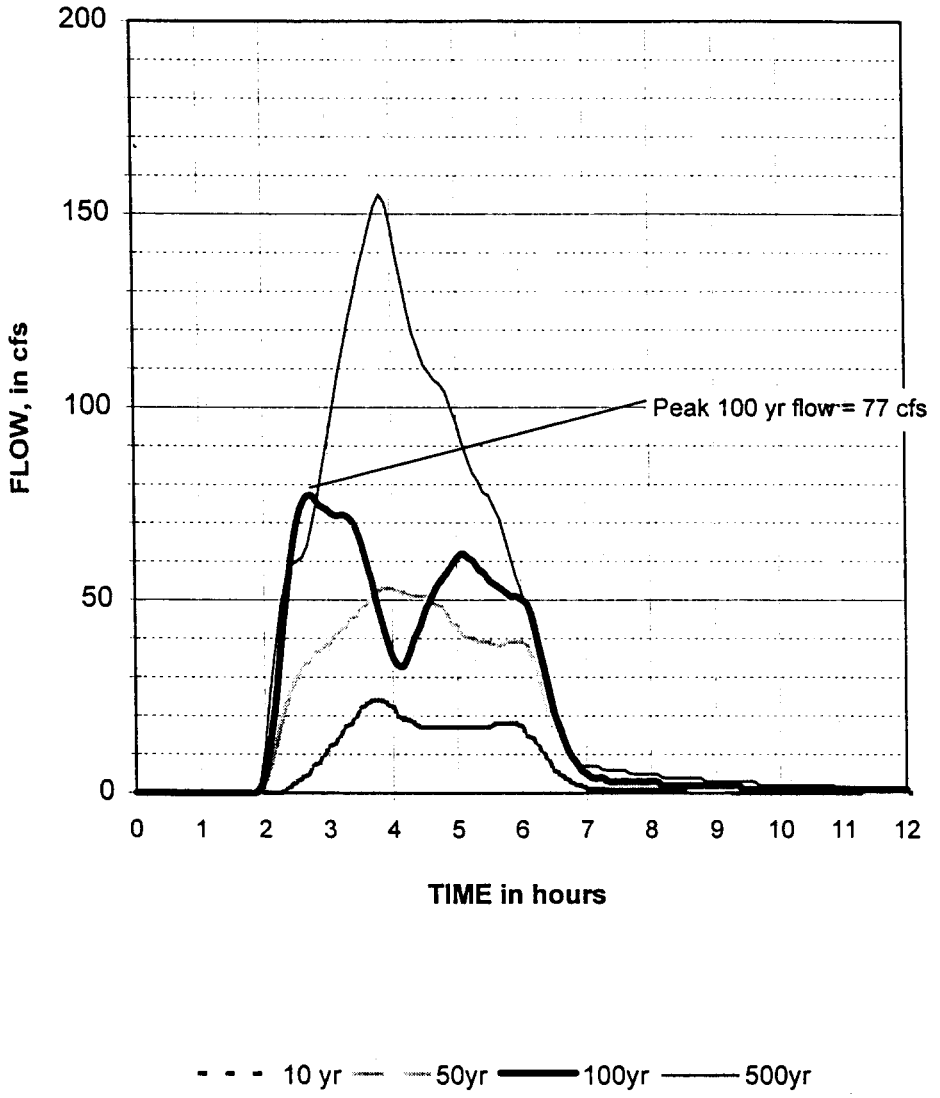
Figure 41



Tahoe Basin
Incline Village Hydrology Report

WF Third Cr ab Village Blvd
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

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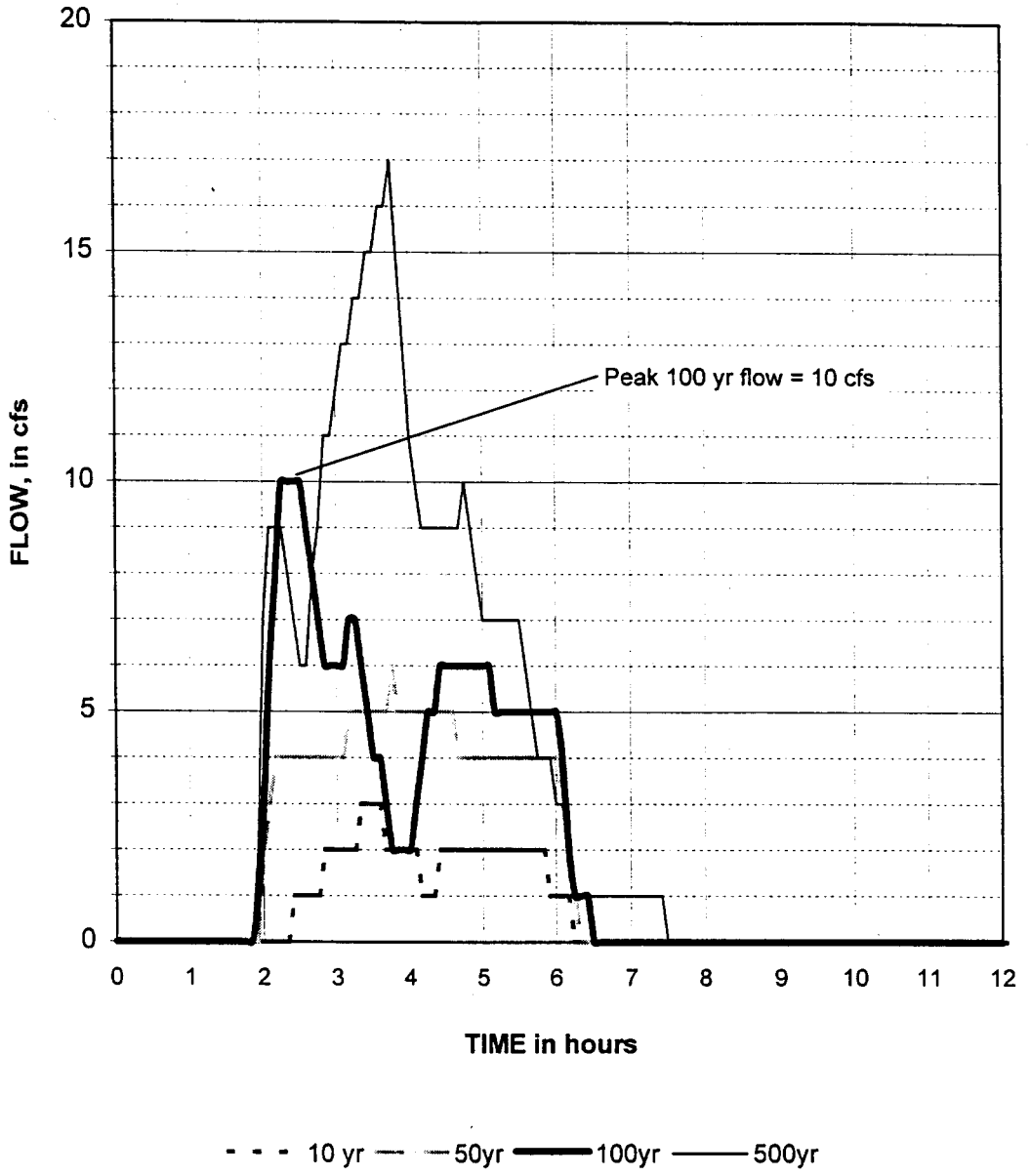
Figure 42



Tahoe Basin
Incline Village Hydrology Report

WF Third Cr at SR 28
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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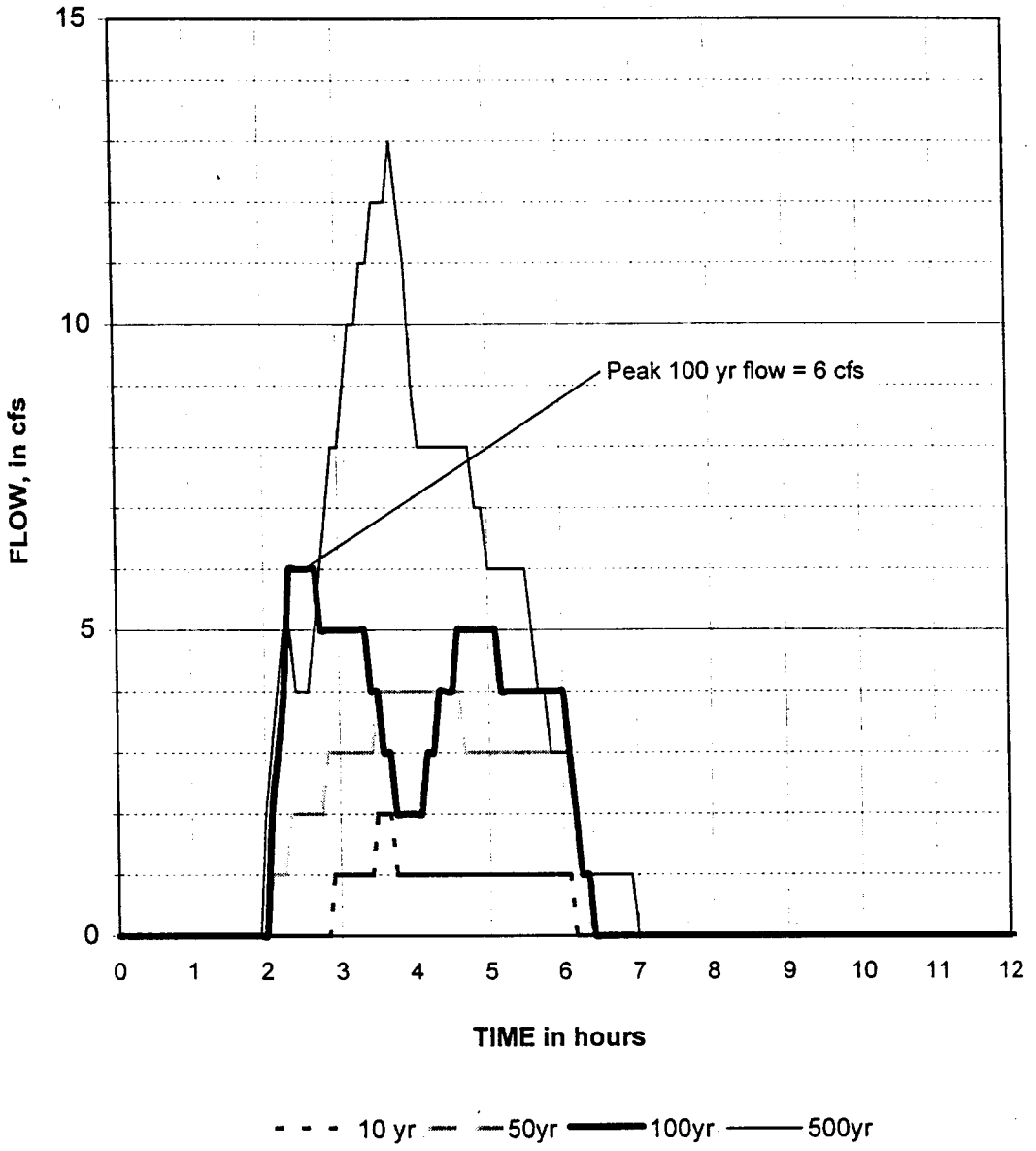
Figure 43



Tahoe Basin
Incline Village Hydrology Report

Third Cr at Mouth
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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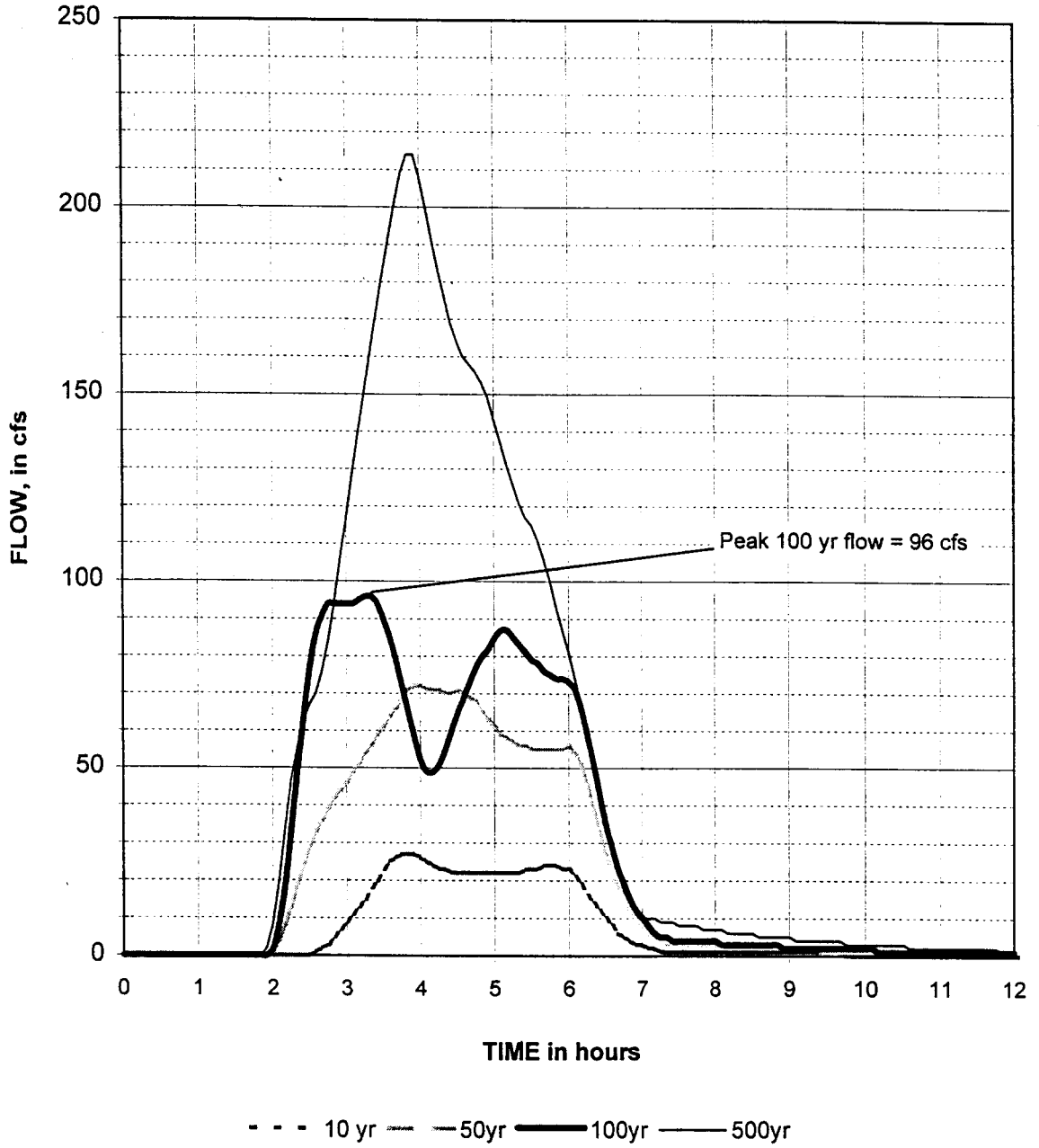
Figure 44



Tahoe Basin
Incline Village Hydrology Report

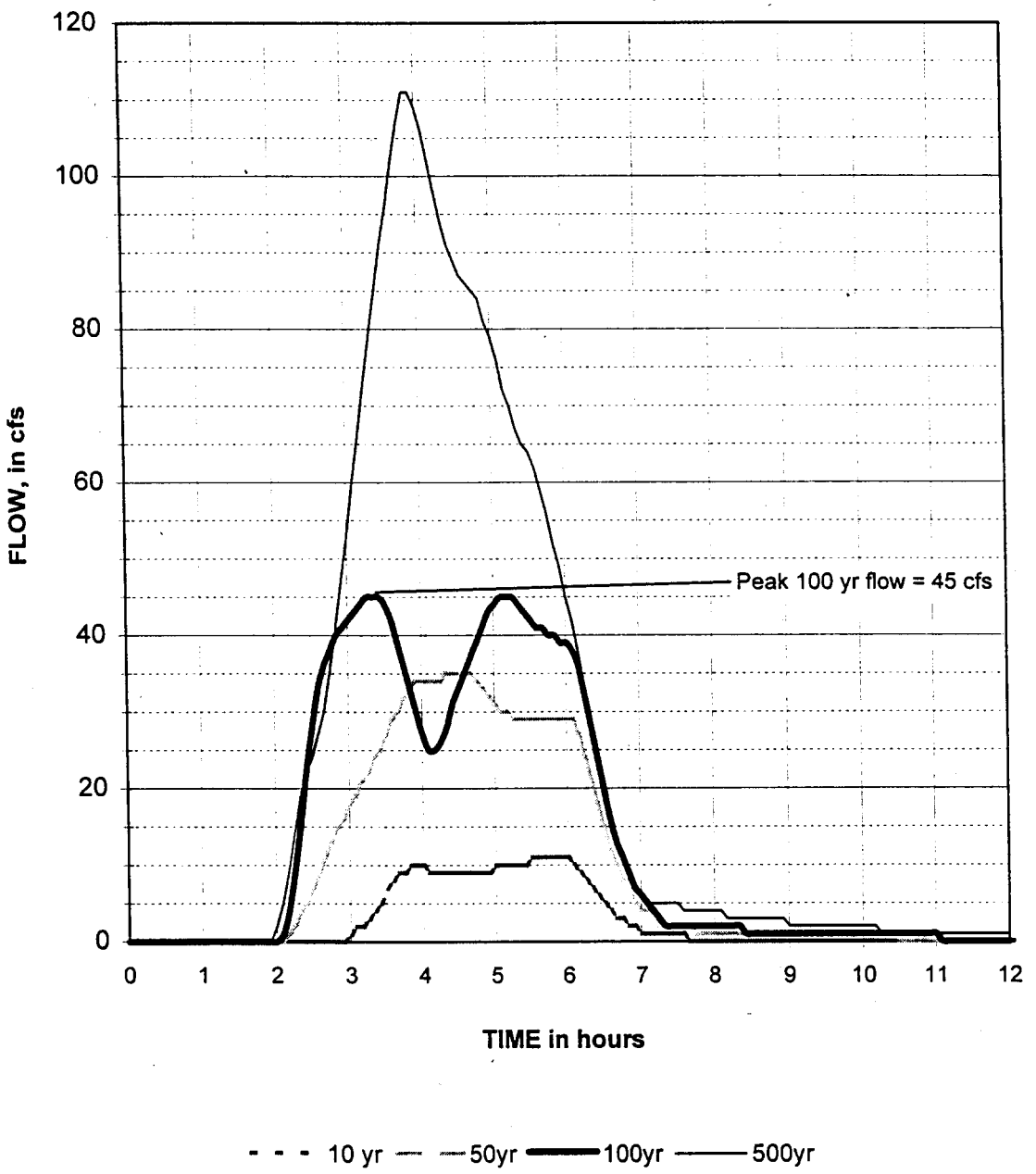
WF Incline Cr at Village Blvd
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

Dec 99

Figure 45



Tahoe Basin
Incline Village Hydrology Report

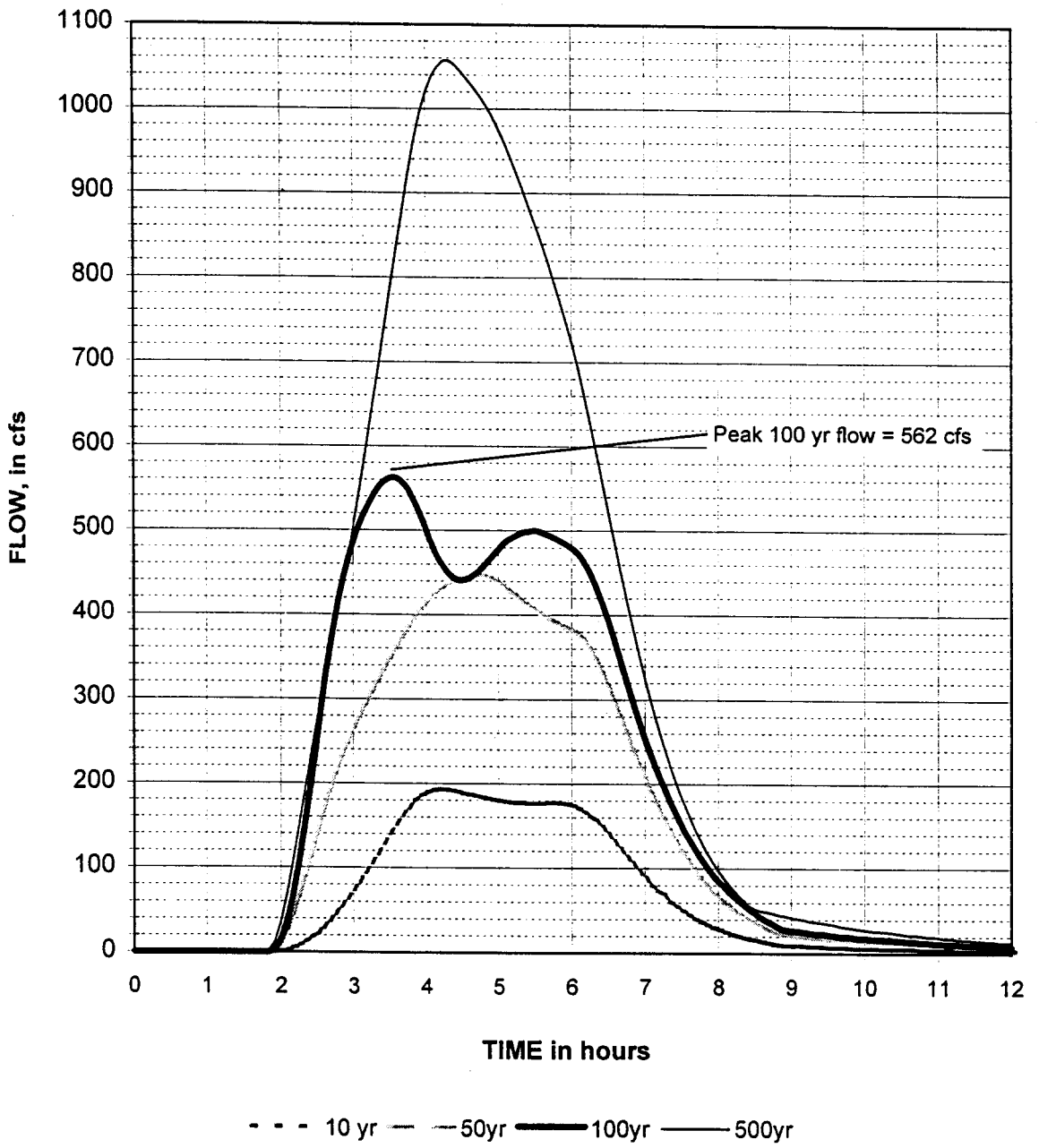
WF Incline Cr at SR 28
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

Dec 99

Figure 46



Tahoe Basin
Incline Village Hydrology Report

Incline Cr ab Ski Way
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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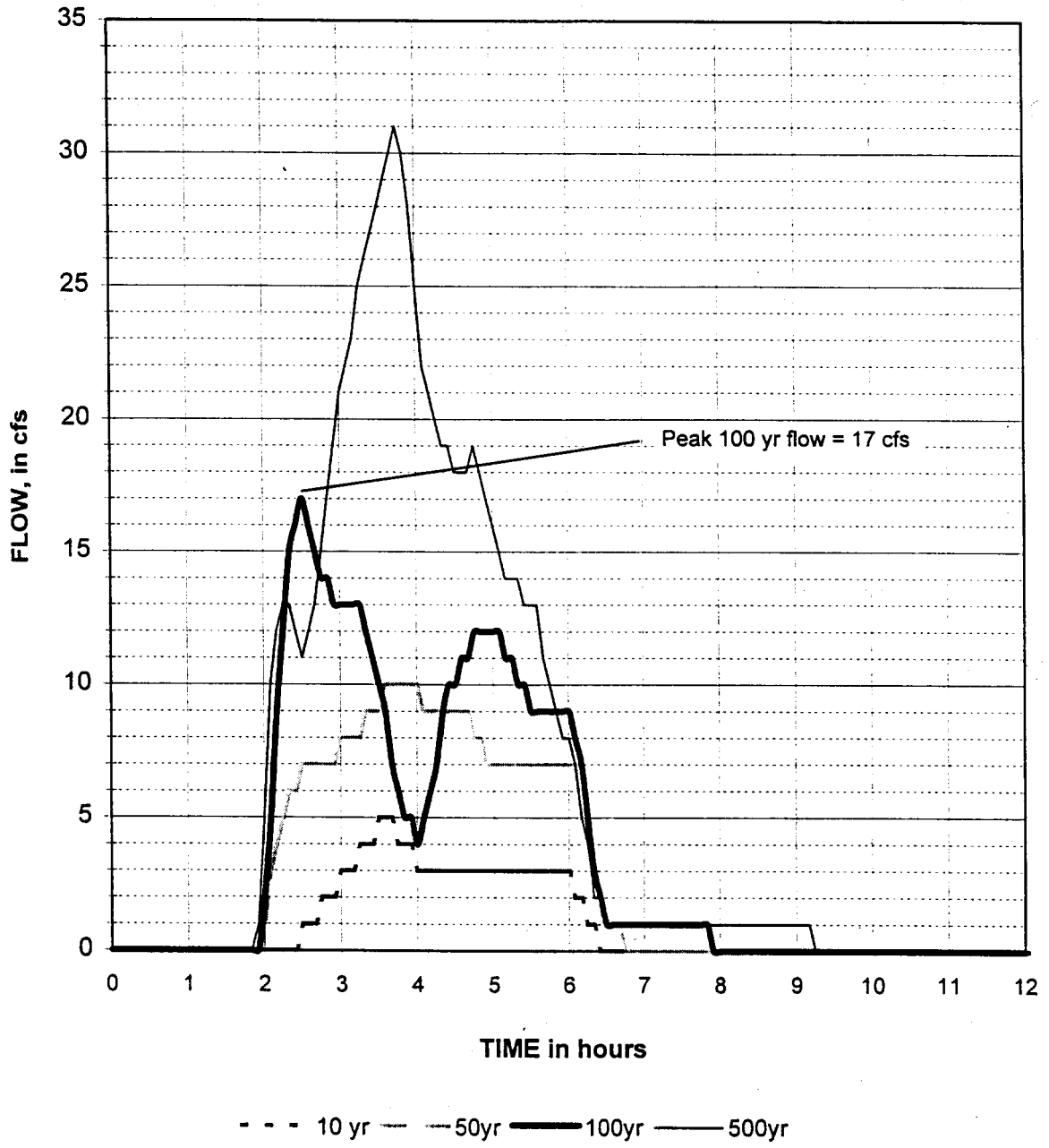
Figure 47



Tahoe Basin
Incline Village Hydrology Report

Incline Cr at SR 28
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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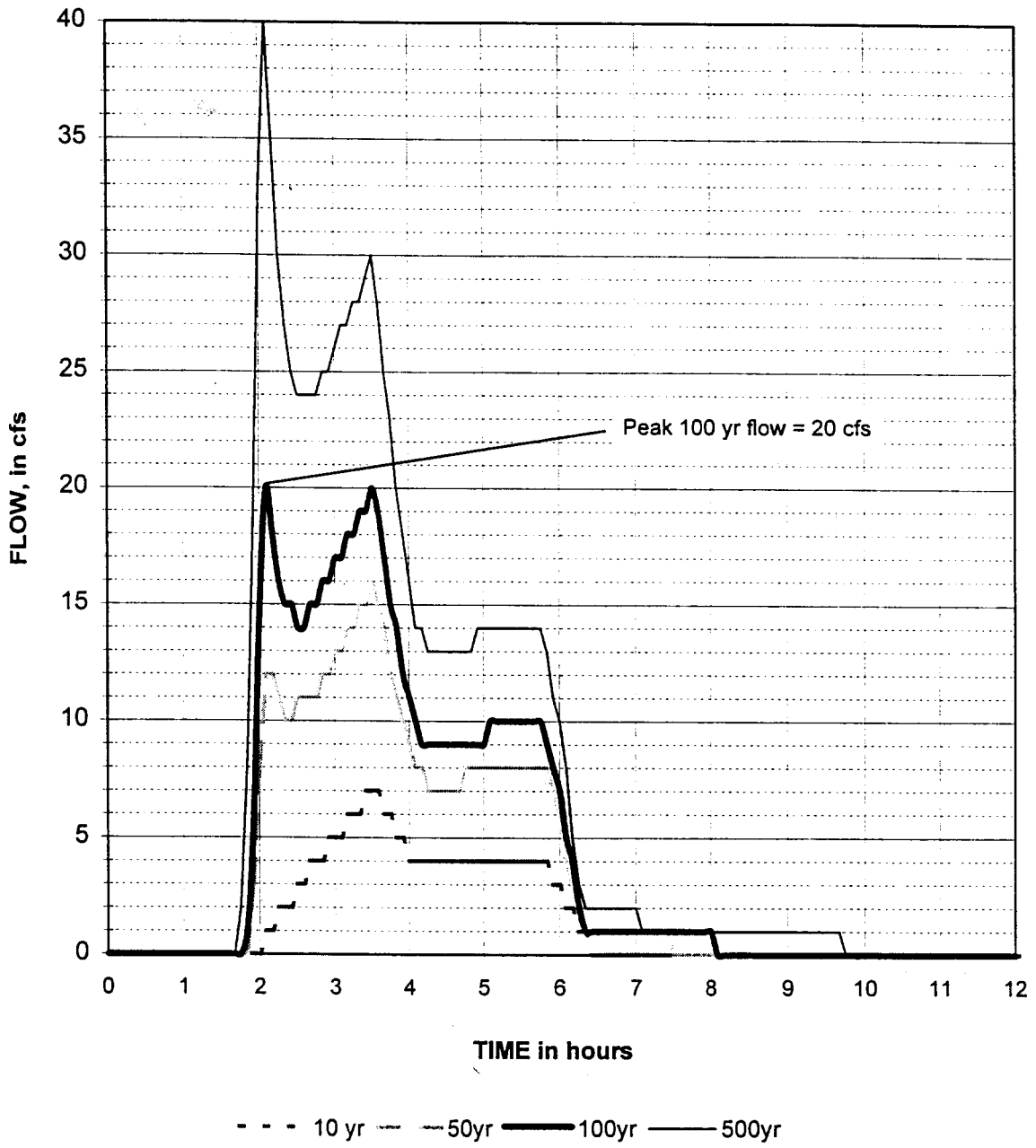
Figure 48



Tahoe Basin
Incline Village Hydrology Report

Incline Cr at Mouth
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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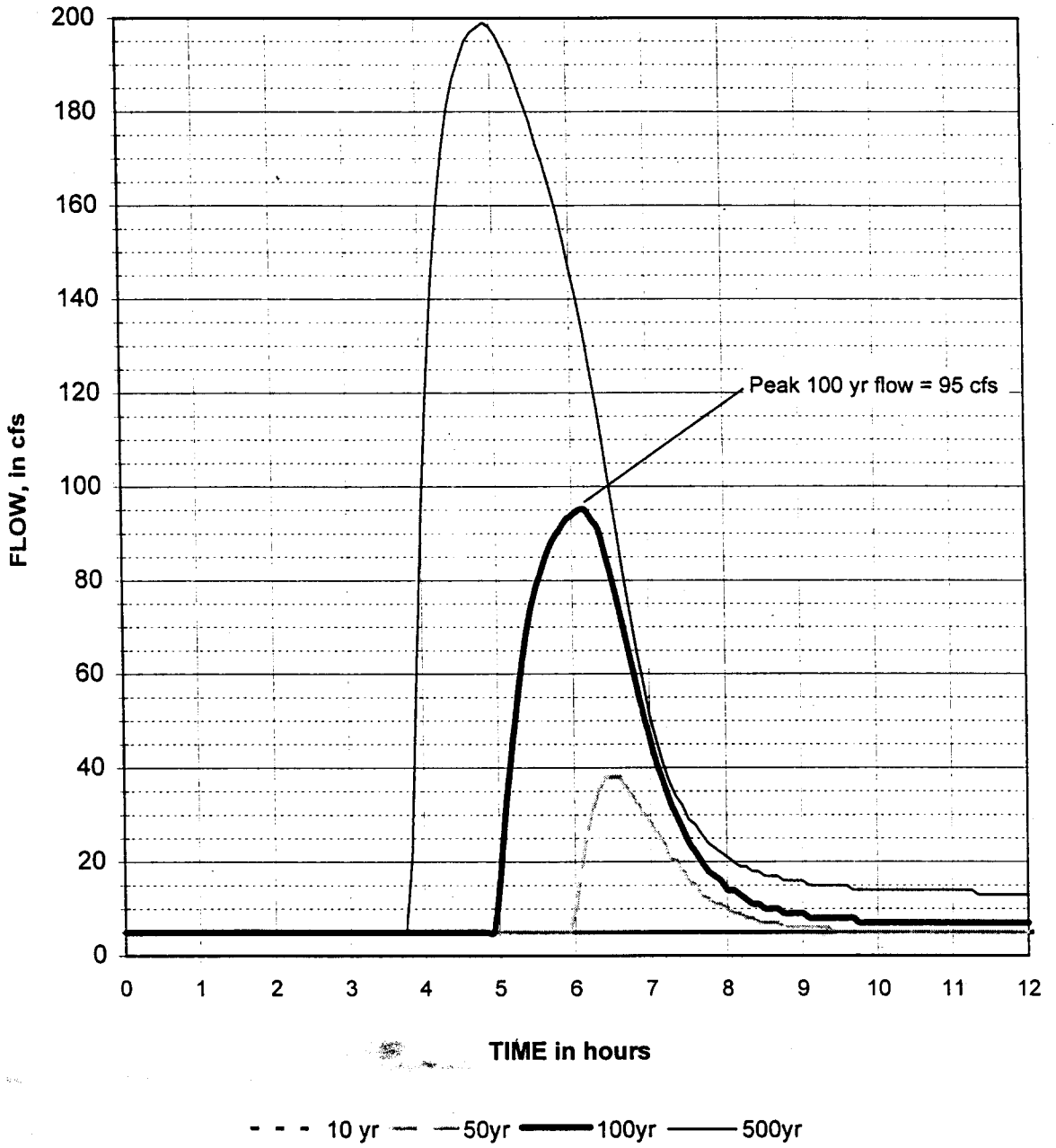
Figure 49



Tahoe Basin
Incline Village Hydrology Report

Mill Cr ab Dam
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

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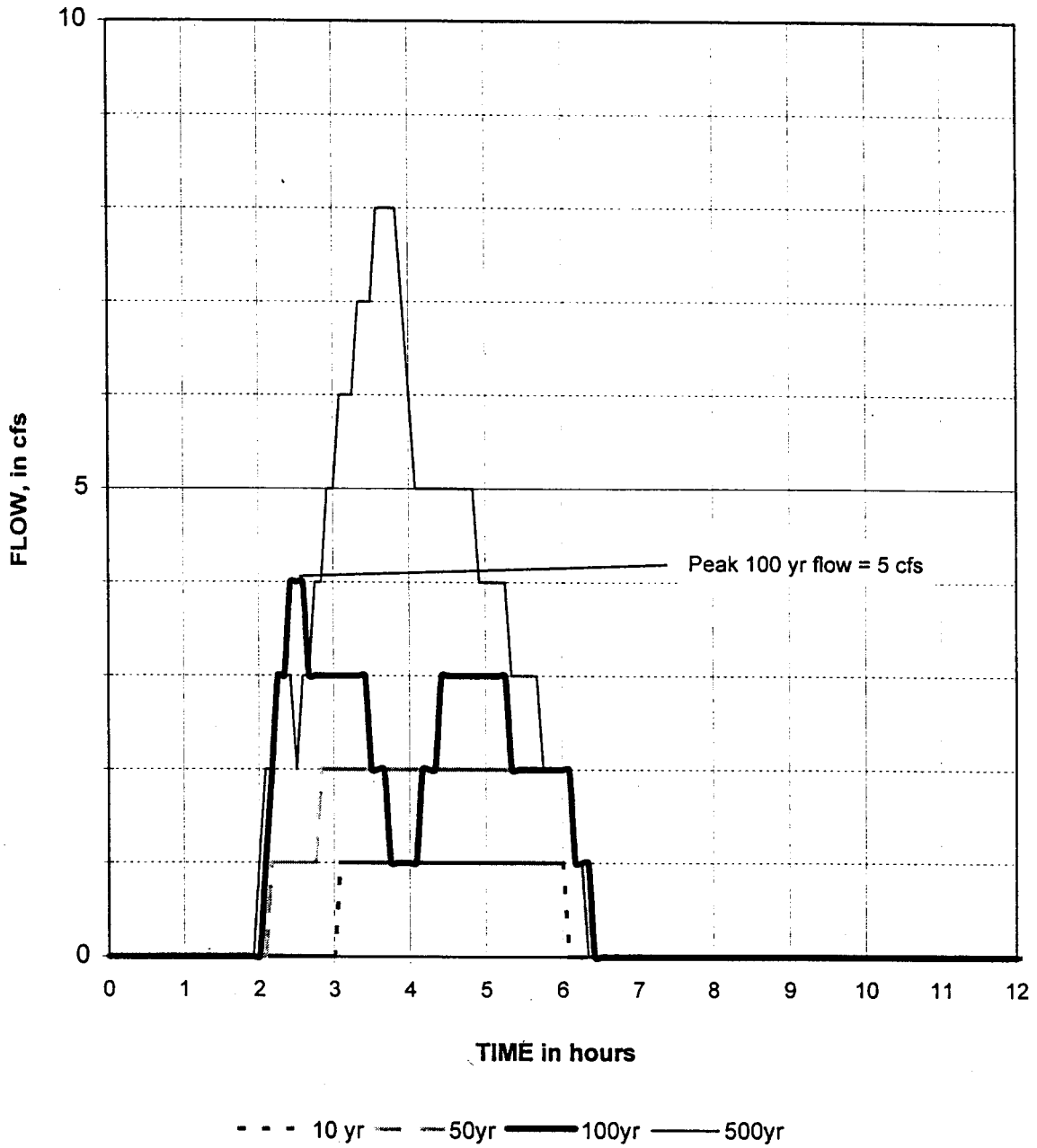
Figure 50



Tahoe Basin
Incline Village Hydrology Report

Mill Cr at SR 28
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

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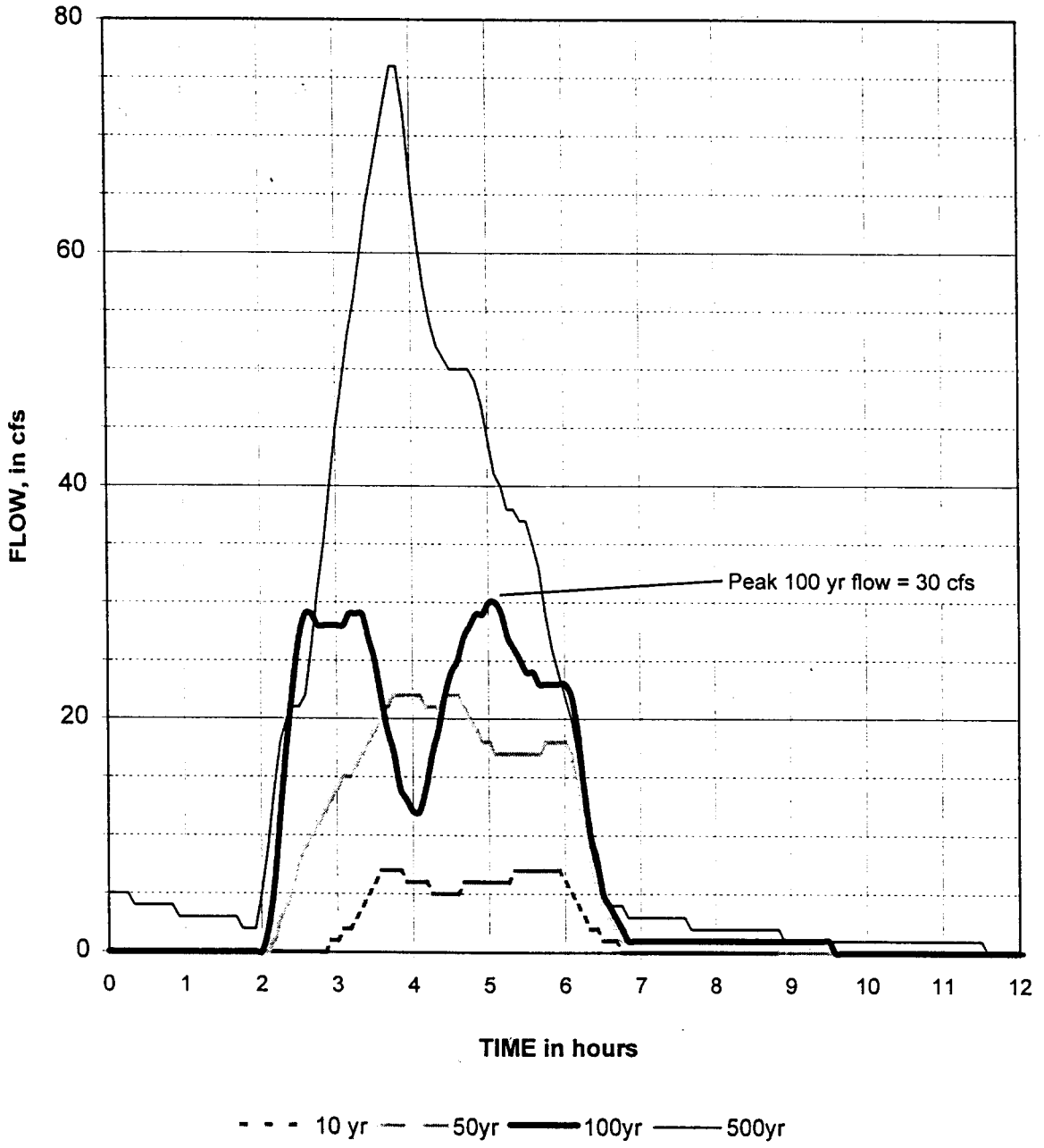
Figure 51



Tahoe Basin
Incline Village Hydrology Report

Mill Cr at Mouth
Computed Flood Hydrographs

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

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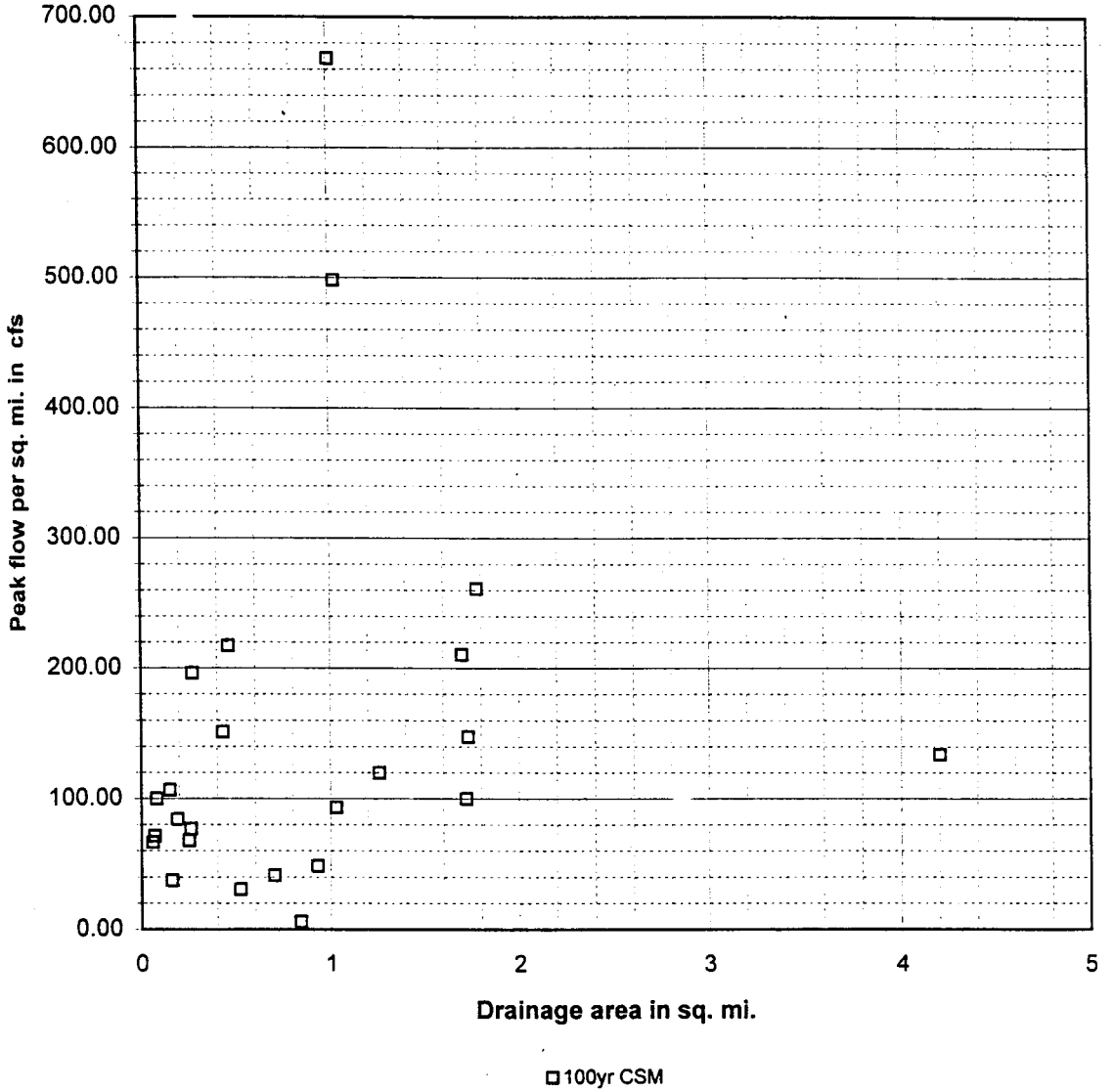
Figure 52



Tahoe Basin
Incline Village Hydrology Report

100 yr 6hr Storm CSM plot

U.S. ARMY CORPS OF ENGINEERS
SACRAMENTO DISTRICT

Prepared by JAL

Dec 99

Figure 53

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*           VERSION 4.0.3E              *
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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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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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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID   Incline Village 6hr 100yr FPMS HEC-1 Model
  2           ID   This filename: INCL100r.DAT, 10/14/99
  3           ID   Removed all routings except within subareas
  4           ID   and those above Incline Lake
  5           ID   Model time reduced to 8 hrs.
  6           ID   3hr precip burst moved to after first hour.
  7           ID   Precip ratioed from freq curve and NAP map.
  8           ID   Creek locations in model from west to east
  9           ID   Numbers in DSS path refer to hydraulic analysis pts
 10           ID   5 min UHG, LAUHG, sgr47.dat Truckee Mdws avg mtn ws
 11           ID   Curve numbers lumped to subareas
 12           ID   Muskingum steps chosen as minimum value
 13           ID   to make model stable at X = 0.4 using
 14           ID   equation on pg A-66 in HEC-1 manual
 15           ID   Modified Puls routing for Mill Cr reservoir
 16           ID   reported as possibly unstable by program.
 17           ID
 18           ID   ******************************************
 19           ID   First Creek
 20           ID   ******************************************
*** FREE ***
              *DIAGRAM
 21           IT      05 01JAN99    0005      96
 22           IO       1       0       0

 23           KK      F1First Cr at mouth, Pt 1
 24           BA    1.72
 25           BF       0    -.05     1.5
 26           PB    3.19
 27           IN      15
 28           PI       2       2       2       3       1       3      11      21      12       7
 29           PI       4       4       4       2       1       1       3       3       3       3
 30           PI       2       2       2       2
 31           IN       5
 32           LS       0   65.14
              * n=0.07
 33           UI     121     364     566     744     863     984     955     932     867     790
 34           UI     724     659     595     532     470     409     351     312     272     243
 35           UI     215     192     170     151     136     121     106      92      82      69
 36           UI      60      48      40      31      20      12       4       0
 37           ZW   A=FIRST CR B=MOUTH PT1 C=FLOW F=
              * ZZ
              * ID ******************************************
              * ID Second Creek
              * ID ******************************************
              * *FREE
              * *DIAGRAM
              * IT 5  01JAN99  0005  96
              * IO 1 0 0
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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 38           KK      S1Second Cr at mouth, Pt 2
 39           BA    1.73
 40           BF       0    -.05     1.5
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41          PB    3.27
42          IN      15
43          PI       2       2       2       3       1       3      11      21      12       7
44          PI       4       4       4       2       1       1       3       3       3       3
45          PI       2       2       2       2
46          IN       5
47          LS       0   69.79
            * n=0.07
48          UI      99     297     470     626     728     845     896     870     839     781
49          UI     718     664     611     558     507     456     407     356     311     281
50          UI     247     224     201     180     163     145     133     120     107      95
51          UI      83      76      68      59      48      42      34      26      17      11
52          UI       5       0
53          ZW   A=SECOND CR B=MOUTH PT2 C=FLOW F=
            * ZZ
            * ID ****************************************
            * ID Burnt Cedar Beach Creek
            * ID ****************************************
            * *FREE
            * *DIAGRAM
            * IT 5  01JAN99  0005  96
            * IO 1 0 0

54          KK    BCB1Burnt Cedar Beach Cr at mouth, pt 20
55          BA    0.43
56          BF       0    -.05     1.5
57          PB    2.43
58          IN      15
59          PI       2       2       2       3       1       3      11      21      12       7
60          PI       4       4       4       2       1       1       3       3       3       3
61          PI       2       2       2       2
62          IN       5
63          LS       0   74.31
            * n=0.05
64          UI     188     485     606     531     422     321     228     165     123      91
65          UI      67      49      31      18       5       0
66          ZW   A=BNT CDR BCH CR B=MOUTH PT20 C=FLOW F=
            * ZZ
            * ID ****************************************
            * ID Burnt Cedar Creek
            * ID ****************************************
            * *FREE
            * *DIAGRAM
            * IT 5  01JAN99  0005  96
            * IO 1 0 0
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LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

67          KK     BC1Burnt Cedar Cr at mouth, Pt 3
68          BA    0.27
69          BF       0    -.05     1.5
70          PB    2.21
71          IN      15
72          PI       2       2       2       3       1       3      11      21      12       7
73          PI       4       4       4       2       1       1       3       3       3       3
74          PI       2       2       2       2
75          IN       5
76          LS       0   79.74
            * n=0.04
77          UI     114     295     374     332     265     204     147     106      79      59
78          UI      44      32      22      13       4       0
79          ZW   A=BURNT CEDAR CR B=MOUTH PT3 C=FLOW F=
            * ZZ
            * ID ****************************************
            * ID Wood Creek
            * ID ****************************************
            * *FREE
            * *DIAGRAM
            * IT 5  01JAN99  0005  96
            * IO 1 0 0

80          KK      W1Wood Cr at SR 431, Pt 17
81          BA     1.7
82          BF       0    -.05     1.5
83          PB    3.84
84          IN      15
85          PI       2       2       2       3       1       3      11      21      12       7
86          PI       4       4       4       2       1       1       3       3       3       3
87          PI       2       2       2       2
88          IN       5
89          LS       0   68.67
            * n=0.07
90          UI     107     320     503     667     770     896     909     876     845     772
91          UI     711     654     596     541     486     432     378     327     293     257
92          UI     231     207     185     166     147     134     120     107      93      82
93          UI      75      65      55      44      37      28      20      12       4       0
94          ZW   A=WOOD CR B=SR 431 PT17 C=FLOW F=

95          KK     W1RRoute Wood to SR 28 at 4fps
96          RM       4    0.32     0.4
            * ********

97          KK      W2Wood Cr at SR 28
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 98          BA    0.19
 99          BF       0    -.05     1.5
100          PB    1.43
101          IN      15
102          PI       2       2       2       3       1       3      11      21      12       7
103          PI       4       4       4       2       1       1       3       3       3       3
104          PI       2       2       2       2
105          IN       5
106          LS       0   82.01
             * n=0.04
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

107          UI     143     334     322     239     161     103      69      47      30      17
108          UI       7       0
109          ZW   A=WOOD CR B=SR28 LOCAL C=FLOW F=

110          KK     W2Ccombine upper & mid Wood, Pt 4
111          HC       2
112          ZW   A=WOOD CR B=SR28 PT4 C=FLOW F=

113          KK     W2RRoute Wood Cr to mouth at 3fps
114          RM       3    0.26     0.4
             * ********

115          KK      W3Wood Cr at mouth
116          BA    0.08
117          BF       0    -.05     1.5
118          PB    1.26
119          IN      15
120          PI       2       2       2       3       1       3      11      21      12       7
121          PI       4       4       4       2       1       1       3       3       3       3
122          PI       2       2       2       2
123          IN       5
124          LS       0   85.14
             * n=0.03
125          UI     125     211     138      73      40      22       9       0
126          ZW   A=WOOD CR B=MOUTH LOCAL C=FLOW F=

127          KK     W3CCombine Wood Cr at mouth, Pt 5
128          HC       2
129          ZW   A=WOOD CR B=MOUTH PT5 C=FLOW F=
             * ZZ
             * ID ****************************************
             * ID Third Creek
             * ID ****************************************
             * *FREE
             * *DIAGRAM
             * IT 5  01JAN99  0005  96
             * IO 1 0 0

130          KK      T1Third Cr ab Ophir Div.
131          BA    1.03
132          BF       2    -.05     1.03
133          PB    6.33
134          IN      15
135          PI       2       2       2       3       1       3      11      21      12       7
136          PI       4       4       4       2       1       1       3       3       3       3
137          PI       2       2       2       2
138          IN       5
139          LS       0   61.84
             * n=0.07
140          UI      93     278     428     541     645     658     635     589     530     480
141          UI     429     381     333     286     240     210     180     159     138     122
142          UI     106      94      82      70      60      50      42      33      28      20
143          UI      15       8       1       0
144          ZW   A=THIRD CR B=AB OPHIR C=FLOW F=
             * ********
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

145          KK     TD1Divert part Third Cr flow to Ophir Cr.
146          DT   OPDIV
147          DI       0       5     125    1000
148          DQ       0       0      50      50
             * KK TD1R Recall Ophir Cr diversion
             * BA 0.01
             * DR OPDIV
             * ZW A=THIRD CR B=OPHIR DIV C=FLOW F=
             * KK TD1B Re-divert to Ophir Cr
             * DT OPDIV2
             * DI 0 100 1000
             * DQ 0 50 50
149          ZW   A=THIRD CR B=BL OPHIR C=FLOW F=

150          KK     T1RRoute Third to Ginny Lk at 4 fps
151          RM       1    0.10     0.4
             * ********

152          KK      T2Third Cr - Ginny Lk Watershed
153          BA    1.01
154          BF       2    -.05     1.03
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155          PB    5.67
156          IN      15
157          PI       2       2       2       3       1       3      11      21      12       7
158          PI       4       4       4       2       1       1       3       3       3       3
159          PI       2       2       2       2
160          IN       5
161          LS       0   69.60
             * n=0.07
162          UI     156     447     665     828     829     778     680     595     512     432
163          UI     353     287     236     200     168     140     119     100      81      68
164          UI      54      41      30      15       0
165          ZW   A=THIRD CR B=GINNY LK LOCAL C=FLOW F=

166          KK     T2CCombine Third at Ginny Lk. WS outlet
167          HC       2
             * ********

168          KK     TD2Divert part Third Cr to Incline Lake
169          KM   Divert part of flow to Incline Lk
170          DT   INDIV
171          DI       0       4     150     550    1000
172          DQ       0       4      60     160     200
173          ZW   A=THIRD CR B=BL INCLINE DIV C=FLOW F=

174          KK     T2RRoute rest Third Cr to SR 431 at 4 fps
175          RM       9    0.85     0.4

176          KK    TD2RRecall Incline Lk diversion
177          BA    0.01
178          DR   INDIV
179          ZW   A=THIRD CR B=INCLINE DIV C=FLOW F=
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

180          KK    T2RBRoute diverted Third Cr Q to Incline Lk
181          RM       2    0.19     0.4
             * ********

182          KK      T3Incline Lake
183          BA    0.46
184          BF       0    -.05     1.5
185          PB    4.46
186          IN      15
187          PI       2       2       2       3       1       3      11      21      12       7
188          PI       4       4       4       2       1       1       3       3       3       3
189          PI       2       2       2       2
190          IN       5
191          LS       0   62.30
             * n=.03 a=.46 l=.57 lca=.38 d=280
             * calc lake as CN = 100
192          UI     728    1221     793     417     227     122      50       0
193          ZW   A=WF THIRD CR B=INCLINE LK C=FLOW F=

194          KK     T3CCombine Incline Lake and diversion
195          HC       2
196          ZW   A=THIRD CR B=RES INFLOW C=FLOW F=
             * ********

197          KK     TRRIncline Lake reservoir routing
198          KM   Route through Incline Lake
199          RS       1    STOR     146
200          SV     135     157     166     177     197     218     239     261     274     285
201          SV     309     335
202          SQ       3     3.2     3.3     3.4      24     113     239     393     571     668
203          SQ    1561    5096
204          SE    8316    8317  8317.5    8318    8319    8320    8321    8322  8322.5    8323
205          SE    8324    8325
206          ZW   A=THIRD CR CR B=RES OUTFLOW C=FLOW F=

207          KK    TRR2Route res out to Third Cr SR 431 at 4 fps
208          RM       7    0.72     0.4

209          KK    TRRCReturn res out to Third Cr at SR 431
210          HC       2
             * ********

211          KK      T4Third Cr at SR 431
212          BA    1.78
213          BF       0    -.05     1.5
214          PB    4.09
215          IN      15
216          PI       2       2       2       3       1       3      11      21      12       7
217          PI       4       4       4       2       1       1       3       3       3       3
218          PI       2       2       2       2
219          IN       5
220          LS       0   69.44
             * n=0.07
221          UI     120     361     564     744     860     991     974     949     894     814
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

222          UI     748     683     619     557     495     436     373     330     290     257
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223          UI     231     204     183     162     146     131     116     100      89      80
224          UI      69      57      45      38      31      21      13       5       0
225          ZW   A=THIRD CR B=SR431 LOCAL C=FLOW F=

226          KK     T4CCombine Third at SR431, Pt 18
227          HC       2
228          ZW   A=THIRD CR B=SR431 PT18 C=FLOW F=

229          KK     T4RRoute Third to Village Bl at 3 fps
230          RM       2    0.19     0.4
             * ********

231          KK      T5Third Cr at Village Bl
232          BA    0.07
233          BF       0    -.05     1.5
234          PB    1.82
235          IN      15
236          PI       2       2       2       3       1       3      11      21      12       7
237          PI       4       4       4       2       1       1       3       3       3       3
238          PI       2       2       2       2
239          IN       5
240          LS       0   75.22
             * n=0.04
241          UI      59     133     121      87      55      35      23      15       9       4
242          UI       0
243          ZW   A=THIRD CR B=VILLAGE BL LOCAL C=FLOW F=

244          KK     T5CCombine Third at Village Bl, Pt 8
245          HC       2
246          ZW   A=THIRD CR B=VILLAGE BL PT8 C=FLOW F=

247          KK     T5RRoute Third to SR 28 at 3 fps
248          RM       3    0.24     0.4
             * ********

249          KK      T6Third Cr at SR 28
250          BA    0.52
251          BF       0    -.05     1.5
252          PB    1.26
253          IN      15
254          PI       2       2       2       3       1       3      11      21      12       7
255          PI       4       4       4       2       1       1       3       3       3       3
256          PI       2       2       2       2
257          IN       5
258          LS       0   80.68
             * n=0.03 9/15
259          UI     255     614     624     480     342     222     152     105      71      47
260          UI      25       3       0
261          ZW   A=THIRD CR B=SR28 LOCAL C=FLOW F=
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1                                    HEC-1 INPUT

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

262          KK     T6CCombine Third at SR 28, Pt 9
263          HC       2
264          ZW   A=THIRD CR B=SR28 PT9 C=FLOW F=

265          KK     T6RRoute Third to WF just below SR 28
266          RM       1    0.01     0.4
             * *********

267          KK     WT1WF Third Cr at Village Bl
268          BA    0.84
269          BF       0    -.05     1.5
270          PB    2.33
271          IN      15
272          PI       2       2       2       3       1       3      11      21      12       7
273          PI       4       4       4       2       1       1       3       3       3       3
274          PI       2       2       2       2
275          IN       5
276          LS       0   72.23
             * n=0.05 9/15
277          UI     180     503     724     827     776     668     570     476     384     298
278          UI     238     194     158     129     106      83      68      51      35      25
279          UI      11       0
280          ZW   A=WF THIRD CR B=VILLAGE BL PT6 C=FLOW F=

281          KK    WT1RRoute WF Third to SR 28 at 3 fps
282          RM       4    0.32     0.4
             * ********

283          KK     WT2WF Third Cr at SR 28
284          BA    0.15
285          BF       0    -.05     1.5
286          PB    1.21
287          IN      15
288          PI       2       2       2       3       1       3      11      21      12       7
289          PI       4       4       4       2       1       1       3       3       3       3
290          PI       2       2       2       2
291          IN       5
292          LS       0   83.73
             * n=0.04 9/15
293          UI     219     387     262     144      79      45      21       0
294          ZW   A=WF THIRD CR B=SR28 LOCAL C=FLOW F=
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 295          KK    WT2CCombine WF Third at SR 28, Pt 7
 296          HC       2
 297          ZW   A=WF THIRD CR B=SR28 PT7 C=FLOW F=

 298          KK     T2RRoute main to WF just below SR 28
 299          RM       1    0.01     0.4
              * **********
1                                        HEC-1 INPUT                                                  PAGE  9

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


 300          KK    T2C2Combine WF and main just below SR 28
 301          HC       2

 302          KK   WT6R2Route WF Third to main at 3 fps
 303          RM       3    0.30     0.4
              * ********

 304          KK      T7Mouth Third
 305          BA    0.16
 306          BF       0    -.05     1.5
 307          PB    1.07
 308          IN      15
 309          PI       2       2       2       3       1       3      11      21      12       7
 310          PI       4       4       4       2       1       1       3       3       3       3
 311          PI       2       2       2       2
 312          IN       5
 313          LS       0   83.13
              * n=0.03 9/15 new
 314          UI     160     338     282     190     113      70      45      27      13       0
 315          ZW   A=THIRD CR B=MOUTH LOCAL C=FLOW F=
              * ********

 316          KK     T7CCombine Third Cr at mouth, Pt 12
 317          HC       2
 318          ZW   A=THIRD CR B=MOUTH PT 12 C=FLOW F=
              * ZZ
              * ID ******************************************
              * ID Incline Cr
              * ID
              * ID ******************************************
              * *FREE
              * *DIAGRAM
              * IT 5  01JAN99  0005  96
              * IO 1 0 0

 319          KK     WI1WF Incline at Village Dr. Pt 10
 320          BA    1.03
 321          BF       0    -.05     1.5
 322          PB    3.01
 323          IN      15
 324          PI       2       2       2       3       1       3      11      21      12       7
 325          PI       4       4       4       2       1       1       3       3       3       3
 326          PI       2       2       2       2
 327          IN       5
 328          LS       0   64.74
              * n=0.05
 329          UI     182     515     754     923     889     806     699     602     507     415
 330          UI     329     269     223     185     153     129     106      85      71      53
 331          UI      38      27      13       0
 332          ZW   A=WF INCLINE CR B=VILLAGE BL PT10 C=FLOW F=
1                                        HEC-1 INPUT                                                  PAGE 10

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


 333          KK    WI1RRoute WF Incline to SR 28 at 3 fps
 334          RM       8    0.79     0.4
              * ********

 335          KK     WI2WF Incline at SR 28
 336          BA    0.93
 337          BF       0    -.05     1.5
 338          PB    2.04
 339          IN      15
 340          PI       2       2       2       3       1       3      11      21      12       7
 341          PI       4       4       4       2       1       1       3       3       3       3
 342          PI       2       2       2       2
 343          IN       5
 344          LS       0   70.58
              * n=0.05
 345          UI     152     432     638     792     779     722     629     547     467     389
 346          UI     313     256     211     177     148     124     104      85      70      58
 347          UI      43      32      22      10       0
 348          ZW   A=WF INCLINE CR B=SR28 LOCAL C=FLOW F=

 349          KK    WI2CCombine WF Incline at SR 28, Pt 11
 350          HC       2
 351          ZW   A=WF INCLINE CR B=SR28 PT11 C=FLOW F=

 352          KK    WI2RRoute WF Incline Cr to main at 3 fps
 353          RM       3    0.33     0.4
              * ******************
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```
354          KK      I1Incline Cr at Ski Way, pt 19
355          BA     4.2
356          BF       0    -.05      1.5
357          PB    3.56
358          IN      15
359          PI       2       2       2       3       1       3      11      21      12       7
360          PI       4       4       4       2       1       1       3       3       3       3
361          PI       2       2       2       2
362          IN       5
363          LS       0   66.58
             * n=0.07
364          UI     144     432     720     938    1175    1336    1500    1649    1684    1640
365          UI    1597    1545    1443    1355    1276    1199    1121    1044     971     895
366          UI     822     752     676     606     557     513     463     428     398     363
367          UI     335     311     283     261     244     225     207     190     171     155
368          UI     144     133     121     107      91      80      69      61      52      42
369          UI      30      23      14       8       2       0
370          ZW   A=INCLINE CR B=SKI WY PT19 C=FLOW F=

371          KK      I1RRoute Incline to SR 28 at 3 fps
372          RM       4    0.38     0.4
             * ********
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1                                    HEC-1 INPUT

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

373          KK      I2Incline Cr at SR 28
374          BA    0.25
375          BF       0    -.05      1.5
376          PB     1.5
377          IN      15
378          PI       2       2       2       3       1       3      11      21      12       7
379          PI       4       4       4       2       1       1       3       3       3       3
380          PI       2       2       2       2
381          IN       5
382          LS       0   79.59
             * n=0.05
383          UI     160     391     406     316     229     151     103      72      50      33
384          UI      19       8       0
385          ZW   A=INCLINE CR B=SR28 LOCAL C=FLOW F=

386          KK      I2CCombine Incline at SR 28, Pt 13
387          HC       2
388          ZW   A=INCLINE CR B=SR28 PT13 C=FLOW F=

389          KK      I2RRoute Incline to mouth at 3 fps
390          RM       4    0.33     0.4
             * ********

391          KK      I3Incline Cr at mouth
392          BA    0.26
393          BF       0    -.05      1.5
394          PB    1.38
395          IN      15
396          PI       2       2       2       2       3       8      11      20       5       5
397          PI       5       5       5       5       3       2       2       2       2       2
398          PI       2       2       2       1
399          IN       5
400          LS       0   83.34
             * n=0.03
401          UI     270     563     459     304     179     111      69      40      17       0
402          ZW   A=INCLINE CR B=MOUTH LOCAL C=FLOW F=
             *

403          KK      I3CCombine Incline at mouth, Pt 14
404          HC       3
405          ZW   A=INCLINE CR B=MOUTH PT14 C=FLOW F=
             * ZZ
             * ID ***********************************************
             * ID Mill Creek:
             * ID Data is from 1991 FP Study
             * ID 100 yr 3-hr cloudburst storm
             * ID Note: 3 hr PMP at dam was 10.4" 9.8" excess
             * ID PMF is 6000 cfs pk, 386 AF volume (time unknown)
             * ID ***********************************************
             * *FREE
             * *DIAGRAM
             * IT 5  01JAN99  0005  96
             * IO 1 0 0
```



```
1                                    HEC-1 INPUT

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

406          KK      M1Mill Cr above Res #2
407          KM   There is no Res #1 upstream of #2
408          BA    1.26
409          BF       5    -.05     1.03
410          PB    3.04
411          IN      15
412          PI       2       2       2       3       1       3      11      21      12       7
413          PI       4       4       4       2       1       1       3       3       3       3
414          PI       2       2       2       2
```

```
415          IN       5
416          LS       0   66.32
             * n=0.07
417          UI     265     741    1070    1230    1158    1000     856     716     581     452
418          UI     362     295     240     196     161     128     104      80      60      40
419          UI      19       0
420          ZW   A=MILL CR B=RES INFLOW C=FLOW F=
             * ********

421          KK     MRRRoute through Mill Cr #2 Res
422          KM   Route through Mill Cr #2 Res
423          KM   Spillway crest=6409', Dam crest=6414'
424          KM   8" Suction pipe outlet at 6400', assume 5 cfs capacity
425          KM   25AF storage subtracted from actual S/E curve
426          KM   to approximate operation
427          RS       1    STOR       0
428          SV       0      11      25    26.5      41      45      64
429          SQ       5       5       5      36     374    1487   16724
430          SE    6400    6405    6409    6410    6414    6415    6420
431          ZW   A=MILL CR B=RES OUTFLOW C=FLOW F=

432          KK     M1RRoute Mill to SR 28 at 3 fps
433          RM       1    0.09     0.4
             * ********

434          KK      M2Mill Cr btw dam and SR 28
435          BA    0.06
436          BF       0    -.05     1.5
437          PB    1.82
438          LS       0   74.12
             * n=0.05
439          UI      61     128     106      71      42      26      17      10       4       0
440          ZW   A=MILL CR B=SR28 LOCAL C=FLOW F=

441          KK     M2CAdd SR 28 local to Mill, Pt 15
442          HC       2
443          ZW   A=MILL CR B=SR28 PT15 C=FLOW F=

444          KK     M2RRoute Mill to mouth at 3 fps
445          RM       1    0.09     0.4
             * ********
1                                        HEC-1 INPUT                                          PAGE 13

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


446          KK      M3Mill Cr at mouth
447          BA     0.7
448          BF       0    -.05     1.5
449          PB    1.67
450          IN      15
451          PI       2       2       2       3       1       3      11      21      12       7
452          PI       4       4       4       2       1       1       3       3       3       3
453          PI       2       2       2       2
454          IN       5
455          LS       0   74.43
             * n=0.05
456          UI     315     809    1000     867     685     518     365     263     195     145
457          UI     105      76      47      24      12       0
458          ZW   A=MILL CR B=MOUTH LOCAL C=FLOW F=

459          KK     M3CAdd local at mouth to Mill Pt 16
460          HC       2
461          ZW   A=MILL CR B=MOUTH PT16 C=FLOW F=
462          ZZ
1
          SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   23         F1
               .
               .
   38          .          S1
               .           .
               .           .
   54          .           .        BCB1
               .           .          .
               .           .          .
   67          .           .          .         BC1
               .           .          .           .
               .           .          .           .
   80          .           .          .           .          W1
               .           .          .           .           V
               .           .          .           .           V
   95          .           .          .           .          W1R
               .           .          .           .            .
               .           .          .           .            .
   97          .           .          .           .            .          W2
               .           .          .           .            .           .
               .           .          .           .            .           .
  110          .           .          .           .          W2C............
               .           .          .           .            V
```

```
                                                  V
113                                              W2R
                                                  .
                                                  .
115                                                 .          W3
                                                  .           .
                                                  .           .
127                                              W3C............
                                                  .
                                                  .
130                                                 .          T1
                                                  .           .
                                                  .           .
146                                                 .          .-------->   OPDIV
145                                                 .         TD1
                                                  .           V
                                                  .           V
150                                                 .         T1R
                                                  .           .
                                                  .           .
152                                                 .           .          T2
                                                  .           .           .
                                                  .           .           .
166                                                 .         T2C............
                                                  .           .
                                                  .           .
170                                                 .          .-------->   INDIV
168                                                 .         TD2
                                                  .           V
                                                  .           V
174                                                 .         T2R
                                                  .           .
                                                  .           .
176                                                 .           .        TD2R
                                                  .           .           V
                                                  .           .           V
180                                                 .           .        T2RB
                                                  .           .           .
                                                  .           .           .
182                                                 .           .           .          T3
                                                  .           .           .           .
                                                  .           .           .           .
194                                                 .           .         T3C............
                                                  .           .           V
                                                  .           .           V
197                                                 .           .         TRR
                                                  .           .           V
                                                  .           .           V
207                                                 .           .        TRR2
                                                  .           .           .
                                                  .           .           .
209                                                 .         TRRC............
                                                  .           .
                                                  .           .
211                                                 .           .          T4
                                                  .           .           .
                                                  .           .           .
226                                                 .         T4C............
                                                  .           V
                                                  .           V
229                                                 .         T4R
                                                  .           .
                                                  .           .
231                                                 .           .          T5
                                                  .           .           .
                                                  .           .           .
244                                                 .         T5C............
                                                  .           V
                                                  .           V
247                                                 .         T5R
                                                  .           .
                                                  .           .
249                                                 .           .          T6
                                                  .           .           .
                                                  .           .           .
262                                                 .         T6C............
                                                  .           V
                                                  .           V
265                                                 .         T6R
                                                  .           .
                                                  .           .
267                                                 .           .         WT1
                                                  .           .           V
                                                  .           .           V
281                                                 .           .        WT1R
                                                  .           .           .
                                                  .           .           .
283                                                 .           .           .          WT2
                                                  .           .           .           .
                                                  .           .           .           .
295                                                 .           .        WT2C............
                                                  .           .           V
                                                  .           .           V
298                                                 .           .          T2R
                                                  .           .           .
```

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300                                                  T2C2............
                                                        V
                                                        V
302                                                  WT6R2
                                                        .
304                                                        .        T7
                                                        .        .
316                                                  T7C............
                                                        .
319                                                        .        WI1
                                                        .          V
                                                        .          V
333                                                        .       WI1R
                                                        .        .
335                                                        .        .        WI2
                                                        .        .        .
349                                                        .       WI2C............
                                                        .          V
                                                        .          V
352                                                        .       WI2R
                                                        .        .
354                                                        .        .        I1
                                                        .        .          V
                                                        .        .          V
371                                                        .        .        I1R
                                                        .        .        .
373                                                        .        .        .        I2
                                                        .        .        .        .
386                                                        .        .        I2C............
                                                        .        .          V
                                                        .        .          V
389                                                        .        .        I2R
                                                        .        .        .
391                                                        .        .        .        I3
                                                        .        .        .        .
403                                                        .       I3C........................
                                                        .        .
406                                                        .        .        M1
                                                        .        .          V
                                                        .        .          V
421                                                        .        .        MRR
                                                        .        .          V
                                                        .        .          V
432                                                        .        .        M1R
                                                        .        .        .
434                                                        .        .        .        M2
                                                        .        .        .        .
441                                                        .        .        M2C............
                                                        .        .          V
                                                        .        .          V
444                                                        .        .        M2R
                                                        .        .        .
446                                                        .        .        .        M3
                                                        .        .        .        .
459                                                        .        .        M3C............
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             JUN 09 1992               *
*           VERSION 4.0.3E              *
*                                       *
*  RUN DATE  02/02/00  TIME  09:00:31   *
*                                       *
*****************************************
```

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

Incline Village 6hr 100yr FPMS HEC-1 Model
This filename: INCL100r.DAT, 10/14/99
Removed all routings except within subareas
and those above Incline Lake
Model time reduced to 8 hrs.
3hr precip burst moved to after first hour.
Precip ratioed from freq curve and NAP map.
Creek locations in model from west to east

```
                    Numbers in DSS path refer to hydraulic analysis pts
                    5 min UHG, LAUHG, sgr47.dat Truckee Mdws avg mtn ws
                    Curve numbers lumped to subareas
                    Muskingum steps chosen as minimum value
                    to make model stable at X = 0.4 using
                    equation on pg A-66 in HEC-1 manual
                    Modified Puls routing for Mill Cr reservoir
                    reported as possibly unstable by program.

                    ****************************************
                    First Creek
                    ****************************************

22 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          1  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT          HYDROGRAPH TIME DATA
                      NMIN          5  MINUTES IN COMPUTATION INTERVAL
                     IDATE     1JAN99  STARTING DATE
                     ITIME       0005  STARTING TIME
                        NQ         96  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE     1JAN99  ENDING DATE
                    NDTIME       0800  ENDING TIME
                     ICENT         19  CENTURY MARK

                 COMPUTATION INTERVAL    0.08 HOURS
                      TOTAL TIME BASE    7.92 HOURS

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


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 23 KK      *     F1     *     First Cr at mouth, Pt 1
            *            *
            **************

 27 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN         15  TIME INTERVAL IN MINUTES
                     JXDATE     1JAN99  STARTING DATE
                     JXTIME          5  STARTING TIME

                SUBBASIN RUNOFF DATA

 24 BA           SUBBASIN CHARACTERISTICS
                      TAREA       1.72  SUBBASIN AREA

 25 BF           BASE FLOW CHARACTERISTICS
                      STRTQ       0.00  INITIAL FLOW
                      QRCSN      -0.05  BEGIN BASE FLOW RECESSION
                      RTIOR    1.50000  RECESSION CONSTANT

                 PRECIPITATION DATA

 26 PB                STORM       3.19  BASIN TOTAL PRECIPITATION

 28 PI             INCREMENTAL PRECIPITATION PATTERN
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                     1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                     3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                     1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                     0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                     1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                     0.67      0.67

 32 LS           SCS LOSS RATE
                      STRTL       1.07  INITIAL ABSTRACTION
                     CRVNBR      65.14  CURVE NUMBER
                      RTIMP       0.00  PERCENT IMPERVIOUS AREA

 33 UI           INPUT UNITGRAPH,  37 ORDINATES,  VOLUME = 1.00
                     121.0     364.0     566.0     744.0     863.0     984.0     955.0     932.0     867.0     790.0
                     724.0     659.0     595.0     532.0     470.0     409.0     351.0     312.0     272.0     243.0
                     215.0     192.0     170.0     151.0     136.0     121.0     106.0      92.0      82.0      69.0
                      60.0      48.0      40.0      31.0      20.0      12.0       4.0
                                                                  ***

*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION        F1
```

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	1	JAN	0405	49	0.01	0.01	0.00	134.
1	JAN	0010	2	0.02	0.02	0.00	0.	1	JAN	0410	50	0.03	0.02	0.01	127.
1	JAN	0015	3	0.02	0.02	0.00	0.	1	JAN	0415	51	0.03	0.02	0.01	122.
1	JAN	0020	4	0.02	0.02	0.00	0.	1	JAN	0420	52	0.03	0.02	0.01	120.
1	JAN	0025	5	0.02	0.02	0.00	0.	1	JAN	0425	53	0.03	0.02	0.01	120.
1	JAN	0030	6	0.02	0.02	0.00	0.	1	JAN	0430	54	0.03	0.02	0.01	122.
1	JAN	0035	7	0.02	0.02	0.00	0.	1	JAN	0435	55	0.03	0.02	0.01	126.
1	JAN	0040	8	0.02	0.02	0.00	0.	1	JAN	0440	56	0.03	0.02	0.01	129.
1	JAN	0045	9	0.02	0.02	0.00	0.	1	JAN	0445	57	0.03	0.02	0.01	134.
1	JAN	0050	10	0.02	0.02	0.00	0.	1	JAN	0450	58	0.03	0.02	0.01	138.
1	JAN	0055	11	0.03	0.03	0.00	0.	1	JAN	0455	59	0.03	0.02	0.01	142.
1	JAN	0100	12	0.03	0.03	0.00	0.	1	JAN	0500	60	0.03	0.02	0.01	147.
1	JAN	0105	13	0.03	0.03	0.00	0.	1	JAN	0505	61	0.03	0.02	0.01	150.
1	JAN	0110	14	0.01	0.01	0.00	0.	1	JAN	0510	62	0.02	0.01	0.01	154.
1	JAN	0115	15	0.01	0.01	0.00	0.	1	JAN	0515	63	0.02	0.01	0.01	156.
1	JAN	0120	16	0.01	0.01	0.00	0.	1	JAN	0520	64	0.02	0.01	0.01	156.
1	JAN	0125	17	0.03	0.03	0.00	0.	1	JAN	0525	65	0.02	0.01	0.01	156.
1	JAN	0130	18	0.03	0.03	0.00	0.	1	JAN	0530	66	0.02	0.01	0.01	155.
1	JAN	0135	19	0.03	0.03	0.00	0.	1	JAN	0535	67	0.02	0.01	0.01	153.
1	JAN	0140	20	0.12	0.12	0.00	0.	1	JAN	0540	68	0.02	0.01	0.01	151.
1	JAN	0145	21	0.12	0.12	0.00	0.	1	JAN	0545	69	0.02	0.01	0.01	149.
1	JAN	0150	22	0.12	0.12	0.00	0.	1	JAN	0550	70	0.02	0.01	0.01	147.
1	JAN	0155	23	0.22	0.22	0.00	0.	1	JAN	0555	71	0.02	0.01	0.01	146.
1	JAN	0200	24	0.22	0.22	0.00	0.	1	JAN	0600	72	0.02	0.01	0.01	144.
1	JAN	0205	25	0.22	0.20	0.02	4.	1	JAN	0605	73	0.02	0.01	0.01	143.
1	JAN	0210	26	0.13	0.11	0.02	11.	1	JAN	0610	74	0.00	0.00	0.00	141.
1	JAN	0215	27	0.13	0.10	0.02	23.	1	JAN	0615	75	0.00	0.00	0.00	136.
1	JAN	0220	28	0.13	0.10	0.03	40.	1	JAN	0620	76	0.00	0.00	0.00	130.
1	JAN	0225	29	0.07	0.06	0.02	59.	1	JAN	0625	77	0.00	0.00	0.00	122.
1	JAN	0230	30	0.07	0.06	0.02	80.	1	JAN	0630	78	0.00	0.00	0.00	113.
1	JAN	0235	31	0.07	0.05	0.02	100.	1	JAN	0635	79	0.00	0.00	0.00	102.
1	JAN	0240	32	0.04	0.03	0.01	118.	1	JAN	0640	80	0.00	0.00	0.00	92.
1	JAN	0245	33	0.04	0.03	0.01	133.	1	JAN	0645	81	0.00	0.00	0.00	83.
1	JAN	0250	34	0.04	0.03	0.01	144.	1	JAN	0650	82	0.00	0.00	0.00	74.
1	JAN	0255	35	0.04	0.03	0.01	153.	1	JAN	0655	83	0.00	0.00	0.00	65.
1	JAN	0300	36	0.04	0.03	0.01	159.	1	JAN	0700	84	0.00	0.00	0.00	58.
1	JAN	0305	37	0.04	0.03	0.01	164.	1	JAN	0705	85	0.00	0.00	0.00	51.
1	JAN	0310	38	0.04	0.03	0.01	168.	1	JAN	0710	86	0.00	0.00	0.00	44.
1	JAN	0315	39	0.04	0.03	0.01	171.	1	JAN	0715	87	0.00	0.00	0.00	38.
1	JAN	0320	40	0.04	0.03	0.02	174.	1	JAN	0720	88	0.00	0.00	0.00	33.
1	JAN	0325	41	0.02	0.01	0.01	176.	1	JAN	0725	89	0.00	0.00	0.00	29.
1	JAN	0330	42	0.02	0.01	0.01	176.	1	JAN	0730	90	0.00	0.00	0.00	25.
1	JAN	0335	43	0.02	0.01	0.01	174.	1	JAN	0735	91	0.00	0.00	0.00	22.
1	JAN	0340	44	0.01	0.01	0.00	171.	1	JAN	0740	92	0.00	0.00	0.00	19.
1	JAN	0345	45	0.01	0.01	0.00	165.	1	JAN	0745	93	0.00	0.00	0.00	16.
1	JAN	0350	46	0.01	0.01	0.00	158.	1	JAN	0750	94	0.00	0.00	0.00	14.
1	JAN	0355	47	0.01	0.01	0.00	150.	1	JAN	0755	95	0.00	0.00	0.00	12.
1	JAN	0400	48	0.01	0.01	0.00	142.	1	JAN	0800	96	0.00	0.00	0.00	10.

TOTAL RAINFALL = 3.19, TOTAL LOSS = 2.59, TOTAL EXCESS = 0.60

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)	(CFS)				
+ 176.	3.33		111.	84.	84.	84.
		(INCHES)	0.597	0.597	0.597	0.597
		(AC-FT)	55.	55.	55.	55.

CUMULATIVE AREA = 1.72 SQ MI

```
-----DSS---ZOPEN:  Existing File Opened,  File: INCL100R.DSS
                   Unit:  71;  DSS Version: 6-JC
-----DSS---ZWRITE Unit  71; Vers.    2:  /FIRST CR/MOUTH PT1/FLOW/01JAN1999/5MIN//
```

*** ***

```
            **************
            *            *
 38 KK      *     S1     *     Second Cr at mouth, Pt 2
            *            *
            **************

 42 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           5  STARTING TIME

              SUBBASIN RUNOFF DATA

 39 BA          SUBBASIN CHARACTERISTICS
                     TAREA        1.73  SUBBASIN AREA

 40 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        0.00  INITIAL FLOW
```

```
                    QRCSN        -0.05  BEGIN BASE FLOW RECESSION
                    RTIOR      1.50000  RECESSION CONSTANT

                PRECIPITATION DATA

41 PB                STORM        3.27  BASIN TOTAL PRECIPITATION

43 PI             INCREMENTAL PRECIPITATION PATTERN
                     0.67       0.67       0.67       0.67       0.67       0.67       0.67       0.67       0.67       1.00
                     1.00       1.00       0.33       0.33       0.33       1.00       1.00       1.00       3.67       3.67
                     3.67       7.00       7.00       7.00       4.00       4.00       4.00       2.33       2.33       2.33
                     1.33       1.33       1.33       1.33       1.33       1.33       1.33       1.33       1.33       0.67
                     0.67       0.67       0.33       0.33       0.33       0.33       0.33       0.33       1.00       1.00
                     1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00       1.00
                     0.67       0.67       0.67       0.67       0.67       0.67       0.67       0.67       0.67       0.67
                     0.67       0.67

47 LS           SCS LOSS RATE
                    STRTL        0.87  INITIAL ABSTRACTION
                   CRVNBR       69.79  CURVE NUMBER
                    RTIMP        0.00  PERCENT IMPERVIOUS AREA

48 UI           INPUT UNITGRAPH,  41 ORDINATES,  VOLUME = 1.00
                     99.0      297.0      470.0      626.0      728.0      845.0      896.0      870.0      839.0      781.0
                    718.0      664.0      611.0      558.0      507.0      456.0      407.0      356.0      311.0      281.0
                    247.0      224.0      201.0      180.0      163.0      145.0      133.0      120.0      107.0       95.0
                     83.0       76.0       68.0       59.0       48.0       42.0       34.0       26.0       17.0       11.0
                      5.0

                                                                  ***
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****

HYDROGRAPH AT STATION S1

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	1	JAN	0405	49	0.01	0.01	0.01	198.
1	JAN	0010	2	0.02	0.02	0.00	0.	1	JAN	0410	50	0.03	0.02	0.02	188.
1	JAN	0015	3	0.02	0.02	0.00	0.	1	JAN	0415	51	0.03	0.02	0.02	181.
1	JAN	0020	4	0.02	0.02	0.00	0.	1	JAN	0420	52	0.03	0.02	0.02	176.
1	JAN	0025	5	0.02	0.02	0.00	0.	1	JAN	0425	53	0.03	0.02	0.02	173.
1	JAN	0030	6	0.02	0.02	0.00	0.	1	JAN	0430	54	0.03	0.02	0.02	173.
1	JAN	0035	7	0.02	0.02	0.00	0.	1	JAN	0435	55	0.03	0.02	0.02	175.
1	JAN	0040	8	0.02	0.02	0.00	0.	1	JAN	0440	56	0.03	0.02	0.02	178.
1	JAN	0045	9	0.02	0.02	0.00	0.	1	JAN	0445	57	0.03	0.02	0.02	182.
1	JAN	0050	10	0.02	0.02	0.00	0.	1	JAN	0450	58	0.03	0.02	0.02	186.
1	JAN	0055	11	0.03	0.03	0.00	0.	1	JAN	0455	59	0.03	0.02	0.02	190.
1	JAN	0100	12	0.03	0.03	0.00	0.	1	JAN	0500	60	0.03	0.01	0.02	194.
1	JAN	0105	13	0.03	0.03	0.00	0.	1	JAN	0505	61	0.03	0.01	0.02	198.
1	JAN	0110	14	0.01	0.01	0.00	0.	1	JAN	0510	62	0.02	0.01	0.01	201.
1	JAN	0115	15	0.01	0.01	0.00	0.	1	JAN	0515	63	0.02	0.01	0.01	203.
1	JAN	0120	16	0.01	0.01	0.00	0.	1	JAN	0520	64	0.02	0.01	0.01	203.
1	JAN	0125	17	0.03	0.03	0.00	0.	1	JAN	0525	65	0.02	0.01	0.01	202.
1	JAN	0130	18	0.03	0.03	0.00	0.	1	JAN	0530	66	0.02	0.01	0.01	201.
1	JAN	0135	19	0.03	0.03	0.00	0.	1	JAN	0535	67	0.02	0.01	0.01	198.
1	JAN	0140	20	0.12	0.12	0.00	0.	1	JAN	0540	68	0.02	0.01	0.01	195.
1	JAN	0145	21	0.12	0.12	0.00	0.	1	JAN	0545	69	0.02	0.01	0.01	193.
1	JAN	0150	22	0.12	0.12	0.00	0.	1	JAN	0550	70	0.02	0.01	0.01	190.
1	JAN	0155	23	0.23	0.22	0.00	0.	1	JAN	0555	71	0.02	0.01	0.01	187.
1	JAN	0200	24	0.23	0.20	0.03	4.	1	JAN	0600	72	0.02	0.01	0.01	185.
1	JAN	0205	25	0.23	0.18	0.04	14.	1	JAN	0605	73	0.02	0.01	0.01	183.
1	JAN	0210	26	0.13	0.10	0.03	31.	1	JAN	0610	74	0.00	0.00	0.00	180.
1	JAN	0215	27	0.13	0.09	0.04	54.	1	JAN	0615	75	0.00	0.00	0.00	175.
1	JAN	0220	28	0.13	0.09	0.04	81.	1	JAN	0620	76	0.00	0.00	0.00	168.
1	JAN	0225	29	0.08	0.05	0.03	111.	1	JAN	0625	77	0.00	0.00	0.00	159.
1	JAN	0230	30	0.08	0.05	0.03	142.	1	JAN	0630	78	0.00	0.00	0.00	148.
1	JAN	0235	31	0.08	0.05	0.03	171.	1	JAN	0635	79	0.00	0.00	0.00	137.
1	JAN	0240	32	0.04	0.03	0.02	196.	1	JAN	0640	80	0.00	0.00	0.00	125.
1	JAN	0245	33	0.04	0.03	0.02	216.	1	JAN	0645	81	0.00	0.00	0.00	114.
1	JAN	0250	34	0.04	0.03	0.02	230.	1	JAN	0650	82	0.00	0.00	0.00	103.
1	JAN	0255	35	0.04	0.03	0.02	241.	1	JAN	0655	83	0.00	0.00	0.00	93.
1	JAN	0300	36	0.04	0.02	0.02	249.	1	JAN	0700	84	0.00	0.00	0.00	83.
1	JAN	0305	37	0.04	0.02	0.02	254.	1	JAN	0705	85	0.00	0.00	0.00	75.
1	JAN	0310	38	0.04	0.02	0.02	257.	1	JAN	0710	86	0.00	0.00	0.00	67.
1	JAN	0315	39	0.04	0.02	0.02	259.	1	JAN	0715	87	0.00	0.00	0.00	59.
1	JAN	0320	40	0.04	0.02	0.02	261.	1	JAN	0720	88	0.00	0.00	0.00	52.
1	JAN	0325	41	0.02	0.01	0.01	262.	1	JAN	0725	89	0.00	0.00	0.00	46.
1	JAN	0330	42	0.02	0.01	0.01	260.	1	JAN	0730	90	0.00	0.00	0.00	41.
1	JAN	0335	43	0.02	0.01	0.01	256.	1	JAN	0735	91	0.00	0.00	0.00	36.
1	JAN	0340	44	0.01	0.01	0.01	250.	1	JAN	0740	92	0.00	0.00	0.00	32.
1	JAN	0345	45	0.01	0.01	0.01	242.	1	JAN	0745	93	0.00	0.00	0.00	28.
1	JAN	0350	46	0.01	0.01	0.01	232.	1	JAN	0750	94	0.00	0.00	0.00	24.
1	JAN	0355	47	0.01	0.01	0.01	221.	1	JAN	0755	95	0.00	0.00	0.00	21.
1	JAN	0400	48	0.01	0.01	0.01	210.	1	JAN	0800	96	0.00	0.00	0.00	18.

****

TOTAL RAINFALL = 3.27, TOTAL LOSS = 2.41, TOTAL EXCESS = 0.86

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)				

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                        (CFS)
+     262.      3.33                158.        120.        120.        120.
                      (INCHES)     0.851       0.851       0.851       0.851
                       (AC-FT)      79.         79.         79.         79.

                      CUMULATIVE AREA =    1.73 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /SECOND CR/MOUTH PT2/FLOW/01JAN1999/5MIN//


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
  54 KK     *     BCB1   *     Burnt Cedar Beach Cr at mouth, pt 20
            *            *
            **************

  58 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE      1JAN99  STARTING DATE
                     JXTIME           5  STARTING TIME

               SUBBASIN RUNOFF DATA

  55 BA          SUBBASIN CHARACTERISTICS
                      TAREA        0.43  SUBBASIN AREA

  56 BF          BASE FLOW CHARACTERISTICS
                      STRTQ        0.00  INITIAL FLOW
                      QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                      RTIOR     1.50000  RECESSION CONSTANT

                 PRECIPITATION DATA

  57 PB                STORM        2.43  BASIN TOTAL PRECIPITATION

  59 PI            INCREMENTAL PRECIPITATION PATTERN
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                     1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                     3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                     1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                     0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                     1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                     0.67      0.67

  63 LS          SCS LOSS RATE
                      STRTL        0.69  INITIAL ABSTRACTION
                     CRVNBR       74.31  CURVE NUMBER
                      RTIMP        0.00  PERCENT IMPERVIOUS AREA

  64 UI          INPUT UNITGRAPH,  15 ORDINATES,  VOLUME = 1.00
                     188.0     485.0     606.0     531.0     422.0     321.0     228.0     165.0     123.0      91.0
                      67.0      49.0      31.0      18.0       5.0
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                                                HYDROGRAPH AT STATION     BCB1

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                                                                  *
     DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q          *     DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      1 JAN 0005    1    0.00    0.00    0.00         0.          *      1 JAN 0405   49    0.01    0.00    0.00        17.
      1 JAN 0010    2    0.02    0.02    0.00         0.          *      1 JAN 0410   50    0.02    0.01    0.01        17.
      1 JAN 0015    3    0.02    0.02    0.00         0.          *      1 JAN 0415   51    0.02    0.01    0.01        19.
      1 JAN 0020    4    0.02    0.02    0.00         0.          *      1 JAN 0420   52    0.02    0.01    0.01        23.
      1 JAN 0025    5    0.02    0.02    0.00         0.          *      1 JAN 0425   53    0.02    0.01    0.01        27.
      1 JAN 0030    6    0.02    0.02    0.00         0.          *      1 JAN 0430   54    0.02    0.01    0.01        30.
      1 JAN 0035    7    0.02    0.02    0.00         0.          *      1 JAN 0435   55    0.02    0.01    0.01        33.
      1 JAN 0040    8    0.02    0.02    0.00         0.          *      1 JAN 0440   56    0.02    0.01    0.01        35.
      1 JAN 0045    9    0.02    0.02    0.00         0.          *      1 JAN 0445   57    0.02    0.01    0.01        36.
      1 JAN 0050   10    0.02    0.02    0.00         0.          *      1 JAN 0450   58    0.02    0.01    0.01        37.
      1 JAN 0055   11    0.02    0.02    0.00         0.          *      1 JAN 0455   59    0.02    0.01    0.01        38.
      1 JAN 0100   12    0.02    0.02    0.00         0.          *      1 JAN 0500   60    0.02    0.01    0.01        39.
      1 JAN 0105   13    0.02    0.02    0.00         0.          *      1 JAN 0505   61    0.02    0.01    0.01        40.
      1 JAN 0110   14    0.01    0.01    0.00         0.          *      1 JAN 0510   62    0.02    0.01    0.01        40.
      1 JAN 0115   15    0.01    0.01    0.00         0.          *      1 JAN 0515   63    0.02    0.01    0.01        38.
      1 JAN 0120   16    0.01    0.01    0.00         0.          *      1 JAN 0520   64    0.02    0.01    0.01        36.
      1 JAN 0125   17    0.02    0.02    0.00         0.          *      1 JAN 0525   65    0.02    0.01    0.01        34.
      1 JAN 0130   18    0.02    0.02    0.00         0.          *      1 JAN 0530   66    0.02    0.01    0.01        33.
      1 JAN 0135   19    0.02    0.02    0.00         0.          *      1 JAN 0535   67    0.02    0.01    0.01        32.
      1 JAN 0140   20    0.09    0.09    0.00         0.          *      1 JAN 0540   68    0.02    0.01    0.01        31.
      1 JAN 0145   21    0.09    0.09    0.00         0.          *      1 JAN 0545   69    0.02    0.01    0.01        30.
      1 JAN 0150   22    0.09    0.09    0.00         0.          *      1 JAN 0550   70    0.02    0.01    0.01        30.
      1 JAN 0155   23    0.17    0.17    0.00         0.          *      1 JAN 0555   71    0.02    0.01    0.01        30.
      1 JAN 0200   24    0.17    0.16    0.01         3.          *      1 JAN 0600   72    0.02    0.01    0.01        30.
      1 JAN 0205   25    0.17    0.14    0.03        12.          *      1 JAN 0605   73    0.02    0.01    0.01        30.
      1 JAN 0210   26    0.10    0.08    0.02        26.          *      1 JAN 0610   74    0.00    0.00    0.00        28.
      1 JAN 0215   27    0.10    0.07    0.02        39.          *      1 JAN 0615   75    0.00    0.00    0.00        24.
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  1 JAN 0220   28    0.10    0.07    0.03        51.      *        1 JAN 0620   76    0.00    0.00    0.00        18.
  1 JAN 0225   29    0.06    0.04    0.02        59.      *        1 JAN 0625   77    0.00    0.00    0.00        14.
  1 JAN 0230   30    0.06    0.04    0.02        63.      *        1 JAN 0630   78    0.00    0.00    0.00        10.
  1 JAN 0235   31    0.06    0.04    0.02        65.      *        1 JAN 0635   79    0.00    0.00    0.00         7.
  1 JAN 0240   32    0.03    0.02    0.01        64.      *        1 JAN 0640   80    0.00    0.00    0.00         5.
  1 JAN 0245   33    0.03    0.02    0.01        61.      *        1 JAN 0645   81    0.00    0.00    0.00         3.
  1 JAN 0250   34    0.03    0.02    0.01        56.      *        1 JAN 0650   82    0.00    0.00    0.00         3.
  1 JAN 0255   35    0.03    0.02    0.01        53.      *        1 JAN 0655   83    0.00    0.00    0.00         3.
  1 JAN 0300   36    0.03    0.02    0.01        50.      *        1 JAN 0700   84    0.00    0.00    0.00         3.
  1 JAN 0305   37    0.03    0.02    0.01        48.      *        1 JAN 0705   85    0.00    0.00    0.00         3.
  1 JAN 0310   38    0.03    0.02    0.01        47.      *        1 JAN 0710   86    0.00    0.00    0.00         3.
  1 JAN 0315   39    0.03    0.02    0.01        46.      *        1 JAN 0715   87    0.00    0.00    0.00         3.
  1 JAN 0320   40    0.03    0.02    0.01        46.      *        1 JAN 0720   88    0.00    0.00    0.00         3.
  1 JAN 0325   41    0.02    0.01    0.01        44.      *        1 JAN 0725   89    0.00    0.00    0.00         2.
  1 JAN 0330   42    0.02    0.01    0.01        41.      *        1 JAN 0730   90    0.00    0.00    0.00         2.
  1 JAN 0335   43    0.02    0.01    0.01        37.      *        1 JAN 0735   91    0.00    0.00    0.00         2.
  1 JAN 0340   44    0.01    0.00    0.00        33.      *        1 JAN 0740   92    0.00    0.00    0.00         2.
  1 JAN 0345   45    0.01    0.00    0.00        29.      *        1 JAN 0745   93    0.00    0.00    0.00         2.
  1 JAN 0350   46    0.01    0.00    0.00        24.      *        1 JAN 0750   94    0.00    0.00    0.00         2.
  1 JAN 0355   47    0.01    0.00    0.00        21.      *        1 JAN 0755   95    0.00    0.00    0.00         2.
  1 JAN 0400   48    0.01    0.00    0.00        19.      *        1 JAN 0800   96    0.00    0.00    0.00         2.
                                                         *
*****************************************************************************************************************

   TOTAL RAINFALL =    2.43, TOTAL LOSS =    1.85, TOTAL EXCESS =    0.58

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR      7.92-HR
+   (CFS)       (HR)
                              (CFS)
+     65.       2.50                27.         21.         21.         21.
                          (INCHES)  0.591       0.591       0.591       0.591
                           (AC-FT)  14.         14.         14.         14.

                          CUMULATIVE AREA =    0.43 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /BNT CDR BCH CR/MOUTH PT20/FLOW/01JAN1999/5MIN//


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
  67 KK     *     BC1    *     Burnt Cedar Cr at mouth, Pt 3
            *            *
            **************

  71 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE      1JAN99  STARTING DATE
                     JXTIME           5  STARTING TIME

               SUBBASIN RUNOFF DATA

  68 BA          SUBBASIN CHARACTERISTICS
                      TAREA        0.27  SUBBASIN AREA

  69 BF          BASE FLOW CHARACTERISTICS
                      STRTQ        0.00  INITIAL FLOW
                      QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                      RTIOR     1.50000  RECESSION CONSTANT

                 PRECIPITATION DATA

  70 PB               STORM        2.21  BASIN TOTAL PRECIPITATION

  72 PI            INCREMENTAL PRECIPITATION PATTERN
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                     1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                     3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                     1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                     0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                     1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                     0.67      0.67

  76 LS          SCS LOSS RATE
                      STRTL        0.51  INITIAL ABSTRACTION
                     CRVNBR       79.74  CURVE NUMBER
                      RTIMP        0.00  PERCENT IMPERVIOUS AREA

  77 UI          INPUT UNITGRAPH,  15 ORDINATES,  VOLUME = 1.00
                     114.0     295.0     374.0     332.0     265.0     204.0     147.0     106.0      79.0      59.0
                      44.0      32.0      22.0      13.0       4.0
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                                          HYDROGRAPH AT STATION      BC1

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
								*								
1	JAN	0005	1	0.00	0.00	0.00	0.	*	1	JAN	0405	49	0.01	0.00	0.00	12.
1	JAN	0010	2	0.01	0.01	0.00	0.	*	1	JAN	0410	50	0.02	0.01	0.01	12.
1	JAN	0015	3	0.01	0.01	0.00	0.	*	1	JAN	0415	51	0.02	0.01	0.01	13.
1	JAN	0020	4	0.01	0.01	0.00	0.	*	1	JAN	0420	52	0.02	0.01	0.01	16.
1	JAN	0025	5	0.01	0.01	0.00	0.	*	1	JAN	0425	53	0.02	0.01	0.01	18.
1	JAN	0030	6	0.01	0.01	0.00	0.	*	1	JAN	0430	54	0.02	0.01	0.01	20.
1	JAN	0035	7	0.01	0.01	0.00	0.	*	1	JAN	0435	55	0.02	0.01	0.01	22.
1	JAN	0040	8	0.01	0.01	0.00	0.	*	1	JAN	0440	56	0.02	0.01	0.01	23.
1	JAN	0045	9	0.01	0.01	0.00	0.	*	1	JAN	0445	57	0.02	0.01	0.01	24.
1	JAN	0050	10	0.01	0.01	0.00	0.	*	1	JAN	0450	58	0.02	0.01	0.01	25.
1	JAN	0055	11	0.02	0.02	0.00	0.	*	1	JAN	0455	59	0.02	0.01	0.01	26.
1	JAN	0100	12	0.02	0.02	0.00	0.	*	1	JAN	0500	60	0.02	0.01	0.01	26.
1	JAN	0105	13	0.02	0.02	0.00	0.	*	1	JAN	0505	61	0.02	0.01	0.01	27.
1	JAN	0110	14	0.01	0.01	0.00	0.	*	1	JAN	0510	62	0.01	0.01	0.01	27.
1	JAN	0115	15	0.01	0.01	0.00	0.	*	1	JAN	0515	63	0.01	0.01	0.01	26.
1	JAN	0120	16	0.01	0.01	0.00	0.	*	1	JAN	0520	64	0.01	0.01	0.01	24.
1	JAN	0125	17	0.02	0.02	0.00	0.	*	1	JAN	0525	65	0.01	0.01	0.01	23.
1	JAN	0130	18	0.02	0.02	0.00	0.	*	1	JAN	0530	66	0.01	0.01	0.01	22.
1	JAN	0135	19	0.02	0.02	0.00	0.	*	1	JAN	0535	67	0.01	0.01	0.01	21.
1	JAN	0140	20	0.08	0.08	0.00	0.	*	1	JAN	0540	68	0.01	0.01	0.01	21.
1	JAN	0145	21	0.08	0.08	0.00	0.	*	1	JAN	0545	69	0.01	0.01	0.01	20.
1	JAN	0150	22	0.08	0.08	0.00	0.	*	1	JAN	0550	70	0.01	0.01	0.01	20.
1	JAN	0155	23	0.15	0.14	0.01	1.	*	1	JAN	0555	71	0.01	0.01	0.01	20.
1	JAN	0200	24	0.15	0.13	0.03	6.	*	1	JAN	0600	72	0.01	0.01	0.01	20.
1	JAN	0205	25	0.15	0.11	0.04	17.	*	1	JAN	0605	73	0.01	0.01	0.01	20.
1	JAN	0210	26	0.09	0.06	0.03	29.	*	1	JAN	0610	74	0.00	0.00	0.00	18.
1	JAN	0215	27	0.09	0.06	0.03	39.	*	1	JAN	0615	75	0.00	0.00	0.00	16.
1	JAN	0220	28	0.09	0.05	0.03	46.	*	1	JAN	0620	76	0.00	0.00	0.00	12.
1	JAN	0225	29	0.05	0.03	0.02	51.	*	1	JAN	0625	77	0.00	0.00	0.00	9.
1	JAN	0230	30	0.05	0.03	0.02	53.	*	1	JAN	0630	78	0.00	0.00	0.00	7.
1	JAN	0235	31	0.05	0.03	0.02	52.	*	1	JAN	0635	79	0.00	0.00	0.00	5.
1	JAN	0240	32	0.03	0.02	0.01	50.	*	1	JAN	0640	80	0.00	0.00	0.00	3.
1	JAN	0245	33	0.03	0.02	0.01	47.	*	1	JAN	0645	81	0.00	0.00	0.00	3.
1	JAN	0250	34	0.03	0.02	0.01	43.	*	1	JAN	0650	82	0.00	0.00	0.00	3.
1	JAN	0255	35	0.03	0.02	0.01	40.	*	1	JAN	0655	83	0.00	0.00	0.00	2.
1	JAN	0300	36	0.03	0.01	0.01	37.	*	1	JAN	0700	84	0.00	0.00	0.00	2.
1	JAN	0305	37	0.03	0.01	0.01	36.	*	1	JAN	0705	85	0.00	0.00	0.00	2.
1	JAN	0310	38	0.03	0.01	0.02	34.	*	1	JAN	0710	86	0.00	0.00	0.00	2.
1	JAN	0315	39	0.03	0.01	0.02	33.	*	1	JAN	0715	87	0.00	0.00	0.00	2.
1	JAN	0320	40	0.03	0.01	0.02	33.	*	1	JAN	0720	88	0.00	0.00	0.00	2.
1	JAN	0325	41	0.01	0.01	0.01	31.	*	1	JAN	0725	89	0.00	0.00	0.00	2.
1	JAN	0330	42	0.01	0.01	0.01	29.	*	1	JAN	0730	90	0.00	0.00	0.00	2.
1	JAN	0335	43	0.01	0.01	0.01	26.	*	1	JAN	0735	91	0.00	0.00	0.00	2.
1	JAN	0340	44	0.01	0.00	0.00	23.	*	1	JAN	0740	92	0.00	0.00	0.00	2.
1	JAN	0345	45	0.01	0.00	0.00	20.	*	1	JAN	0745	93	0.00	0.00	0.00	2.
1	JAN	0350	46	0.01	0.00	0.00	17.	*	1	JAN	0750	94	0.00	0.00	0.00	2.
1	JAN	0355	47	0.01	0.00	0.00	15.	*	1	JAN	0755	95	0.00	0.00	0.00	2.
1	JAN	0400	48	0.01	0.00	0.00	13.	*	1	JAN	0800	96	0.00	0.00	0.00	2.
								*								

****

TOTAL RAINFALL = 2.21, TOTAL LOSS = 1.53, TOTAL EXCESS = 0.68

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 53.	2.42		20.	15.	15.	15.
		(INCHES)	0.694	0.695	0.695	0.695
		(AC-FT)	10.	10.	10.	10.

CUMULATIVE AREA = 0.27 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /BURNT CEDAR CR/MOUTH PT3/FLOW/01JAN1999/5MIN//

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            **************
            *            *
 80 KK      *     W1     *     Wood Cr at SR 431, Pt 17
            *            *
            **************

 84 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           5  STARTING TIME

              SUBBASIN RUNOFF DATA

 81 BA          SUBBASIN CHARACTERISTICS
                     TAREA        1.70  SUBBASIN AREA

 82 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        0.00  INITIAL FLOW
                     QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR     1.50000  RECESSION CONSTANT

                PRECIPITATION DATA
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83 PB          STORM        3.84  BASIN TOTAL PRECIPITATION

85 PI        INCREMENTAL PRECIPITATION PATTERN
                0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                0.67      0.67

89 LS        SCS LOSS RATE
                STRTL        0.91  INITIAL ABSTRACTION
                CRVNBR      68.67  CURVE NUMBER
                RTIMP        0.00  PERCENT IMPERVIOUS AREA

90 UI        INPUT UNITGRAPH,  39 ORDINATES,  VOLUME = 1.00
                107.0     320.0     503.0     667.0     770.0     896.0     909.0     876.0     845.0     772.0
                711.0     654.0     596.0     541.0     486.0     432.0     378.0     327.0     293.0     257.0
                231.0     207.0     185.0     166.0     147.0     134.0     120.0     107.0      93.0      82.0
                 75.0      65.0      55.0      44.0      37.0      28.0      20.0      12.0       4.0
                                                   ***
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HYDROGRAPH AT STATION W1

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	1	JAN	0405	49	0.01	0.01	0.01	255.
1	JAN	0010	2	0.03	0.03	0.00	0.	1	JAN	0410	50	0.04	0.02	0.02	241.
1	JAN	0015	3	0.03	0.03	0.00	0.	1	JAN	0415	51	0.04	0.02	0.02	231.
1	JAN	0020	4	0.03	0.03	0.00	0.	1	JAN	0420	52	0.04	0.02	0.02	224.
1	JAN	0025	5	0.03	0.03	0.00	0.	1	JAN	0425	53	0.04	0.02	0.02	221.
1	JAN	0030	6	0.03	0.03	0.00	0.	1	JAN	0430	54	0.04	0.02	0.02	221.
1	JAN	0035	7	0.03	0.03	0.00	0.	1	JAN	0435	55	0.04	0.02	0.02	223.
1	JAN	0040	8	0.03	0.03	0.00	0.	1	JAN	0440	56	0.04	0.02	0.02	227.
1	JAN	0045	9	0.03	0.03	0.00	0.	1	JAN	0445	57	0.04	0.02	0.02	231.
1	JAN	0050	10	0.03	0.03	0.00	0.	1	JAN	0450	58	0.04	0.02	0.02	236.
1	JAN	0055	11	0.04	0.04	0.00	0.	1	JAN	0455	59	0.04	0.02	0.02	241.
1	JAN	0100	12	0.04	0.04	0.00	0.	1	JAN	0500	60	0.04	0.02	0.02	245.
1	JAN	0105	13	0.04	0.04	0.00	0.	1	JAN	0505	61	0.04	0.02	0.02	250.
1	JAN	0110	14	0.01	0.01	0.00	0.	1	JAN	0510	62	0.03	0.01	0.02	253.
1	JAN	0115	15	0.01	0.01	0.00	0.	1	JAN	0515	63	0.03	0.01	0.02	254.
1	JAN	0120	16	0.01	0.01	0.00	0.	1	JAN	0520	64	0.03	0.01	0.02	254.
1	JAN	0125	17	0.04	0.04	0.00	0.	1	JAN	0525	65	0.03	0.01	0.02	253.
1	JAN	0130	18	0.04	0.04	0.00	0.	1	JAN	0530	66	0.03	0.01	0.02	250.
1	JAN	0135	19	0.04	0.04	0.00	0.	1	JAN	0535	67	0.03	0.01	0.02	247.
1	JAN	0140	20	0.14	0.14	0.00	0.	1	JAN	0540	68	0.03	0.01	0.02	243.
1	JAN	0145	21	0.14	0.14	0.00	0.	1	JAN	0545	69	0.03	0.01	0.02	239.
1	JAN	0150	22	0.14	0.14	0.00	0.	1	JAN	0550	70	0.03	0.01	0.02	236.
1	JAN	0155	23	0.27	0.25	0.02	2.	1	JAN	0555	71	0.03	0.01	0.02	233.
1	JAN	0200	24	0.27	0.23	0.04	10.	1	JAN	0600	72	0.03	0.01	0.02	230.
1	JAN	0205	25	0.27	0.20	0.07	29.	1	JAN	0605	73	0.03	0.01	0.02	227.
1	JAN	0210	26	0.15	0.11	0.05	58.	1	JAN	0610	74	0.00	0.00	0.00	223.
1	JAN	0215	27	0.15	0.10	0.05	94.	1	JAN	0615	75	0.00	0.00	0.00	216.
1	JAN	0220	28	0.15	0.10	0.06	136.	1	JAN	0620	76	0.00	0.00	0.00	206.
1	JAN	0225	29	0.09	0.05	0.04	182.	1	JAN	0625	77	0.00	0.00	0.00	194.
1	JAN	0230	30	0.09	0.05	0.04	225.	1	JAN	0630	78	0.00	0.00	0.00	181.
1	JAN	0235	31	0.09	0.05	0.04	264.	1	JAN	0635	79	0.00	0.00	0.00	166.
1	JAN	0240	32	0.05	0.03	0.02	295.	1	JAN	0640	80	0.00	0.00	0.00	151.
1	JAN	0245	33	0.05	0.03	0.02	320.	1	JAN	0645	81	0.00	0.00	0.00	136.
1	JAN	0250	34	0.05	0.03	0.02	336.	1	JAN	0650	82	0.00	0.00	0.00	122.
1	JAN	0255	35	0.05	0.03	0.02	346.	1	JAN	0655	83	0.00	0.00	0.00	110.
1	JAN	0300	36	0.05	0.03	0.02	353.	1	JAN	0700	84	0.00	0.00	0.00	98.
1	JAN	0305	37	0.05	0.03	0.03	356.	1	JAN	0705	85	0.00	0.00	0.00	87.
1	JAN	0310	38	0.05	0.03	0.03	357.	1	JAN	0710	86	0.00	0.00	0.00	77.
1	JAN	0315	39	0.05	0.03	0.03	358.	1	JAN	0715	87	0.00	0.00	0.00	68.
1	JAN	0320	40	0.05	0.02	0.03	357.	1	JAN	0720	88	0.00	0.00	0.00	59.
1	JAN	0325	41	0.03	0.01	0.01	354.	1	JAN	0725	89	0.00	0.00	0.00	52.
1	JAN	0330	42	0.03	0.01	0.01	349.	1	JAN	0730	90	0.00	0.00	0.00	45.
1	JAN	0335	43	0.03	0.01	0.01	341.	1	JAN	0735	91	0.00	0.00	0.00	40.
1	JAN	0340	44	0.01	0.01	0.01	331.	1	JAN	0740	92	0.00	0.00	0.00	34.
1	JAN	0345	45	0.01	0.01	0.01	319.	1	JAN	0745	93	0.00	0.00	0.00	30.
1	JAN	0350	46	0.01	0.01	0.01	304.	1	JAN	0750	94	0.00	0.00	0.00	26.
1	JAN	0355	47	0.01	0.01	0.01	288.	1	JAN	0755	95	0.00	0.00	0.00	22.
1	JAN	0400	48	0.01	0.01	0.01	271.	1	JAN	0800	96	0.00	0.00	0.00	19.

****

TOTAL RAINFALL = 3.84, TOTAL LOSS = 2.70, TOTAL EXCESS = 1.14

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 358.	3.17	(CFS)	208.	157.	157.	157.
		(INCHES)	1.135	1.136	1.136	1.136
		(AC-FT)	103.	103.	103.	103.

CUMULATIVE AREA = 1.70 SQ MI

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-----DSS---ZWRITE Unit  71; Vers.    2:  /WOOD CR/SR 431 PT17/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
  95 KK     *      W1R   *     Route Wood to SR 28 at 4fps
            *            *
            **************

              HYDROGRAPH ROUTING DATA

  96 RM          MUSKINGUM ROUTING
                       NSTPS          4 NUMBER OF SUBREACHES
                       AMSKK       0.32 MUSKINGUM K
                           X       0.40 MUSKINGUM X

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HYDROGRAPH AT STATION W1R

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
1	JAN	0005	1	0.	1	JAN	0205	25	0.	1	JAN	0405	49	316.	1	JAN	0605	73	239.
1	JAN	0010	2	0.	1	JAN	0210	26	1.	1	JAN	0410	50	301.	1	JAN	0610	74	235.
1	JAN	0015	3	0.	1	JAN	0215	27	5.	1	JAN	0415	51	285.	1	JAN	0615	75	232.
1	JAN	0020	4	0.	1	JAN	0220	28	16.	1	JAN	0420	52	269.	1	JAN	0620	76	229.
1	JAN	0025	5	0.	1	JAN	0225	29	36.	1	JAN	0425	53	254.	1	JAN	0625	77	226.
1	JAN	0030	6	0.	1	JAN	0230	30	66.	1	JAN	0430	54	241.	1	JAN	0630	78	221.
1	JAN	0035	7	0.	1	JAN	0235	31	102.	1	JAN	0435	55	231.	1	JAN	0635	79	214.
1	JAN	0040	8	0.	1	JAN	0240	32	144.	1	JAN	0440	56	225.	1	JAN	0640	80	204.
1	JAN	0045	9	0.	1	JAN	0245	33	188.	1	JAN	0445	57	222.	1	JAN	0645	81	192.
1	JAN	0050	10	0.	1	JAN	0250	34	230.	1	JAN	0450	58	222.	1	JAN	0650	82	178.
1	JAN	0055	11	0.	1	JAN	0255	35	267.	1	JAN	0455	59	224.	1	JAN	0655	83	163.
1	JAN	0100	12	0.	1	JAN	0300	36	297.	1	JAN	0500	60	228.	1	JAN	0700	84	149.
1	JAN	0105	13	0.	1	JAN	0305	37	320.	1	JAN	0505	61	232.	1	JAN	0705	85	134.
1	JAN	0110	14	0.	1	JAN	0310	38	336.	1	JAN	0510	62	237.	1	JAN	0710	86	121.
1	JAN	0115	15	0.	1	JAN	0315	39	346.	1	JAN	0515	63	241.	1	JAN	0715	87	108.
1	JAN	0120	16	0.	1	JAN	0320	40	353.	1	JAN	0520	64	246.	1	JAN	0720	88	96.
1	JAN	0125	17	0.	1	JAN	0325	41	356.	1	JAN	0525	65	250.	1	JAN	0725	89	85.
1	JAN	0130	18	0.	1	JAN	0330	42	357.	1	JAN	0530	66	252.	1	JAN	0730	90	76.
1	JAN	0135	19	0.	1	JAN	0335	43	357.	1	JAN	0535	67	254.	1	JAN	0735	91	67.
1	JAN	0140	20	0.	1	JAN	0340	44	356.	1	JAN	0540	68	254.	1	JAN	0740	92	58.
1	JAN	0145	21	0.	1	JAN	0345	45	353.	1	JAN	0545	69	252.	1	JAN	0745	93	51.
1	JAN	0150	22	0.	1	JAN	0350	46	347.	1	JAN	0550	70	250.	1	JAN	0750	94	45.
1	JAN	0155	23	0.	1	JAN	0355	47	339.	1	JAN	0555	71	246.	1	JAN	0755	95	39.
1	JAN	0200	24	0.	1	JAN	0400	48	329.	1	JAN	0600	72	242.	1	JAN	0800	96	34.

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  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                                 6-HR        24-HR        72-HR       7.92-HR
+   (CFS)        (HR)
                                   (CFS)
+     357.       3.50                206.         156.         156.         156.
                                (INCHES)        1.128        1.128        1.128        1.128
                                 (AC-FT)         102.         102.         102.         102.

                              CUMULATIVE AREA =    1.70 SQ MI

 *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
  97 KK     *       W2    *     Wood Cr at SR 28
            *            *
            **************

  101 IN          TIME DATA FOR INPUT TIME SERIES
                       JXMIN          15  TIME INTERVAL IN MINUTES
                      JXDATE      1JAN99  STARTING DATE
                      JXTIME           5  STARTING TIME

                SUBBASIN RUNOFF DATA

  98 BA           SUBBASIN CHARACTERISTICS
                        TAREA        0.19  SUBBASIN AREA

  99 BF           BASE FLOW CHARACTERISTICS
                        STRTQ        0.00  INITIAL FLOW
                        QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                        RTIOR     1.50000  RECESSION CONSTANT
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                PRECIPITATION DATA

100 PB                STORM        1.43  BASIN TOTAL PRECIPITATION

102 PI              INCREMENTAL PRECIPITATION PATTERN
                      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                      1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                      3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                      0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                      0.67      0.67

106 LS            SCS LOSS RATE
                       STRTL        0.44  INITIAL ABSTRACTION
                      CRVNBR       82.01  CURVE NUMBER
                       RTIMP        0.00  PERCENT IMPERVIOUS AREA

107 UI            INPUT UNITGRAPH,  11 ORDINATES,  VOLUME = 1.00
                     143.0     334.0     322.0     239.0     161.0     103.0      69.0      47.0      30.0      17.0
                       7.0
                                                          ***
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HYDROGRAPH AT STATION W2

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	*	1	JAN	0405	49	0.00	0.00	0.00	3.
1	JAN	0010	2	0.01	0.01	0.00	0.	*	1	JAN	0410	50	0.01	0.01	0.01	4.
1	JAN	0015	3	0.01	0.01	0.00	0.	*	1	JAN	0415	51	0.01	0.01	0.01	5.
1	JAN	0020	4	0.01	0.01	0.00	0.	*	1	JAN	0420	52	0.01	0.01	0.01	6.
1	JAN	0025	5	0.01	0.01	0.00	0.	*	1	JAN	0425	53	0.01	0.01	0.01	7.
1	JAN	0030	6	0.01	0.01	0.00	0.	*	1	JAN	0430	54	0.01	0.01	0.01	8.
1	JAN	0035	7	0.01	0.01	0.00	0.	*	1	JAN	0435	55	0.01	0.01	0.01	9.
1	JAN	0040	8	0.01	0.01	0.00	0.	*	1	JAN	0440	56	0.01	0.01	0.01	9.
1	JAN	0045	9	0.01	0.01	0.00	0.	*	1	JAN	0445	57	0.01	0.01	0.01	9.
1	JAN	0050	10	0.01	0.01	0.00	0.	*	1	JAN	0450	58	0.01	0.01	0.01	10.
1	JAN	0055	11	0.01	0.01	0.00	0.	*	1	JAN	0455	59	0.01	0.01	0.01	10.
1	JAN	0100	12	0.01	0.01	0.00	0.	*	1	JAN	0500	60	0.01	0.01	0.01	10.
1	JAN	0105	13	0.01	0.01	0.00	0.	*	1	JAN	0505	61	0.01	0.01	0.01	10.
1	JAN	0110	14	0.00	0.00	0.00	0.	*	1	JAN	0510	62	0.01	0.00	0.00	10.
1	JAN	0115	15	0.00	0.00	0.00	0.	*	1	JAN	0515	63	0.01	0.00	0.00	9.
1	JAN	0120	16	0.00	0.00	0.00	0.	*	1	JAN	0520	64	0.01	0.00	0.00	8.
1	JAN	0125	17	0.01	0.01	0.00	0.	*	1	JAN	0525	65	0.01	0.00	0.00	8.
1	JAN	0130	18	0.01	0.01	0.00	0.	*	1	JAN	0530	66	0.01	0.00	0.00	8.
1	JAN	0135	19	0.01	0.01	0.00	0.	*	1	JAN	0535	67	0.01	0.00	0.00	7.
1	JAN	0140	20	0.05	0.05	0.00	0.	*	1	JAN	0540	68	0.01	0.00	0.00	7.
1	JAN	0145	21	0.05	0.05	0.00	0.	*	1	JAN	0545	69	0.01	0.00	0.00	7.
1	JAN	0150	22	0.05	0.05	0.00	0.	*	1	JAN	0550	70	0.01	0.00	0.00	7.
1	JAN	0155	23	0.10	0.10	0.00	0.	*	1	JAN	0555	71	0.01	0.00	0.00	7.
1	JAN	0200	24	0.10	0.10	0.00	1.	*	1	JAN	0600	72	0.01	0.00	0.00	7.
1	JAN	0205	25	0.10	0.09	0.01	3.	*	1	JAN	0605	73	0.01	0.00	0.00	7.
1	JAN	0210	26	0.06	0.05	0.01	7.	*	1	JAN	0610	74	0.00	0.00	0.00	7.
1	JAN	0215	27	0.06	0.04	0.01	11.	*	1	JAN	0615	75	0.00	0.00	0.00	5.
1	JAN	0220	28	0.06	0.04	0.01	13.	*	1	JAN	0620	76	0.00	0.00	0.00	3.
1	JAN	0225	29	0.03	0.02	0.01	15.	*	1	JAN	0625	77	0.00	0.00	0.00	2.
1	JAN	0230	30	0.03	0.02	0.01	16.	*	1	JAN	0630	78	0.00	0.00	0.00	1.
1	JAN	0235	31	0.03	0.02	0.01	16.	*	1	JAN	0635	79	0.00	0.00	0.00	1.
1	JAN	0240	32	0.02	0.01	0.01	15.	*	1	JAN	0640	80	0.00	0.00	0.00	1.
1	JAN	0245	33	0.02	0.01	0.01	14.	*	1	JAN	0645	81	0.00	0.00	0.00	1.
1	JAN	0250	34	0.02	0.01	0.01	12.	*	1	JAN	0650	82	0.00	0.00	0.00	1.
1	JAN	0255	35	0.02	0.01	0.01	11.	*	1	JAN	0655	83	0.00	0.00	0.00	1.
1	JAN	0300	36	0.02	0.01	0.01	11.	*	1	JAN	0700	84	0.00	0.00	0.00	1.
1	JAN	0305	37	0.02	0.01	0.01	11.	*	1	JAN	0705	85	0.00	0.00	0.00	1.
1	JAN	0310	38	0.02	0.01	0.01	11.	*	1	JAN	0710	86	0.00	0.00	0.00	1.
1	JAN	0315	39	0.02	0.01	0.01	11.	*	1	JAN	0715	87	0.00	0.00	0.00	1.
1	JAN	0320	40	0.02	0.01	0.01	11.	*	1	JAN	0720	88	0.00	0.00	0.00	1.
1	JAN	0325	41	0.01	0.01	0.00	10.	*	1	JAN	0725	89	0.00	0.00	0.00	1.
1	JAN	0330	42	0.01	0.01	0.00	9.	*	1	JAN	0730	90	0.00	0.00	0.00	1.
1	JAN	0335	43	0.01	0.01	0.00	8.	*	1	JAN	0735	91	0.00	0.00	0.00	1.
1	JAN	0340	44	0.00	0.00	0.00	7.	*	1	JAN	0740	92	0.00	0.00	0.00	1.
1	JAN	0345	45	0.00	0.00	0.00	6.	*	1	JAN	0745	93	0.00	0.00	0.00	0.
1	JAN	0350	46	0.00	0.00	0.00	5.	*	1	JAN	0750	94	0.00	0.00	0.00	0.
1	JAN	0355	47	0.00	0.00	0.00	4.	*	1	JAN	0755	95	0.00	0.00	0.00	0.
1	JAN	0400	48	0.00	0.00	0.00	4.	*	1	JAN	0800	96	0.00	0.00	0.00	0.

****

TOTAL RAINFALL = 1.43, TOTAL LOSS = 1.12, TOTAL EXCESS = 0.31

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 16.	2.42		6.	5.	5.	5.
		(INCHES)	0.314	0.315	0.315	0.315
		(AC-FT)	3.	3.	3.	3.

CUMULATIVE AREA = 0.19 SQ MI

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-----DSS---ZWRITE Unit  71; Vers.    2:  /WOOD CR/SR28 LOCAL/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 110 KK     *     W2C    *     combine upper & mid Wood, Pt 4
            *            *
            **************

 111 HC          HYDROGRAPH COMBINATION
                       ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                          ***

*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION      W2C
                                                    SUM OF  2 HYDROGRAPHS

*****************************************************************************************************************************
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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	4.	1 JAN 0405	49	319.	1 JAN 0605	73	246.
1 JAN 0010	2	0.	1 JAN 0210	26	8.	1 JAN 0410	50	305.	1 JAN 0610	74	242.
1 JAN 0015	3	0.	1 JAN 0215	27	16.	1 JAN 0415	51	290.	1 JAN 0615	75	237.
1 JAN 0020	4	0.	1 JAN 0220	28	29.	1 JAN 0420	52	275.	1 JAN 0620	76	233.
1 JAN 0025	5	0.	1 JAN 0225	29	51.	1 JAN 0425	53	261.	1 JAN 0625	77	228.
1 JAN 0030	6	0.	1 JAN 0230	30	81.	1 JAN 0430	54	249.	1 JAN 0630	78	223.
1 JAN 0035	7	0.	1 JAN 0235	31	118.	1 JAN 0435	55	240.	1 JAN 0635	79	215.
1 JAN 0040	8	0.	1 JAN 0240	32	159.	1 JAN 0440	56	234.	1 JAN 0640	80	205.
1 JAN 0045	9	0.	1 JAN 0245	33	202.	1 JAN 0445	57	231.	1 JAN 0645	81	193.
1 JAN 0050	10	0.	1 JAN 0250	34	242.	1 JAN 0450	58	232.	1 JAN 0650	82	179.
1 JAN 0055	11	0.	1 JAN 0255	35	278.	1 JAN 0455	59	234.	1 JAN 0655	83	164.
1 JAN 0100	12	0.	1 JAN 0300	36	308.	1 JAN 0500	60	238.	1 JAN 0700	84	149.
1 JAN 0105	13	0.	1 JAN 0305	37	331.	1 JAN 0505	61	242.	1 JAN 0705	85	135.
1 JAN 0110	14	0.	1 JAN 0310	38	346.	1 JAN 0510	62	247.	1 JAN 0710	86	121.
1 JAN 0115	15	0.	1 JAN 0315	39	357.	1 JAN 0515	63	250.	1 JAN 0715	87	109.
1 JAN 0120	16	0.	1 JAN 0320	40	363.	1 JAN 0520	64	254.	1 JAN 0720	88	97.
1 JAN 0125	17	0.	1 JAN 0325	41	366.	1 JAN 0525	65	258.	1 JAN 0725	89	86.
1 JAN 0130	18	0.	1 JAN 0330	42	366.	1 JAN 0530	66	260.	1 JAN 0730	90	76.
1 JAN 0135	19	0.	1 JAN 0335	43	365.	1 JAN 0535	67	261.	1 JAN 0735	91	67.
1 JAN 0140	20	0.	1 JAN 0340	44	363.	1 JAN 0540	68	261.	1 JAN 0740	92	59.
1 JAN 0145	21	0.	1 JAN 0345	45	358.	1 JAN 0545	69	259.	1 JAN 0745	93	51.
1 JAN 0150	22	0.	1 JAN 0350	46	352.	1 JAN 0550	70	257.	1 JAN 0750	94	45.
1 JAN 0155	23	0.	1 JAN 0355	47	343.	1 JAN 0555	71	253.	1 JAN 0755	95	39.
1 JAN 0200	24	1.	1 JAN 0400	48	332.	1 JAN 0600	72	250.	1 JAN 0800	96	34.

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*****************************************************************************************************************************

 PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR        24-HR        72-HR       7.92-HR
+  (CFS)        (HR)
                                   (CFS)
+    366.       3.42                213.         161.         161.         161.
                             (INCHES)        1.046        1.046        1.046        1.046
                             (AC-FT)          105.         105.         105.         105.

                             CUMULATIVE AREA =     1.89 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /WOOD CR/SR28 PT4/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 113 KK     *     W2R    *     Route Wood Cr to mouth at 3fps
            *            *
            **************

               HYDROGRAPH ROUTING DATA

 114 RM          MUSKINGUM ROUTING
                       NSTPS          3 NUMBER OF SUBREACHES
                       AMSKK       0.26 MUSKINGUM K
                           X       0.40 MUSKINGUM X

                                                          ***

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                                                HYDROGRAPH AT STATION      W2R

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW

1 JAN 0005	1	0.	*	1 JAN 0205	25	0.	*	1 JAN 0405	49	352.	*	1 JAN 0605	73	257.
1 JAN 0010	2	0.	*	1 JAN 0210	26	0.	*	1 JAN 0410	50	344.	*	1 JAN 0610	74	254.
1 JAN 0015	3	0.	*	1 JAN 0215	27	1.	*	1 JAN 0415	51	333.	*	1 JAN 0615	75	250.
1 JAN 0020	4	0.	*	1 JAN 0220	28	4.	*	1 JAN 0420	52	320.	*	1 JAN 0620	76	246.
1 JAN 0025	5	0.	*	1 JAN 0225	29	8.	*	1 JAN 0425	53	306.	*	1 JAN 0625	77	242.
1 JAN 0030	6	0.	*	1 JAN 0230	30	16.	*	1 JAN 0430	54	292.	*	1 JAN 0630	78	238.
1 JAN 0035	7	0.	*	1 JAN 0235	31	30.	*	1 JAN 0435	55	277.	*	1 JAN 0635	79	233.
1 JAN 0040	8	0.	*	1 JAN 0240	32	51.	*	1 JAN 0440	56	263.	*	1 JAN 0640	80	229.
1 JAN 0045	9	0.	*	1 JAN 0245	33	80.	*	1 JAN 0445	57	251.	*	1 JAN 0645	81	223.
1 JAN 0050	10	0.	*	1 JAN 0250	34	115.	*	1 JAN 0450	58	242.	*	1 JAN 0650	82	215.
1 JAN 0055	11	0.	*	1 JAN 0255	35	155.	*	1 JAN 0455	59	236.	*	1 JAN 0655	83	205.
1 JAN 0100	12	0.	*	1 JAN 0300	36	196.	*	1 JAN 0500	60	233.	*	1 JAN 0700	84	194.
1 JAN 0105	13	0.	*	1 JAN 0305	37	236.	*	1 JAN 0505	61	232.	*	1 JAN 0705	85	180.
1 JAN 0110	14	0.	*	1 JAN 0310	38	272.	*	1 JAN 0510	62	234.	*	1 JAN 0710	86	166.
1 JAN 0115	15	0.	*	1 JAN 0315	39	303.	*	1 JAN 0515	63	238.	*	1 JAN 0715	87	151.
1 JAN 0120	16	0.	*	1 JAN 0320	40	326.	*	1 JAN 0520	64	242.	*	1 JAN 0720	88	137.
1 JAN 0125	17	0.	*	1 JAN 0325	41	343.	*	1 JAN 0525	65	246.	*	1 JAN 0725	89	123.
1 JAN 0130	18	0.	*	1 JAN 0330	42	354.	*	1 JAN 0530	66	250.	*	1 JAN 0730	90	110.
1 JAN 0135	19	0.	*	1 JAN 0335	43	362.	*	1 JAN 0535	67	254.	*	1 JAN 0735	91	98.
1 JAN 0140	20	0.	*	1 JAN 0340	44	365.	*	1 JAN 0540	68	257.	*	1 JAN 0740	92	88.
1 JAN 0145	21	0.	*	1 JAN 0345	45	366.	*	1 JAN 0545	69	259.	*	1 JAN 0745	93	78.
1 JAN 0150	22	0.	*	1 JAN 0350	46	365.	*	1 JAN 0550	70	261.	*	1 JAN 0750	94	68.
1 JAN 0155	23	0.	*	1 JAN 0355	47	363.	*	1 JAN 0555	71	260.	*	1 JAN 0755	95	60.
1 JAN 0200	24	0.	*	1 JAN 0400	48	358.	*	1 JAN 0600	72	259.	*	1 JAN 0800	96	53.
			*				*				*			

****

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)	(CFS)				
+ 366.	3.67		211.	160.	160.	160.
		(INCHES)	1.037	1.037	1.037	1.037
		(AC-FT)	105.	105.	105.	105.

CUMULATIVE AREA = 1.89 SQ MI

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            **************
            *            *
115 KK      *     W3     *     Wood Cr at mouth
            *            *
            **************

119 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           5  STARTING TIME

                SUBBASIN RUNOFF DATA

116 BA          SUBBASIN CHARACTERISTICS
                     TAREA        0.08  SUBBASIN AREA

117 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        0.00  INITIAL FLOW
                     QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR     1.50000  RECESSION CONSTANT

                PRECIPITATION DATA

118 PB               STORM        1.26  BASIN TOTAL PRECIPITATION

120 PI            INCREMENTAL PRECIPITATION PATTERN
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                    1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                    3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                    1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                    0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                    1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                    0.67      0.67

124 LS          SCS LOSS RATE
                     STRTL        0.35  INITIAL ABSTRACTION
                    CRVNBR       85.14  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

125 UI          INPUT UNITGRAPH,   7 ORDINATES,  VOLUME = 1.00
                    125.0     211.0     138.0      73.0      40.0      22.0       9.0
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HYDROGRAPH AT STATION W3

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q

1 JAN 0005	1	0.00	0.00	0.00	0.	*	1 JAN 0405	49	0.00	0.00	0.00	1.
1 JAN 0010	2	0.01	0.01	0.00	0.	*	1 JAN 0410	50	0.01	0.01	0.01	2.
1 JAN 0015	3	0.01	0.01	0.00	0.	*	1 JAN 0415	51	0.01	0.01	0.01	3.
1 JAN 0020	4	0.01	0.01	0.00	0.	*	1 JAN 0420	52	0.01	0.01	0.01	3.
1 JAN 0025	5	0.01	0.01	0.00	0.	*	1 JAN 0425	53	0.01	0.01	0.01	3.
1 JAN 0030	6	0.01	0.01	0.00	0.	*	1 JAN 0430	54	0.01	0.01	0.01	4.
1 JAN 0035	7	0.01	0.01	0.00	0.	*	1 JAN 0435	55	0.01	0.01	0.01	4.
1 JAN 0040	8	0.01	0.01	0.00	0.	*	1 JAN 0440	56	0.01	0.01	0.01	4.
1 JAN 0045	9	0.01	0.01	0.00	0.	*	1 JAN 0445	57	0.01	0.01	0.01	4.
1 JAN 0050	10	0.01	0.01	0.00	0.	*	1 JAN 0450	58	0.01	0.01	0.01	4.
1 JAN 0055	11	0.01	0.01	0.00	0.	*	1 JAN 0455	59	0.01	0.01	0.01	4.
1 JAN 0100	12	0.01	0.01	0.00	0.	*	1 JAN 0500	60	0.01	0.01	0.01	4.
1 JAN 0105	13	0.01	0.01	0.00	0.	*	1 JAN 0505	61	0.01	0.01	0.01	4.
1 JAN 0110	14	0.00	0.00	0.00	0.	*	1 JAN 0510	62	0.01	0.00	0.00	4.
1 JAN 0115	15	0.00	0.00	0.00	0.	*	1 JAN 0515	63	0.01	0.00	0.00	3.
1 JAN 0120	16	0.00	0.00	0.00	0.	*	1 JAN 0520	64	0.01	0.00	0.00	3.
1 JAN 0125	17	0.01	0.01	0.00	0.	*	1 JAN 0525	65	0.01	0.00	0.00	3.
1 JAN 0130	18	0.01	0.01	0.00	0.	*	1 JAN 0530	66	0.01	0.00	0.00	3.
1 JAN 0135	19	0.01	0.01	0.00	0.	*	1 JAN 0535	67	0.01	0.00	0.00	3.
1 JAN 0140	20	0.05	0.05	0.00	0.	*	1 JAN 0540	68	0.01	0.00	0.00	3.
1 JAN 0145	21	0.05	0.05	0.00	0.	*	1 JAN 0545	69	0.01	0.00	0.00	3.
1 JAN 0150	22	0.05	0.05	0.00	0.	*	1 JAN 0550	70	0.01	0.00	0.00	3.
1 JAN 0155	23	0.09	0.09	0.00	0.	*	1 JAN 0555	71	0.01	0.00	0.00	3.
1 JAN 0200	24	0.09	0.08	0.01	1.	*	1 JAN 0600	72	0.01	0.00	0.00	3.
1 JAN 0205	25	0.09	0.07	0.02	4.	*	1 JAN 0605	73	0.01	0.00	0.00	3.
1 JAN 0210	26	0.05	0.04	0.01	6.	*	1 JAN 0610	74	0.00	0.00	0.00	2.
1 JAN 0215	27	0.05	0.04	0.01	7.	*	1 JAN 0615	75	0.00	0.00	0.00	1.
1 JAN 0220	28	0.05	0.04	0.02	8.	*	1 JAN 0620	76	0.00	0.00	0.00	1.
1 JAN 0225	29	0.03	0.02	0.01	8.	*	1 JAN 0625	77	0.00	0.00	0.00	0.
1 JAN 0230	30	0.03	0.02	0.01	7.	*	1 JAN 0630	78	0.00	0.00	0.00	0.
1 JAN 0235	31	0.03	0.02	0.01	7.	*	1 JAN 0635	79	0.00	0.00	0.00	0.
1 JAN 0240	32	0.02	0.01	0.01	6.	*	1 JAN 0640	80	0.00	0.00	0.00	0.
1 JAN 0245	33	0.02	0.01	0.01	5.	*	1 JAN 0645	81	0.00	0.00	0.00	0.
1 JAN 0250	34	0.02	0.01	0.01	5.	*	1 JAN 0650	82	0.00	0.00	0.00	0.
1 JAN 0255	35	0.02	0.01	0.01	4.	*	1 JAN 0655	83	0.00	0.00	0.00	0.
1 JAN 0300	36	0.02	0.01	0.01	4.	*	1 JAN 0700	84	0.00	0.00	0.00	0.
1 JAN 0305	37	0.02	0.01	0.01	4.	*	1 JAN 0705	85	0.00	0.00	0.00	0.
1 JAN 0310	38	0.02	0.01	0.01	4.	*	1 JAN 0710	86	0.00	0.00	0.00	0.
1 JAN 0315	39	0.02	0.01	0.01	4.	*	1 JAN 0715	87	0.00	0.00	0.00	0.
1 JAN 0320	40	0.02	0.01	0.01	4.	*	1 JAN 0720	88	0.00	0.00	0.00	0.
1 JAN 0325	41	0.01	0.00	0.00	4.	*	1 JAN 0725	89	0.00	0.00	0.00	0.
1 JAN 0330	42	0.01	0.00	0.00	3.	*	1 JAN 0730	90	0.00	0.00	0.00	0.
1 JAN 0335	43	0.01	0.00	0.00	3.	*	1 JAN 0735	91	0.00	0.00	0.00	0.
1 JAN 0340	44	0.00	0.00	0.00	2.	*	1 JAN 0740	92	0.00	0.00	0.00	0.
1 JAN 0345	45	0.00	0.00	0.00	2.	*	1 JAN 0745	93	0.00	0.00	0.00	0.
1 JAN 0350	46	0.00	0.00	0.00	2.	*	1 JAN 0750	94	0.00	0.00	0.00	0.
1 JAN 0355	47	0.00	0.00	0.00	1.	*	1 JAN 0755	95	0.00	0.00	0.00	0.
1 JAN 0400	48	0.00	0.00	0.00	1.	*	1 JAN 0800	96	0.00	0.00	0.00	0.

****

TOTAL RAINFALL = 1.26, TOTAL LOSS = 0.95, TOTAL EXCESS = 0.31

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 8.	2.33		3.	2.	2.	2.
		(INCHES)	0.320	0.320	0.320	0.320
		(AC-FT)	1.	1.	1.	1.

CUMULATIVE AREA = 0.08 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /WOOD CR/MOUTH LOCAL/FLOW/01JAN1999/5MIN//

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            **************
            *            *
127 KK      *     W3C    *     Combine Wood Cr at mouth, Pt 5
            *            *
            **************
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128 HC          HYDROGRAPH COMBINATION
                     ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE
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HYDROGRAPH AT STATION W3C
SUM OF 2 HYDROGRAPHS

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	4.	1 JAN 0405	49	353.	1 JAN 0605	73	260.
1 JAN 0010	2	0.	1 JAN 0210	26	6.	1 JAN 0410	50	345.	1 JAN 0610	74	256.
1 JAN 0015	3	0.	1 JAN 0215	27	8.	1 JAN 0415	51	336.	1 JAN 0615	75	251.
1 JAN 0020	4	0.	1 JAN 0220	28	12.	1 JAN 0420	52	323.	1 JAN 0620	76	247.

1 JAN 0025	5	0.	*	1 JAN 0225	29	16.	*	1 JAN 0425	53	310.	*	1 JAN 0625	77	243.
1 JAN 0030	6	0.	*	1 JAN 0230	30	23.	*	1 JAN 0430	54	295.	*	1 JAN 0630	78	238.
1 JAN 0035	7	0.	*	1 JAN 0235	31	37.	*	1 JAN 0435	55	281.	*	1 JAN 0635	79	234.
1 JAN 0040	8	0.	*	1 JAN 0240	32	57.	*	1 JAN 0440	56	267.	*	1 JAN 0640	80	229.
1 JAN 0045	9	0.	*	1 JAN 0245	33	85.	*	1 JAN 0445	57	255.	*	1 JAN 0645	81	223.
1 JAN 0050	10	0.	*	1 JAN 0250	34	120.	*	1 JAN 0450	58	246.	*	1 JAN 0650	82	215.
1 JAN 0055	11	0.	*	1 JAN 0255	35	159.	*	1 JAN 0455	59	240.	*	1 JAN 0655	83	206.
1 JAN 0100	12	0.	*	1 JAN 0300	36	201.	*	1 JAN 0500	60	237.	*	1 JAN 0700	84	194.
1 JAN 0105	13	0.	*	1 JAN 0305	37	241.	*	1 JAN 0505	61	236.	*	1 JAN 0705	85	180.
1 JAN 0110	14	0.	*	1 JAN 0310	38	277.	*	1 JAN 0510	62	238.	*	1 JAN 0710	86	166.
1 JAN 0115	15	0.	*	1 JAN 0315	39	307.	*	1 JAN 0515	63	241.	*	1 JAN 0715	87	151.
1 JAN 0120	16	0.	*	1 JAN 0320	40	331.	*	1 JAN 0520	64	245.	*	1 JAN 0720	88	137.
1 JAN 0125	17	0.	*	1 JAN 0325	41	347.	*	1 JAN 0525	65	249.	*	1 JAN 0725	89	123.
1 JAN 0130	18	0.	*	1 JAN 0330	42	358.	*	1 JAN 0530	66	253.	*	1 JAN 0730	90	111.
1 JAN 0135	19	0.	*	1 JAN 0335	43	364.	*	1 JAN 0535	67	256.	*	1 JAN 0735	91	99.
1 JAN 0140	20	0.	*	1 JAN 0340	44	367.	*	1 JAN 0540	68	260.	*	1 JAN 0740	92	88.
1 JAN 0145	21	0.	*	1 JAN 0345	45	368.	*	1 JAN 0545	69	262.	*	1 JAN 0745	93	78.
1 JAN 0150	22	0.	*	1 JAN 0350	46	367.	*	1 JAN 0550	70	263.	*	1 JAN 0750	94	69.
1 JAN 0155	23	0.	*	1 JAN 0355	47	364.	*	1 JAN 0555	71	263.	*	1 JAN 0755	95	60.
1 JAN 0200	24	1.	*	1 JAN 0400	48	360.	*	1 JAN 0600	72	262.	*	1 JAN 0800	96	53.
			*				*				*			

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 368.	3.67		214.	162.	162.	162.
		(INCHES)	1.008	1.008	1.008	1.008
		(AC-FT)	106.	106.	106.	106.

CUMULATIVE AREA = 1.97 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 1: /WOOD CR/MOUTH PT5/FLOW/01JAN1999/5MIN//

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            **************
            *            *
 130 KK     *     T1     *     Third Cr ab Ophir Div.
            *            *
            **************

 134 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE      1JAN99  STARTING DATE
                     JXTIME           5  STARTING TIME

               SUBBASIN RUNOFF DATA

 131 BA          SUBBASIN CHARACTERISTICS
                      TAREA        1.03  SUBBASIN AREA

 132 BF          BASE FLOW CHARACTERISTICS
                      STRTQ        2.00  INITIAL FLOW
                      QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                      RTIOR     1.03000  RECESSION CONSTANT

                 PRECIPITATION DATA

 133 PB               STORM        6.33  BASIN TOTAL PRECIPITATION

 135 PI            INCREMENTAL PRECIPITATION PATTERN
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                     1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                     3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                     1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                     0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                     1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                     0.67      0.67

 139 LS          SCS LOSS RATE
                      STRTL        1.23  INITIAL ABSTRACTION
                     CRVNBR       61.84  CURVE NUMBER
                      RTIMP        0.00  PERCENT IMPERVIOUS AREA

 140 UI          INPUT UNITGRAPH,  33 ORDINATES,  VOLUME = 1.00
                      93.0     278.0     428.0     541.0     645.0     658.0     635.0     589.0     530.0     480.0
                     429.0     381.0     333.0     286.0     240.0     210.0     180.0     159.0     138.0     122.0
                     106.0      94.0      82.0      70.0      60.0      50.0      42.0      33.0      28.0      20.0
                      15.0       8.0       1.0
                                                                  ***
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HYDROGRAPH AT STATION T1

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q

1 JAN 0005	1	0.00	0.00	0.00	2.	*	1 JAN 0405	49	0.02	0.01	0.01	283.
1 JAN 0010	2	0.04	0.04	0.00	2.	*	1 JAN 0410	50	0.06	0.02	0.04	263.
1 JAN 0015	3	0.04	0.04	0.00	2.	*	1 JAN 0415	51	0.06	0.02	0.04	250.
1 JAN 0020	4	0.04	0.04	0.00	2.	*	1 JAN 0420	52	0.06	0.02	0.04	243.
1 JAN 0025	5	0.04	0.04	0.00	2.	*	1 JAN 0425	53	0.06	0.02	0.04	241.
1 JAN 0030	6	0.04	0.04	0.00	2.	*	1 JAN 0430	54	0.06	0.02	0.04	243.
1 JAN 0035	7	0.04	0.04	0.00	2.	*	1 JAN 0435	55	0.06	0.02	0.04	248.
1 JAN 0040	8	0.04	0.04	0.00	2.	*	1 JAN 0440	56	0.06	0.02	0.04	254.
1 JAN 0045	9	0.04	0.04	0.00	2.	*	1 JAN 0445	57	0.06	0.02	0.04	260.
1 JAN 0050	10	0.04	0.04	0.00	2.	*	1 JAN 0450	58	0.06	0.02	0.04	267.
1 JAN 0055	11	0.06	0.06	0.00	2.	*	1 JAN 0455	59	0.06	0.02	0.04	273.
1 JAN 0100	12	0.06	0.06	0.00	2.	*	1 JAN 0500	60	0.06	0.02	0.04	280.
1 JAN 0105	13	0.06	0.06	0.00	2.	*	1 JAN 0505	61	0.06	0.02	0.04	286.
1 JAN 0110	14	0.02	0.02	0.00	2.	*	1 JAN 0510	62	0.04	0.01	0.03	291.
1 JAN 0115	15	0.02	0.02	0.00	2.	*	1 JAN 0515	63	0.04	0.01	0.03	293.
1 JAN 0120	16	0.02	0.02	0.00	2.	*	1 JAN 0520	64	0.04	0.01	0.03	292.
1 JAN 0125	17	0.06	0.06	0.00	2.	*	1 JAN 0525	65	0.04	0.01	0.03	289.
1 JAN 0130	18	0.06	0.06	0.00	2.	*	1 JAN 0530	66	0.04	0.01	0.03	284.
1 JAN 0135	19	0.06	0.06	0.00	2.	*	1 JAN 0535	67	0.04	0.01	0.03	278.
1 JAN 0140	20	0.23	0.23	0.00	2.	*	1 JAN 0540	68	0.04	0.01	0.03	273.
1 JAN 0145	21	0.23	0.23	0.00	2.	*	1 JAN 0545	69	0.04	0.01	0.03	267.
1 JAN 0150	22	0.23	0.22	0.01	3.	*	1 JAN 0550	70	0.04	0.01	0.03	263.
1 JAN 0155	23	0.44	0.38	0.06	11.	*	1 JAN 0555	71	0.04	0.01	0.03	259.
1 JAN 0200	24	0.44	0.33	0.11	35.	*	1 JAN 0600	72	0.04	0.01	0.03	256.
1 JAN 0205	25	0.44	0.30	0.15	81.	*	1 JAN 0605	73	0.04	0.01	0.03	253.
1 JAN 0210	26	0.25	0.15	0.10	142.	*	1 JAN 0610	74	0.00	0.00	0.00	248.
1 JAN 0215	27	0.25	0.14	0.11	212.	*	1 JAN 0615	75	0.00	0.00	0.00	238.
1 JAN 0220	28	0.25	0.14	0.12	287.	*	1 JAN 0620	76	0.00	0.00	0.00	224.
1 JAN 0225	29	0.15	0.08	0.07	357.	*	1 JAN 0625	77	0.00	0.00	0.00	207.
1 JAN 0230	30	0.15	0.07	0.07	413.	*	1 JAN 0630	78	0.00	0.00	0.00	187.
1 JAN 0235	31	0.15	0.07	0.08	458.	*	1 JAN 0635	79	0.00	0.00	0.00	166.
1 JAN 0240	32	0.08	0.04	0.04	490.	*	1 JAN 0640	80	0.00	0.00	0.00	147.
1 JAN 0245	33	0.08	0.04	0.05	506.	*	1 JAN 0645	81	0.00	0.00	0.00	128.
1 JAN 0250	34	0.08	0.04	0.05	513.	*	1 JAN 0650	82	0.00	0.00	0.00	112.
1 JAN 0255	35	0.08	0.04	0.05	512.	*	1 JAN 0655	83	0.00	0.00	0.00	97.
1 JAN 0300	36	0.08	0.04	0.05	504.	*	1 JAN 0700	84	0.00	0.00	0.00	83.
1 JAN 0305	37	0.08	0.04	0.05	494.	*	1 JAN 0705	85	0.00	0.00	0.00	71.
1 JAN 0310	38	0.08	0.04	0.05	483.	*	1 JAN 0710	86	0.00	0.00	0.00	61.
1 JAN 0315	39	0.08	0.03	0.05	472.	*	1 JAN 0715	87	0.00	0.00	0.00	52.
1 JAN 0320	40	0.08	0.03	0.05	463.	*	1 JAN 0720	88	0.00	0.00	0.00	44.
1 JAN 0325	41	0.04	0.02	0.03	452.	*	1 JAN 0725	89	0.00	0.00	0.00	38.
1 JAN 0330	42	0.04	0.02	0.03	438.	*	1 JAN 0730	90	0.00	0.00	0.00	32.
1 JAN 0335	43	0.04	0.02	0.03	422.	*	1 JAN 0735	91	0.00	0.00	0.00	27.
1 JAN 0340	44	0.02	0.01	0.01	404.	*	1 JAN 0740	92	0.00	0.00	0.00	26.
1 JAN 0345	45	0.02	0.01	0.01	381.	*	1 JAN 0745	93	0.00	0.00	0.00	26.
1 JAN 0350	46	0.02	0.01	0.01	356.	*	1 JAN 0750	94	0.00	0.00	0.00	25.
1 JAN 0355	47	0.02	0.01	0.01	331.	*	1 JAN 0755	95	0.00	0.00	0.00	25.
1 JAN 0400	48	0.02	0.01	0.01	306.	*	1 JAN 0800	96	0.00	0.00	0.00	25.

****

TOTAL RAINFALL = 6.33, TOTAL LOSS = 4.03, TOTAL EXCESS = 2.30

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)	(CFS)				
+ 513.	2.75		256.	195.	195.	195.
		(INCHES)	2.314	2.323	2.323	2.323
		(AC-FT)	127.	128.	128.	128.

CUMULATIVE AREA = 1.03 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /THIRD CR/AB OPHIR/FLOW/01JAN1999/5MIN//

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            **************
            *            *
145 KK      *     TD1    *     Divert part Third Cr flow to Ophir Cr.
            *            *
            **************
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DT	DIVERSION ISTAD	OPDIV	DIVERSION HYDROGRAPH IDENTIFICATION		
DI	INFLOW	0.00	5.00	125.00	1000.00
DQ	DIVERTED FLOW	0.00	0.00	50.00	50.00

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DIVERSION HYDROGRAPH OPDIV

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DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	*	1 JAN 0205	25	31.	*	1 JAN 0405	49	50.	*	1 JAN 0605	73	50.

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0010	2	0.	1 JAN 0210	26	50.	1 JAN 0410	50	50.	1 JAN 0610	74	50.
1 JAN 0015	3	0.	1 JAN 0215	27	50.	1 JAN 0415	51	50.	1 JAN 0615	75	50.
1 JAN 0020	4	0.	1 JAN 0220	28	50.	1 JAN 0420	52	50.	1 JAN 0620	76	50.
1 JAN 0025	5	0.	1 JAN 0225	29	50.	1 JAN 0425	53	50.	1 JAN 0625	77	50.
1 JAN 0030	6	0.	1 JAN 0230	30	50.	1 JAN 0430	54	50.	1 JAN 0630	78	50.
1 JAN 0035	7	0.	1 JAN 0235	31	50.	1 JAN 0435	55	50.	1 JAN 0635	79	50.
1 JAN 0040	8	0.	1 JAN 0240	32	50.	1 JAN 0440	56	50.	1 JAN 0640	80	50.
1 JAN 0045	9	0.	1 JAN 0245	33	50.	1 JAN 0445	57	50.	1 JAN 0645	81	50.
1 JAN 0050	10	0.	1 JAN 0250	34	50.	1 JAN 0450	58	50.	1 JAN 0650	82	44.
1 JAN 0055	11	0.	1 JAN 0255	35	50.	1 JAN 0455	59	50.	1 JAN 0655	83	38.
1 JAN 0100	12	0.	1 JAN 0300	36	50.	1 JAN 0500	60	50.	1 JAN 0700	84	33.
1 JAN 0105	13	0.	1 JAN 0305	37	50.	1 JAN 0505	61	50.	1 JAN 0705	85	28.
1 JAN 0110	14	0.	1 JAN 0310	38	50.	1 JAN 0510	62	50.	1 JAN 0710	86	23.
1 JAN 0115	15	0.	1 JAN 0315	39	50.	1 JAN 0515	63	50.	1 JAN 0715	87	19.
1 JAN 0120	16	0.	1 JAN 0320	40	50.	1 JAN 0520	64	50.	1 JAN 0720	88	16.
1 JAN 0125	17	0.	1 JAN 0325	41	50.	1 JAN 0525	65	50.	1 JAN 0725	89	14.
1 JAN 0130	18	0.	1 JAN 0330	42	50.	1 JAN 0530	66	50.	1 JAN 0730	90	11.
1 JAN 0135	19	0.	1 JAN 0335	43	50.	1 JAN 0535	67	50.	1 JAN 0735	91	9.
1 JAN 0140	20	0.	1 JAN 0340	44	50.	1 JAN 0540	68	50.	1 JAN 0740	92	9.
1 JAN 0145	21	0.	1 JAN 0345	45	50.	1 JAN 0545	69	50.	1 JAN 0745	93	9.
1 JAN 0150	22	0.	1 JAN 0350	46	50.	1 JAN 0550	70	50.	1 JAN 0750	94	9.
1 JAN 0155	23	3.	1 JAN 0355	47	50.	1 JAN 0555	71	50.	1 JAN 0755	95	9.
1 JAN 0200	24	13.	1 JAN 0400	48	50.	1 JAN 0600	72	50.	1 JAN 0800	96	8.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
50.	2.08	(CFS)	43.	33.	33.	33.
		(INCHES)	0.390	0.391	0.391	0.391
		(AC-FT)	21.	21.	21.	21.

CUMULATIVE AREA = 1.03 SQ MI

HYDROGRAPH AT STATION TD1

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	2.	1 JAN 0205	25	49.	1 JAN 0405	49	233.	1 JAN 0605	73	203.
1 JAN 0010	2	2.	1 JAN 0210	26	92.	1 JAN 0410	50	213.	1 JAN 0610	74	198.
1 JAN 0015	3	2.	1 JAN 0215	27	162.	1 JAN 0415	51	200.	1 JAN 0615	75	188.
1 JAN 0020	4	2.	1 JAN 0220	28	237.	1 JAN 0420	52	193.	1 JAN 0620	76	174.
1 JAN 0025	5	2.	1 JAN 0225	29	307.	1 JAN 0425	53	191.	1 JAN 0625	77	157.
1 JAN 0030	6	2.	1 JAN 0230	30	363.	1 JAN 0430	54	193.	1 JAN 0630	78	137.
1 JAN 0035	7	2.	1 JAN 0235	31	408.	1 JAN 0435	55	198.	1 JAN 0635	79	116.
1 JAN 0040	8	2.	1 JAN 0240	32	440.	1 JAN 0440	56	204.	1 JAN 0640	80	97.
1 JAN 0045	9	2.	1 JAN 0245	33	456.	1 JAN 0445	57	210.	1 JAN 0645	81	78.
1 JAN 0050	10	2.	1 JAN 0250	34	463.	1 JAN 0450	58	217.	1 JAN 0650	82	67.
1 JAN 0055	11	2.	1 JAN 0255	35	462.	1 JAN 0455	59	223.	1 JAN 0655	83	58.
1 JAN 0100	12	2.	1 JAN 0300	36	454.	1 JAN 0500	60	230.	1 JAN 0700	84	51.
1 JAN 0105	13	2.	1 JAN 0305	37	444.	1 JAN 0505	61	236.	1 JAN 0705	85	44.
1 JAN 0110	14	2.	1 JAN 0310	38	433.	1 JAN 0510	62	241.	1 JAN 0710	86	37.
1 JAN 0115	15	2.	1 JAN 0315	39	422.	1 JAN 0515	63	243.	1 JAN 0715	87	32.
1 JAN 0120	16	2.	1 JAN 0320	40	413.	1 JAN 0520	64	242.	1 JAN 0720	88	28.
1 JAN 0125	17	2.	1 JAN 0325	41	402.	1 JAN 0525	65	239.	1 JAN 0725	89	24.
1 JAN 0130	18	2.	1 JAN 0330	42	388.	1 JAN 0530	66	234.	1 JAN 0730	90	21.
1 JAN 0135	19	2.	1 JAN 0335	43	372.	1 JAN 0535	67	228.	1 JAN 0735	91	18.
1 JAN 0140	20	2.	1 JAN 0340	44	354.	1 JAN 0540	68	223.	1 JAN 0740	92	17.
1 JAN 0145	21	2.	1 JAN 0345	45	331.	1 JAN 0545	69	217.	1 JAN 0745	93	17.
1 JAN 0150	22	3.	1 JAN 0350	46	306.	1 JAN 0550	70	213.	1 JAN 0750	94	17.
1 JAN 0155	23	9.	1 JAN 0355	47	281.	1 JAN 0555	71	209.	1 JAN 0755	95	17.
1 JAN 0200	24	23.	1 JAN 0400	48	256.	1 JAN 0600	72	206.	1 JAN 0800	96	17.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
463.	2.75	(CFS)	213.	162.	162.	162.
		(INCHES)	1.924	1.932	1.932	1.932
		(AC-FT)	106.	106.	106.	106.

CUMULATIVE AREA = 1.03 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /THIRD CR/BL OPHIR/FLOW/01JAN1999/5MIN//

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150 KK **********
* *
* T1R *
* *
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Route Third to Ginny Lk at 4 fps

HYDROGRAPH ROUTING DATA

151 RM MUSKINGUM ROUTING

NSTPS	1	NUMBER OF SUBREACHES
AMSKK	0.10	MUSKINGUM K
X	0.40	MUSKINGUM X

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HYDROGRAPH AT STATION T1R

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	2.	1 JAN 0205	25	21.	1 JAN 0405	49	261.	1 JAN 0605	73	207.
1 JAN 0010	2	2.	1 JAN 0210	26	45.	1 JAN 0410	50	238.	1 JAN 0610	74	204.
1 JAN 0015	3	2.	1 JAN 0215	27	85.	1 JAN 0415	51	217.	1 JAN 0615	75	199.
1 JAN 0020	4	2.	1 JAN 0220	28	149.	1 JAN 0420	52	203.	1 JAN 0620	76	190.
1 JAN 0025	5	2.	1 JAN 0225	29	222.	1 JAN 0425	53	195.	1 JAN 0625	77	177.
1 JAN 0030	6	2.	1 JAN 0230	30	293.	1 JAN 0430	54	192.	1 JAN 0630	78	160.
1 JAN 0035	7	2.	1 JAN 0235	31	351.	1 JAN 0435	55	193.	1 JAN 0635	79	141.
1 JAN 0040	8	2.	1 JAN 0240	32	398.	1 JAN 0440	56	197.	1 JAN 0640	80	121.
1 JAN 0045	9	2.	1 JAN 0245	33	433.	1 JAN 0445	57	203.	1 JAN 0645	81	101.
1 JAN 0050	10	2.	1 JAN 0250	34	452.	1 JAN 0450	58	209.	1 JAN 0650	82	82.
1 JAN 0055	11	2.	1 JAN 0255	35	461.	1 JAN 0455	59	215.	1 JAN 0655	83	70.
1 JAN 0100	12	2.	1 JAN 0300	36	462.	1 JAN 0500	60	222.	1 JAN 0700	84	60.
1 JAN 0105	13	2.	1 JAN 0305	37	455.	1 JAN 0505	61	229.	1 JAN 0705	85	52.
1 JAN 0110	14	2.	1 JAN 0310	38	446.	1 JAN 0510	62	235.	1 JAN 0710	86	45.
1 JAN 0115	15	2.	1 JAN 0315	39	435.	1 JAN 0515	63	240.	1 JAN 0715	87	39.
1 JAN 0120	16	2.	1 JAN 0320	40	424.	1 JAN 0520	64	242.	1 JAN 0720	88	33.
1 JAN 0125	17	2.	1 JAN 0325	41	414.	1 JAN 0525	65	242.	1 JAN 0725	89	29.
1 JAN 0130	18	2.	1 JAN 0330	42	404.	1 JAN 0530	66	239.	1 JAN 0730	90	25.
1 JAN 0135	19	2.	1 JAN 0335	43	391.	1 JAN 0535	67	234.	1 JAN 0735	91	22.
1 JAN 0140	20	2.	1 JAN 0340	44	375.	1 JAN 0540	68	229.	1 JAN 0740	92	19.
1 JAN 0145	21	2.	1 JAN 0345	45	357.	1 JAN 0545	69	224.	1 JAN 0745	93	17.
1 JAN 0150	22	2.	1 JAN 0350	46	335.	1 JAN 0550	70	219.	1 JAN 0750	94	17.
1 JAN 0155	23	3.	1 JAN 0355	47	311.	1 JAN 0555	71	214.	1 JAN 0755	95	17.
1 JAN 0200	24	8.	1 JAN 0400	48	286.	1 JAN 0600	72	210.	1 JAN 0800	96	17.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
462.	2.92	(CFS)	213.	162.	162.	162.
		(INCHES)	1.924	1.930	1.930	1.930
		(AC-FT)	106.	106.	106.	106.

CUMULATIVE AREA = 1.03 SQ MI

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152 KK T2 Third Cr - Ginny Lk Watershed

156 IN TIME DATA FOR INPUT TIME SERIES

JXMIN	15	TIME INTERVAL IN MINUTES
JXDATE	1JAN99	STARTING DATE
JXTIME	5	STARTING TIME

SUBBASIN RUNOFF DATA

153 BA SUBBASIN CHARACTERISTICS

TAREA	1.01	SUBBASIN AREA

154 BF BASE FLOW CHARACTERISTICS

STRTQ	2.00	INITIAL FLOW
QRCSN	-0.05	BEGIN BASE FLOW RECESSION
RTIOR	1.03000	RECESSION CONSTANT

PRECIPITATION DATA

155 PB STORM 5.67 BASIN TOTAL PRECIPITATION

157 PI INCREMENTAL PRECIPITATION PATTERN

0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	1.00
1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	3.67	3.67
3.67	7.00	7.00	7.00	4.00	4.00	4.00	2.33	2.33	2.33
1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	0.67
0.67	0.67	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
0.67	0.67								

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161 LS          SCS LOSS RATE
                     STRTL        0.87  INITIAL ABSTRACTION
                    CRVNBR       69.60  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

162 UI          INPUT UNITGRAPH,  24 ORDINATES,  VOLUME = 1.00
                    156.0     447.0     665.0     828.0     829.0     778.0     680.0     595.0     512.0     432.0
                    353.0     287.0     236.0     200.0     168.0     140.0     119.0     100.0      81.0      68.0
                     54.0      41.0      30.0      15.0
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HYDROGRAPH AT STATION T2

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	2.	1	JAN	0405	49	0.02	0.01	0.01	226.
1	JAN	0010	2	0.04	0.04	0.00	2.	1	JAN	0410	50	0.06	0.02	0.04	207.
1	JAN	0015	3	0.04	0.04	0.00	2.	1	JAN	0415	51	0.06	0.02	0.04	200.
1	JAN	0020	4	0.04	0.04	0.00	2.	1	JAN	0420	52	0.06	0.02	0.04	202.
1	JAN	0025	5	0.04	0.04	0.00	2.	1	JAN	0425	53	0.06	0.02	0.04	212.
1	JAN	0030	6	0.04	0.04	0.00	2.	1	JAN	0430	54	0.06	0.02	0.04	225.
1	JAN	0035	7	0.04	0.04	0.00	2.	1	JAN	0435	55	0.06	0.02	0.04	238.
1	JAN	0040	8	0.04	0.04	0.00	2.	1	JAN	0440	56	0.06	0.02	0.04	251.
1	JAN	0045	9	0.04	0.04	0.00	2.	1	JAN	0445	57	0.06	0.02	0.04	262.
1	JAN	0050	10	0.04	0.04	0.00	2.	1	JAN	0450	58	0.06	0.01	0.04	272.
1	JAN	0055	11	0.06	0.06	0.00	2.	1	JAN	0455	59	0.06	0.01	0.04	281.
1	JAN	0100	12	0.06	0.06	0.00	2.	1	JAN	0500	60	0.06	0.01	0.04	289.
1	JAN	0105	13	0.06	0.06	0.00	2.	1	JAN	0505	61	0.06	0.01	0.04	295.
1	JAN	0110	14	0.02	0.02	0.00	2.	1	JAN	0510	62	0.04	0.01	0.03	299.
1	JAN	0115	15	0.02	0.02	0.00	2.	1	JAN	0515	63	0.04	0.01	0.03	297.
1	JAN	0120	16	0.02	0.02	0.00	2.	1	JAN	0520	64	0.04	0.01	0.03	293.
1	JAN	0125	17	0.06	0.06	0.00	2.	1	JAN	0525	65	0.04	0.01	0.03	285.
1	JAN	0130	18	0.06	0.06	0.00	2.	1	JAN	0530	66	0.04	0.01	0.03	278.
1	JAN	0135	19	0.06	0.06	0.00	2.	1	JAN	0535	67	0.04	0.01	0.03	270.
1	JAN	0140	20	0.21	0.21	0.00	2.	1	JAN	0540	68	0.04	0.01	0.03	264.
1	JAN	0145	21	0.21	0.19	0.02	5.	1	JAN	0545	69	0.04	0.01	0.03	258.
1	JAN	0150	22	0.21	0.18	0.03	15.	1	JAN	0550	70	0.04	0.01	0.03	253.
1	JAN	0155	23	0.40	0.30	0.10	43.	1	JAN	0555	71	0.04	0.01	0.03	249.
1	JAN	0200	24	0.40	0.26	0.14	104.	1	JAN	0600	72	0.04	0.01	0.03	246.
1	JAN	0205	25	0.40	0.22	0.18	199.	1	JAN	0605	73	0.04	0.01	0.03	243.
1	JAN	0210	26	0.23	0.11	0.11	314.	1	JAN	0610	74	0.00	0.00	0.00	236.
1	JAN	0215	27	0.23	0.11	0.12	424.	1	JAN	0615	75	0.00	0.00	0.00	220.
1	JAN	0220	28	0.23	0.10	0.13	523.	1	JAN	0620	76	0.00	0.00	0.00	199.
1	JAN	0225	29	0.13	0.05	0.08	596.	1	JAN	0625	77	0.00	0.00	0.00	174.
1	JAN	0230	30	0.13	0.05	0.08	643.	1	JAN	0630	78	0.00	0.00	0.00	148.
1	JAN	0235	31	0.13	0.05	0.08	670.	1	JAN	0635	79	0.00	0.00	0.00	124.
1	JAN	0240	32	0.08	0.03	0.05	675.	1	JAN	0640	80	0.00	0.00	0.00	104.
1	JAN	0245	33	0.08	0.03	0.05	663.	1	JAN	0645	81	0.00	0.00	0.00	86.
1	JAN	0250	34	0.08	0.03	0.05	638.	1	JAN	0650	82	0.00	0.00	0.00	70.
1	JAN	0255	35	0.08	0.03	0.05	607.	1	JAN	0655	83	0.00	0.00	0.00	57.
1	JAN	0300	36	0.08	0.03	0.05	576.	1	JAN	0700	84	0.00	0.00	0.00	46.
1	JAN	0305	37	0.08	0.03	0.05	547.	1	JAN	0705	85	0.00	0.00	0.00	38.
1	JAN	0310	38	0.08	0.02	0.05	523.	1	JAN	0710	86	0.00	0.00	0.00	34.
1	JAN	0315	39	0.08	0.02	0.05	504.	1	JAN	0715	87	0.00	0.00	0.00	34.
1	JAN	0320	40	0.08	0.02	0.05	487.	1	JAN	0720	88	0.00	0.00	0.00	34.
1	JAN	0325	41	0.04	0.01	0.03	471.	1	JAN	0725	89	0.00	0.00	0.00	33.
1	JAN	0330	42	0.04	0.01	0.03	449.	1	JAN	0730	90	0.00	0.00	0.00	33.
1	JAN	0335	43	0.04	0.01	0.03	423.	1	JAN	0735	91	0.00	0.00	0.00	33.
1	JAN	0340	44	0.02	0.01	0.01	392.	1	JAN	0740	92	0.00	0.00	0.00	33.
1	JAN	0345	45	0.02	0.01	0.01	358.	1	JAN	0745	93	0.00	0.00	0.00	33.
1	JAN	0350	46	0.02	0.01	0.01	322.	1	JAN	0750	94	0.00	0.00	0.00	33.
1	JAN	0355	47	0.02	0.01	0.01	287.	1	JAN	0755	95	0.00	0.00	0.00	33.
1	JAN	0400	48	0.02	0.01	0.01	255.	1	JAN	0800	96	0.00	0.00	0.00	33.

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    TOTAL RAINFALL =    5.67, TOTAL LOSS =    3.16, TOTAL EXCESS =    2.51

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR        72-HR       7.92-HR
+   (CFS)        (HR)
                                    (CFS)
+     675.       2.58                276.         211.         211.         211.
                                 (INCHES)       2.542        2.557        2.557        2.557
                                  (AC-FT)         137.         138.         138.         138.

                                CUMULATIVE AREA =    1.01 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    2:  /THIRD CR/GINNY LK LOCAL/FLOW/01JAN1999/5MIN//

 *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

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            *            *
 166 KK     *     T2C    *     Combine Third at Ginny Lk. WS outlet
            *            *
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167 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION T2C
SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	4.	1 JAN 0205	25	220.	1 JAN 0405	49	488.	1 JAN 0605	73	449.
1 JAN 0010	2	4.	1 JAN 0210	26	359.	1 JAN 0410	50	445.	1 JAN 0610	74	439.
1 JAN 0015	3	4.	1 JAN 0215	27	509.	1 JAN 0415	51	417.	1 JAN 0615	75	419.
1 JAN 0020	4	4.	1 JAN 0220	28	672.	1 JAN 0420	52	405.	1 JAN 0620	76	389.
1 JAN 0025	5	4.	1 JAN 0225	29	818.	1 JAN 0425	53	407.	1 JAN 0625	77	350.
1 JAN 0030	6	4.	1 JAN 0230	30	936.	1 JAN 0430	54	416.	1 JAN 0630	78	308.
1 JAN 0035	7	4.	1 JAN 0235	31	1021.	1 JAN 0435	55	431.	1 JAN 0635	79	265.
1 JAN 0040	8	4.	1 JAN 0240	32	1074.	1 JAN 0440	56	448.	1 JAN 0640	80	224.
1 JAN 0045	9	4.	1 JAN 0245	33	1096.	1 JAN 0445	57	465.	1 JAN 0645	81	186.
1 JAN 0050	10	4.	1 JAN 0250	34	1090.	1 JAN 0450	58	481.	1 JAN 0650	82	152.
1 JAN 0055	11	4.	1 JAN 0255	35	1068.	1 JAN 0455	59	497.	1 JAN 0655	83	127.
1 JAN 0100	12	4.	1 JAN 0300	36	1037.	1 JAN 0500	60	511.	1 JAN 0700	84	107.
1 JAN 0105	13	4.	1 JAN 0305	37	1003.	1 JAN 0505	61	524.	1 JAN 0705	85	90.
1 JAN 0110	14	4.	1 JAN 0310	38	969.	1 JAN 0510	62	534.	1 JAN 0710	86	79.
1 JAN 0115	15	4.	1 JAN 0315	39	939.	1 JAN 0515	63	537.	1 JAN 0715	87	72.
1 JAN 0120	16	4.	1 JAN 0320	40	912.	1 JAN 0520	64	535.	1 JAN 0720	88	67.
1 JAN 0125	17	4.	1 JAN 0325	41	885.	1 JAN 0525	65	527.	1 JAN 0725	89	62.
1 JAN 0130	18	4.	1 JAN 0330	42	853.	1 JAN 0530	66	517.	1 JAN 0730	90	58.
1 JAN 0135	19	4.	1 JAN 0335	43	814.	1 JAN 0535	67	505.	1 JAN 0735	91	55.
1 JAN 0140	20	4.	1 JAN 0340	44	768.	1 JAN 0540	68	493.	1 JAN 0740	92	52.
1 JAN 0145	21	7.	1 JAN 0345	45	715.	1 JAN 0545	69	482.	1 JAN 0745	93	50.
1 JAN 0150	22	17.	1 JAN 0350	46	657.	1 JAN 0550	70	472.	1 JAN 0750	94	50.
1 JAN 0155	23	46.	1 JAN 0355	47	598.	1 JAN 0555	71	463.	1 JAN 0755	95	50.
1 JAN 0200	24	112.	1 JAN 0400	48	541.	1 JAN 0600	72	456.	1 JAN 0800	96	50.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
1096.	2.67	(CFS)	489.	373.	373.	373.
		(INCHES)	2.229	2.240	2.240	2.240
		(AC-FT)	243.	244.	244.	244.

CUMULATIVE AREA = 2.04 SQ MI

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168 KK TD2 Divert part Third Cr to Incline Lake

Divert part of flow to Incline Lk

DT	DIVERSION ISTAD	INDIV	DIVERSION HYDROGRAPH IDENTIFICATION			
DI	INFLOW	0.00	4.00	150.00	550.00	1000.00
DQ	DIVERTED FLOW	0.00	4.00	60.00	160.00	200.00

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DIVERSION HYDROGRAPH INDIV

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	4.	1 JAN 0205	25	77.	1 JAN 0405	49	144.	1 JAN 0605	73	135.
1 JAN 0010	2	4.	1 JAN 0210	26	112.	1 JAN 0410	50	134.	1 JAN 0610	74	132.
1 JAN 0015	3	4.	1 JAN 0215	27	150.	1 JAN 0415	51	127.	1 JAN 0615	75	127.
1 JAN 0020	4	4.	1 JAN 0220	28	171.	1 JAN 0420	52	124.	1 JAN 0620	76	120.
1 JAN 0025	5	4.	1 JAN 0225	29	184.	1 JAN 0425	53	124.	1 JAN 0625	77	110.
1 JAN 0030	6	4.	1 JAN 0230	30	194.	1 JAN 0430	54	127.	1 JAN 0630	78	100.
1 JAN 0035	7	4.	1 JAN 0235	31	202.	1 JAN 0435	55	130.	1 JAN 0635	79	89.
1 JAN 0040	8	4.	1 JAN 0240	32	207.	1 JAN 0440	56	134.	1 JAN 0640	80	79.
1 JAN 0045	9	4.	1 JAN 0245	33	208.	1 JAN 0445	57	139.	1 JAN 0645	81	69.
1 JAN 0050	10	4.	1 JAN 0250	34	208.	1 JAN 0450	58	143.	1 JAN 0650	82	61.
1 JAN 0055	11	4.	1 JAN 0255	35	206.	1 JAN 0455	59	147.	1 JAN 0655	83	51.
1 JAN 0100	12	4.	1 JAN 0300	36	203.	1 JAN 0500	60	150.	1 JAN 0700	84	43.
1 JAN 0105	13	4.	1 JAN 0305	37	200.	1 JAN 0505	61	153.	1 JAN 0705	85	37.

1 JAN 0110	14	4.	*	1 JAN 0310	38	197.	*	1 JAN 0510	62	156.	*	1 JAN 0710	86	33.
1 JAN 0115	15	4.	*	1 JAN 0315	39	195.	*	1 JAN 0515	63	157.	*	1 JAN 0715	87	30.
1 JAN 0120	16	4.	*	1 JAN 0320	40	192.	*	1 JAN 0520	64	156.	*	1 JAN 0720	88	28.
1 JAN 0125	17	4.	*	1 JAN 0325	41	190.	*	1 JAN 0525	65	154.	*	1 JAN 0725	89	26.
1 JAN 0130	18	4.	*	1 JAN 0330	42	187.	*	1 JAN 0530	66	152.	*	1 JAN 0730	90	25.
1 JAN 0135	19	4.	*	1 JAN 0335	43	183.	*	1 JAN 0535	67	149.	*	1 JAN 0735	91	23.
1 JAN 0140	20	4.	*	1 JAN 0340	44	179.	*	1 JAN 0540	68	146.	*	1 JAN 0740	92	22.
1 JAN 0145	21	5.	*	1 JAN 0345	45	175.	*	1 JAN 0545	69	143.	*	1 JAN 0745	93	22.
1 JAN 0150	22	9.	*	1 JAN 0350	46	170.	*	1 JAN 0550	70	140.	*	1 JAN 0750	94	22.
1 JAN 0155	23	20.	*	1 JAN 0355	47	164.	*	1 JAN 0555	71	138.	*	1 JAN 0755	95	22.
1 JAN 0200	24	45.	*	1 JAN 0400	48	158.	*	1 JAN 0600	72	136.	*	1 JAN 0800	96	22.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
208.	2.67	(CFS)	127.	98.	98.	98.
		(INCHES)	0.580	0.588	0.588	0.588
		(AC-FT)	63.	64.	64.	64.

CUMULATIVE AREA = 2.04 SQ MI

HYDROGRAPH AT STATION TD2

DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	*	1 JAN 0205	25	142.	*	1 JAN 0405	49	343.	*	1 JAN 0605	73	315.
1 JAN 0010	2	0.	*	1 JAN 0210	26	247.	*	1 JAN 0410	50	311.	*	1 JAN 0610	74	307.
1 JAN 0015	3	0.	*	1 JAN 0215	27	359.	*	1 JAN 0415	51	290.	*	1 JAN 0615	75	292.
1 JAN 0020	4	0.	*	1 JAN 0220	28	501.	*	1 JAN 0420	52	281.	*	1 JAN 0620	76	269.
1 JAN 0025	5	0.	*	1 JAN 0225	29	634.	*	1 JAN 0425	53	283.	*	1 JAN 0625	77	240.
1 JAN 0030	6	0.	*	1 JAN 0230	30	741.	*	1 JAN 0430	54	290.	*	1 JAN 0630	78	209.
1 JAN 0035	7	0.	*	1 JAN 0235	31	819.	*	1 JAN 0435	55	301.	*	1 JAN 0635	79	176.
1 JAN 0040	8	0.	*	1 JAN 0240	32	867.	*	1 JAN 0440	56	313.	*	1 JAN 0640	80	146.
1 JAN 0045	9	0.	*	1 JAN 0245	33	887.	*	1 JAN 0445	57	326.	*	1 JAN 0645	81	117.
1 JAN 0050	10	0.	*	1 JAN 0250	34	882.	*	1 JAN 0450	58	338.	*	1 JAN 0650	82	92.
1 JAN 0055	11	0.	*	1 JAN 0255	35	862.	*	1 JAN 0455	59	350.	*	1 JAN 0655	83	76.
1 JAN 0100	12	0.	*	1 JAN 0300	36	834.	*	1 JAN 0500	60	361.	*	1 JAN 0700	84	63.
1 JAN 0105	13	0.	*	1 JAN 0305	37	803.	*	1 JAN 0505	61	370.	*	1 JAN 0705	85	53.
1 JAN 0110	14	0.	*	1 JAN 0310	38	772.	*	1 JAN 0510	62	378.	*	1 JAN 0710	86	46.
1 JAN 0115	15	0.	*	1 JAN 0315	39	744.	*	1 JAN 0515	63	381.	*	1 JAN 0715	87	42.
1 JAN 0120	16	0.	*	1 JAN 0320	40	719.	*	1 JAN 0520	64	379.	*	1 JAN 0720	88	39.
1 JAN 0125	17	0.	*	1 JAN 0325	41	695.	*	1 JAN 0525	65	373.	*	1 JAN 0725	89	36.
1 JAN 0130	18	0.	*	1 JAN 0330	42	666.	*	1 JAN 0530	66	365.	*	1 JAN 0730	90	33.
1 JAN 0135	19	0.	*	1 JAN 0335	43	630.	*	1 JAN 0535	67	356.	*	1 JAN 0735	91	31.
1 JAN 0140	20	0.	*	1 JAN 0340	44	588.	*	1 JAN 0540	68	347.	*	1 JAN 0740	92	29.
1 JAN 0145	21	2.	*	1 JAN 0345	45	540.	*	1 JAN 0545	69	339.	*	1 JAN 0745	93	29.
1 JAN 0150	22	8.	*	1 JAN 0350	46	488.	*	1 JAN 0550	70	331.	*	1 JAN 0750	94	28.
1 JAN 0155	23	26.	*	1 JAN 0355	47	434.	*	1 JAN 0555	71	325.	*	1 JAN 0755	95	28.
1 JAN 0200	24	66.	*	1 JAN 0400	48	383.	*	1 JAN 0600	72	319.	*	1 JAN 0800	96	28.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
887.	2.67	(CFS)	362.	275.	275.	275.
		(INCHES)	1.649	1.652	1.652	1.652
		(AC-FT)	179.	180.	180.	180.

CUMULATIVE AREA = 2.04 SQ MI

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-----DSS---ZWRITE Unit  71; Vers.    2:  /THIRD CR/BL INCLINE DIV/FLOW/01JAN1999/5MIN//
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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

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            *            *
 174 KK     *      T2R   *     Route rest Third Cr to SR 431 at 4 fps
            *            *
            **************

               HYDROGRAPH ROUTING DATA

 175 RM          MUSKINGUM ROUTING
                      NSTPS        9 NUMBER OF SUBREACHES
                      AMSKK     0.85 MUSKINGUM K
                          X     0.40 MUSKINGUM X

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HYDROGRAPH AT STATION T2R

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	0.	1 JAN 0405	49	752.	1 JAN 0605	73	376.
1 JAN 0010	2	0.	1 JAN 0210	26	0.	1 JAN 0410	50	725.	1 JAN 0610	74	375.
1 JAN 0015	3	0.	1 JAN 0215	27	0.	1 JAN 0415	51	697.	1 JAN 0615	75	371.
1 JAN 0020	4	0.	1 JAN 0220	28	0.	1 JAN 0420	52	667.	1 JAN 0620	76	365.
1 JAN 0025	5	0.	1 JAN 0225	29	0.	1 JAN 0425	53	631.	1 JAN 0625	77	357.
1 JAN 0030	6	0.	1 JAN 0230	30	2.	1 JAN 0430	54	591.	1 JAN 0630	78	349.
1 JAN 0035	7	0.	1 JAN 0235	31	6.	1 JAN 0435	55	545.	1 JAN 0635	79	341.
1 JAN 0040	8	0.	1 JAN 0240	32	17.	1 JAN 0440	56	496.	1 JAN 0640	80	334.
1 JAN 0045	9	0.	1 JAN 0245	33	42.	1 JAN 0445	57	446.	1 JAN 0645	81	327.
1 JAN 0050	10	0.	1 JAN 0250	34	87.	1 JAN 0450	58	400.	1 JAN 0650	82	321.
1 JAN 0055	11	0.	1 JAN 0255	35	156.	1 JAN 0455	59	360.	1 JAN 0655	83	314.
1 JAN 0100	12	0.	1 JAN 0300	36	246.	1 JAN 0500	60	328.	1 JAN 0700	84	303.
1 JAN 0105	13	0.	1 JAN 0305	37	356.	1 JAN 0505	61	306.	1 JAN 0705	85	288.
1 JAN 0110	14	0.	1 JAN 0310	38	476.	1 JAN 0510	62	294.	1 JAN 0710	86	267.
1 JAN 0115	15	0.	1 JAN 0315	39	593.	1 JAN 0515	63	291.	1 JAN 0715	87	242.
1 JAN 0120	16	0.	1 JAN 0320	40	695.	1 JAN 0520	64	294.	1 JAN 0720	88	213.
1 JAN 0125	17	0.	1 JAN 0325	41	774.	1 JAN 0525	65	302.	1 JAN 0725	89	183.
1 JAN 0130	18	0.	1 JAN 0330	42	828.	1 JAN 0530	66	312.	1 JAN 0730	90	154.
1 JAN 0135	19	0.	1 JAN 0335	43	856.	1 JAN 0535	67	324.	1 JAN 0735	91	126.
1 JAN 0140	20	0.	1 JAN 0340	44	863.	1 JAN 0540	68	335.	1 JAN 0740	92	103.
1 JAN 0145	21	0.	1 JAN 0345	45	853.	1 JAN 0545	69	347.	1 JAN 0745	93	84.
1 JAN 0150	22	0.	1 JAN 0350	46	832.	1 JAN 0550	70	357.	1 JAN 0750	94	70.
1 JAN 0155	23	0.	1 JAN 0355	47	807.	1 JAN 0555	71	366.	1 JAN 0755	95	58.
1 JAN 0200	24	0.	1 JAN 0400	48	779.	1 JAN 0600	72	373.	1 JAN 0800	96	50.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 863.	3.58	(CFS)	358.	271.	271.	271.
		(INCHES)	1.630	1.630	1.630	1.630
		(AC-FT)	177.	177.	177.	177.

CUMULATIVE AREA = 2.04 SQ MI

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176 KK **TD2R** Recall Incline Lk diversion

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HYDROGRAPH AT STATION TD2R

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	4.	1 JAN 0205	25	77.	1 JAN 0405	49	144.	1 JAN 0605	73	135.
1 JAN 0010	2	4.	1 JAN 0210	26	112.	1 JAN 0410	50	134.	1 JAN 0610	74	132.
1 JAN 0015	3	4.	1 JAN 0215	27	150.	1 JAN 0415	51	127.	1 JAN 0615	75	127.
1 JAN 0020	4	4.	1 JAN 0220	28	171.	1 JAN 0420	52	124.	1 JAN 0620	76	120.
1 JAN 0025	5	4.	1 JAN 0225	29	184.	1 JAN 0425	53	124.	1 JAN 0625	77	110.
1 JAN 0030	6	4.	1 JAN 0230	30	194.	1 JAN 0430	54	127.	1 JAN 0630	78	100.
1 JAN 0035	7	4.	1 JAN 0235	31	202.	1 JAN 0435	55	130.	1 JAN 0635	79	89.
1 JAN 0040	8	4.	1 JAN 0240	32	207.	1 JAN 0440	56	134.	1 JAN 0640	80	79.
1 JAN 0045	9	4.	1 JAN 0245	33	208.	1 JAN 0445	57	139.	1 JAN 0645	81	69.
1 JAN 0050	10	4.	1 JAN 0250	34	208.	1 JAN 0450	58	143.	1 JAN 0650	82	61.
1 JAN 0055	11	4.	1 JAN 0255	35	206.	1 JAN 0455	59	147.	1 JAN 0655	83	51.
1 JAN 0100	12	4.	1 JAN 0300	36	203.	1 JAN 0500	60	150.	1 JAN 0700	84	43.
1 JAN 0105	13	4.	1 JAN 0305	37	200.	1 JAN 0505	61	153.	1 JAN 0705	85	37.
1 JAN 0110	14	4.	1 JAN 0310	38	197.	1 JAN 0510	62	156.	1 JAN 0710	86	33.
1 JAN 0115	15	4.	1 JAN 0315	39	195.	1 JAN 0515	63	157.	1 JAN 0715	87	30.
1 JAN 0120	16	4.	1 JAN 0320	40	192.	1 JAN 0520	64	156.	1 JAN 0720	88	28.
1 JAN 0125	17	4.	1 JAN 0325	41	190.	1 JAN 0525	65	154.	1 JAN 0725	89	26.
1 JAN 0130	18	4.	1 JAN 0330	42	187.	1 JAN 0530	66	152.	1 JAN 0730	90	25.
1 JAN 0135	19	4.	1 JAN 0335	43	183.	1 JAN 0535	67	149.	1 JAN 0735	91	23.
1 JAN 0140	20	4.	1 JAN 0340	44	179.	1 JAN 0540	68	146.	1 JAN 0740	92	22.
1 JAN 0145	21	5.	1 JAN 0345	45	175.	1 JAN 0545	69	143.	1 JAN 0745	93	22.
1 JAN 0150	22	9.	1 JAN 0350	46	170.	1 JAN 0550	70	140.	1 JAN 0750	94	22.
1 JAN 0155	23	20.	1 JAN 0355	47	164.	1 JAN 0555	71	138.	1 JAN 0755	95	22.
1 JAN 0200	24	45.	1 JAN 0400	48	158.	1 JAN 0600	72	136.	1 JAN 0800	96	22.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
		(CFS)				

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+     208.      2.67                    127.        98.        98.        98.
                          (INCHES)    0.580     0.588      0.588      0.588
                           (AC-FT)     63.        64.        64.        64.

                          CUMULATIVE AREA =    0.00 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /THIRD CR/INCLINE DIV/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
 180 KK       *     T2RB   *     Route diverted Third Cr Q to Incline Lk
              *            *
              **************

                HYDROGRAPH ROUTING DATA

 181 RM           MUSKINGUM ROUTING
                        NSTPS          2 NUMBER OF SUBREACHES
                        AMSKK       0.19 MUSKINGUM K
                            X       0.40 MUSKINGUM X

                                                                  ***
*****************************************************************************************************************************
                                                HYDROGRAPH AT STATION     T2RB
*****************************************************************************************************************************
                                  *                                 *                                 *                                 *
   DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW
                                  *                                 *                                 *                                 *
    1 JAN 0005    1        4.     *   1 JAN 0205   25       19.     *   1 JAN 0405   49      166.     *   1 JAN 0605   73      139.
    1 JAN 0010    2        4.     *   1 JAN 0210   26       40.     *   1 JAN 0410   50      159.     *   1 JAN 0610   74      137.
    1 JAN 0015    3        4.     *   1 JAN 0215   27       69.     *   1 JAN 0415   51      148.     *   1 JAN 0615   75      135.
    1 JAN 0020    4        4.     *   1 JAN 0220   28      103.     *   1 JAN 0420   52      137.     *   1 JAN 0620   76      133.
    1 JAN 0025    5        4.     *   1 JAN 0225   29      138.     *   1 JAN 0425   53      129.     *   1 JAN 0625   77      128.
    1 JAN 0030    6        4.     *   1 JAN 0230   30      163.     *   1 JAN 0430   54      125.     *   1 JAN 0630   78      122.
    1 JAN 0035    7        4.     *   1 JAN 0235   31      179.     *   1 JAN 0435   55      125.     *   1 JAN 0635   79      113.
    1 JAN 0040    8        4.     *   1 JAN 0240   32      191.     *   1 JAN 0440   56      126.     *   1 JAN 0640   80      102.
    1 JAN 0045    9        4.     *   1 JAN 0245   33      199.     *   1 JAN 0445   57      129.     *   1 JAN 0645   81       92.
    1 JAN 0050   10        4.     *   1 JAN 0250   34      205.     *   1 JAN 0450   58      133.     *   1 JAN 0650   82       81.
    1 JAN 0055   11        4.     *   1 JAN 0255   35      208.     *   1 JAN 0455   59      137.     *   1 JAN 0655   83       72.
    1 JAN 0100   12        4.     *   1 JAN 0300   36      208.     *   1 JAN 0500   60      142.     *   1 JAN 0700   84       63.
    1 JAN 0105   13        4.     *   1 JAN 0305   37      206.     *   1 JAN 0505   61      146.     *   1 JAN 0705   85       54.
    1 JAN 0110   14        4.     *   1 JAN 0310   38      204.     *   1 JAN 0510   62      149.     *   1 JAN 0710   86       46.
    1 JAN 0115   15        4.     *   1 JAN 0315   39      201.     *   1 JAN 0515   63      152.     *   1 JAN 0715   87       39.
    1 JAN 0120   16        4.     *   1 JAN 0320   40      198.     *   1 JAN 0520   64      155.     *   1 JAN 0720   88       34.
    1 JAN 0125   17        4.     *   1 JAN 0325   41      195.     *   1 JAN 0525   65      156.     *   1 JAN 0725   89       31.
    1 JAN 0130   18        4.     *   1 JAN 0330   42      193.     *   1 JAN 0530   66      156.     *   1 JAN 0730   90       29.
    1 JAN 0135   19        4.     *   1 JAN 0335   43      190.     *   1 JAN 0535   67      155.     *   1 JAN 0735   91       27.
    1 JAN 0140   20        4.     *   1 JAN 0340   44      188.     *   1 JAN 0540   68      152.     *   1 JAN 0740   92       25.
    1 JAN 0145   21        4.     *   1 JAN 0345   45      184.     *   1 JAN 0545   69      149.     *   1 JAN 0745   93       24.
    1 JAN 0150   22        4.     *   1 JAN 0350   46      180.     *   1 JAN 0550   70      147.     *   1 JAN 0750   94       23.
    1 JAN 0155   23        5.     *   1 JAN 0355   47      176.     *   1 JAN 0555   71      144.     *   1 JAN 0755   95       22.
    1 JAN 0200   24        9.     *   1 JAN 0400   48      171.     *   1 JAN 0600   72      141.     *   1 JAN 0800   96       22.
                                  *                                 *                                 *
*****************************************************************************************************************************

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR       24-HR      72-HR     7.92-HR
+   (CFS)        (HR)
                           (CFS)
+     208.       2.92                   127.        97.        97.        97.
                          (INCHES)    0.000     0.000      0.000      0.000
                           (AC-FT)     63.        64.        64.        64.

                          CUMULATIVE AREA =    0.00 SQ MI

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
 182 KK       *      T3    *     Incline Lake
              *            *
              **************

 186 IN           TIME DATA FOR INPUT TIME SERIES
                        JXMIN         15  TIME INTERVAL IN MINUTES
                       JXDATE     1JAN99  STARTING DATE
                       JXTIME          5  STARTING TIME

                SUBBASIN RUNOFF DATA

 183 BA           SUBBASIN CHARACTERISTICS
                        TAREA       0.46  SUBBASIN AREA
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184 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        0.00  INITIAL FLOW
                     QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR     1.50000  RECESSION CONSTANT

                PRECIPITATION DATA

185 PB               STORM        4.46  BASIN TOTAL PRECIPITATION

187 PI            INCREMENTAL PRECIPITATION PATTERN
                   0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                   1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                   3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                   1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                   0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                   1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                   0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                   0.67      0.67

191 LS          SCS LOSS RATE
                     STRTL        1.21  INITIAL ABSTRACTION
                    CRVNBR       62.30  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

192 UI          INPUT UNITGRAPH,   7 ORDINATES,  VOLUME = 1.00
                   728.0    1221.0     793.0     417.0     227.0     122.0      50.0
                                                                  ***
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HYDROGRAPH AT STATION T3

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	1	JAN	0405	49	0.01	0.01	0.01	26.
1	JAN	0010	2	0.03	0.03	0.00	0.	1	JAN	0410	50	0.04	0.02	0.02	36.
1	JAN	0015	3	0.03	0.03	0.00	0.	1	JAN	0415	51	0.04	0.02	0.02	54.
1	JAN	0020	4	0.03	0.03	0.00	0.	1	JAN	0420	52	0.04	0.02	0.02	66.
1	JAN	0025	5	0.03	0.03	0.00	0.	1	JAN	0425	53	0.04	0.02	0.02	72.
1	JAN	0030	6	0.03	0.03	0.00	0.	1	JAN	0430	54	0.04	0.02	0.02	76.
1	JAN	0035	7	0.03	0.03	0.00	0.	1	JAN	0435	55	0.04	0.02	0.02	79.
1	JAN	0040	8	0.03	0.03	0.00	0.	1	JAN	0440	56	0.04	0.02	0.02	81.
1	JAN	0045	9	0.03	0.03	0.00	0.	1	JAN	0445	57	0.04	0.02	0.02	81.
1	JAN	0050	10	0.03	0.03	0.00	0.	1	JAN	0450	58	0.04	0.02	0.02	82.
1	JAN	0055	11	0.04	0.04	0.00	0.	1	JAN	0455	59	0.04	0.02	0.02	83.
1	JAN	0100	12	0.04	0.04	0.00	0.	1	JAN	0500	60	0.04	0.02	0.02	84.
1	JAN	0105	13	0.04	0.04	0.00	0.	1	JAN	0505	61	0.04	0.02	0.02	84.
1	JAN	0110	14	0.01	0.01	0.00	0.	1	JAN	0510	62	0.03	0.01	0.02	79.
1	JAN	0115	15	0.01	0.01	0.00	0.	1	JAN	0515	63	0.03	0.01	0.02	70.
1	JAN	0120	16	0.01	0.01	0.00	0.	1	JAN	0520	64	0.03	0.01	0.02	64.
1	JAN	0125	17	0.04	0.04	0.00	0.	1	JAN	0525	65	0.03	0.01	0.02	61.
1	JAN	0130	18	0.04	0.04	0.00	0.	1	JAN	0530	66	0.03	0.01	0.02	60.
1	JAN	0135	19	0.04	0.04	0.00	0.	1	JAN	0535	67	0.03	0.01	0.02	59.
1	JAN	0140	20	0.16	0.16	0.00	0.	1	JAN	0540	68	0.03	0.01	0.02	59.
1	JAN	0145	21	0.16	0.16	0.00	0.	1	JAN	0545	69	0.03	0.01	0.02	59.
1	JAN	0150	22	0.16	0.16	0.00	0.	1	JAN	0550	70	0.03	0.01	0.02	59.
1	JAN	0155	23	0.31	0.31	0.00	3.	1	JAN	0555	71	0.03	0.01	0.02	60.
1	JAN	0200	24	0.31	0.28	0.03	29.	1	JAN	0600	72	0.03	0.01	0.02	60.
1	JAN	0205	25	0.31	0.26	0.06	83.	1	JAN	0605	73	0.03	0.01	0.02	60.
1	JAN	0210	26	0.18	0.14	0.04	127.	1	JAN	0610	74	0.00	0.00	0.00	48.
1	JAN	0215	27	0.18	0.13	0.05	147.	1	JAN	0615	75	0.00	0.00	0.00	27.
1	JAN	0220	28	0.18	0.12	0.06	166.	1	JAN	0620	76	0.00	0.00	0.00	14.
1	JAN	0225	29	0.10	0.07	0.04	167.	1	JAN	0625	77	0.00	0.00	0.00	8.
1	JAN	0230	30	0.10	0.07	0.04	153.	1	JAN	0630	78	0.00	0.00	0.00	8.
1	JAN	0235	31	0.10	0.07	0.04	144.	1	JAN	0635	79	0.00	0.00	0.00	8.
1	JAN	0240	32	0.06	0.04	0.02	129.	1	JAN	0640	80	0.00	0.00	0.00	8.
1	JAN	0245	33	0.06	0.04	0.02	109.	1	JAN	0645	81	0.00	0.00	0.00	7.
1	JAN	0250	34	0.06	0.04	0.02	96.	1	JAN	0650	82	0.00	0.00	0.00	7.
1	JAN	0255	35	0.06	0.03	0.02	91.	1	JAN	0655	83	0.00	0.00	0.00	7.
1	JAN	0300	36	0.06	0.03	0.03	89.	1	JAN	0700	84	0.00	0.00	0.00	7.
1	JAN	0305	37	0.06	0.03	0.03	89.	1	JAN	0705	85	0.00	0.00	0.00	6.
1	JAN	0310	38	0.06	0.03	0.03	90.	1	JAN	0710	86	0.00	0.00	0.00	6.
1	JAN	0315	39	0.06	0.03	0.03	92.	1	JAN	0715	87	0.00	0.00	0.00	6.
1	JAN	0320	40	0.06	0.03	0.03	94.	1	JAN	0720	88	0.00	0.00	0.00	6.
1	JAN	0325	41	0.03	0.02	0.01	85.	1	JAN	0725	89	0.00	0.00	0.00	6.
1	JAN	0330	42	0.03	0.02	0.01	70.	1	JAN	0730	90	0.00	0.00	0.00	5.
1	JAN	0335	43	0.03	0.02	0.01	60.	1	JAN	0735	91	0.00	0.00	0.00	5.
1	JAN	0340	44	0.01	0.01	0.01	50.	1	JAN	0740	92	0.00	0.00	0.00	5.
1	JAN	0345	45	0.01	0.01	0.01	38.	1	JAN	0745	93	0.00	0.00	0.00	5.
1	JAN	0350	46	0.01	0.01	0.01	31.	1	JAN	0750	94	0.00	0.00	0.00	5.
1	JAN	0355	47	0.01	0.01	0.01	28.	1	JAN	0755	95	0.00	0.00	0.00	5.
1	JAN	0400	48	0.01	0.01	0.01	26.	1	JAN	0800	96	0.00	0.00	0.00	4.

****

TOTAL RAINFALL = 4.46, TOTAL LOSS = 3.32, TOTAL EXCESS = 1.14

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS) 6-HR	24-HR	72-HR	7.92-HR
167.	2.33	58.	44.	44.	44.

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                    (INCHES)     1.163       1.165       1.165       1.165
                     (AC-FT)      29.         29.         29.         29.

                    CUMULATIVE AREA =    0.46 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /WF THIRD CR/INCLINE LK/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 194 KK     *      T3C   *     Combine Incline Lake and diversion
            *            *
            **************

 195 HC          HYDROGRAPH COMBINATION
                      ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE
                                                          ***

*****************************************************************************************************************************

                                          HYDROGRAPH AT STATION      T3C
                                               SUM OF  2 HYDROGRAPHS

*****************************************************************************************************************************
                                 *                                 *                                 *                                 *
   DA MON HRMN  ORD      FLOW    *  DA MON HRMN  ORD      FLOW    *  DA MON HRMN  ORD      FLOW    *  DA MON HRMN  ORD      FLOW
                                 *                                 *                                 *
    1 JAN 0005   1        4.     *   1 JAN 0205  25      102.     *   1 JAN 0405  49      191.     *   1 JAN 0605  73      199.
    1 JAN 0010   2        4.     *   1 JAN 0210  26      167.     *   1 JAN 0410  50      195.     *   1 JAN 0610  74      185.
    1 JAN 0015   3        4.     *   1 JAN 0215  27      217.     *   1 JAN 0415  51      202.     *   1 JAN 0615  75      163.
    1 JAN 0020   4        4.     *   1 JAN 0220  28      269.     *   1 JAN 0420  52      203.     *   1 JAN 0620  76      147.
    1 JAN 0025   5        4.     *   1 JAN 0225  29      306.     *   1 JAN 0425  53      202.     *   1 JAN 0625  77      137.
    1 JAN 0030   6        4.     *   1 JAN 0230  30      316.     *   1 JAN 0430  54      202.     *   1 JAN 0630  78      130.
    1 JAN 0035   7        4.     *   1 JAN 0235  31      323.     *   1 JAN 0435  55      204.     *   1 JAN 0635  79      120.
    1 JAN 0040   8        4.     *   1 JAN 0240  32      320.     *   1 JAN 0440  56      207.     *   1 JAN 0640  80      110.
    1 JAN 0045   9        4.     *   1 JAN 0245  33      308.     *   1 JAN 0445  57      211.     *   1 JAN 0645  81       99.
    1 JAN 0050  10        4.     *   1 JAN 0250  34      301.     *   1 JAN 0450  58      216.     *   1 JAN 0650  82       88.
    1 JAN 0055  11        4.     *   1 JAN 0255  35      298.     *   1 JAN 0455  59      220.     *   1 JAN 0655  83       79.
    1 JAN 0100  12        4.     *   1 JAN 0300  36      297.     *   1 JAN 0500  60      225.     *   1 JAN 0700  84       70.
    1 JAN 0105  13        4.     *   1 JAN 0305  37      295.     *   1 JAN 0505  61      230.     *   1 JAN 0705  85       60.
    1 JAN 0110  14        4.     *   1 JAN 0310  38      294.     *   1 JAN 0510  62      228.     *   1 JAN 0710  86       52.
    1 JAN 0115  15        4.     *   1 JAN 0315  39      293.     *   1 JAN 0515  63      222.     *   1 JAN 0715  87       45.
    1 JAN 0120  16        4.     *   1 JAN 0320  40      292.     *   1 JAN 0520  64      219.     *   1 JAN 0720  88       40.
    1 JAN 0125  17        4.     *   1 JAN 0325  41      281.     *   1 JAN 0525  65      217.     *   1 JAN 0725  89       37.
    1 JAN 0130  18        4.     *   1 JAN 0330  42      263.     *   1 JAN 0530  66      216.     *   1 JAN 0730  90       34.
    1 JAN 0135  19        4.     *   1 JAN 0335  43      250.     *   1 JAN 0535  67      214.     *   1 JAN 0735  91       32.
    1 JAN 0140  20        4.     *   1 JAN 0340  44      237.     *   1 JAN 0540  68      211.     *   1 JAN 0740  92       30.
    1 JAN 0145  21        4.     *   1 JAN 0345  45      223.     *   1 JAN 0545  69      209.     *   1 JAN 0745  93       29.
    1 JAN 0150  22        4.     *   1 JAN 0350  46      212.     *   1 JAN 0550  70      206.     *   1 JAN 0750  94       27.
    1 JAN 0155  23        8.     *   1 JAN 0355  47      204.     *   1 JAN 0555  71      204.     *   1 JAN 0755  95       27.
    1 JAN 0200  24       37.     *   1 JAN 0400  48      197.     *   1 JAN 0600  72      201.     *   1 JAN 0800  96       26.
                                 *                                 *                                 *
*****************************************************************************************************************************

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR        24-HR        72-HR       7.92-HR
+   (CFS)        (HR)
                              (CFS)
+     323.       2.50                185.         141.         141.         141.
                            (INCHES)   3.730       3.761        3.761        3.761
                             (AC-FT)    92.         92.          92.          92.

                            CUMULATIVE AREA =    0.46 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    2:  /THIRD CR/RES INFLOW/FLOW/01JAN1999/5MIN//

 *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 197 KK     *      TRR   *     Incline Lake reservoir routing
            *            *
            **************
                                Route through Incline Lake

            HYDROGRAPH ROUTING DATA

 199 RS          STORAGE ROUTING
                      NSTPS          1  NUMBER OF SUBREACHES
                       ITYP       STOR  TYPE OF INITIAL CONDITION
                     RSVRIC     146.00  INITIAL CONDITION
                          X       0.00 WORKING R AND D COEFFICIENT

 200 SV            STORAGE      135.0     157.0     166.0     177.0     197.0     218.0     239.0     261.0     274.0     285.0
                                309.0     335.0

 202 SQ           DISCHARGE        3.        3.        3.        3.       24.      113.      239.      393.      571.      668.
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                                  1561.     5096.

 204 SE          ELEVATION     8316.00   8317.00   8317.50   8318.00   8319.00   8320.00   8321.00   8322.00   8322.50   8323.00
                               8324.00   8325.00

                                                                  ***
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HYDROGRAPH AT STATION TRR

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	JAN	0005	1	3.	146.0	8316.5	1	JAN	0245	33	3.	161.2	8317.2	1	JAN	0525	65	72.	208.4	8319.5
1	JAN	0010	2	3.	146.0	8316.5	1	JAN	0250	34	3.	163.2	8317.3	1	JAN	0530	66	77.	209.4	8319.6
1	JAN	0015	3	3.	146.0	8316.5	1	JAN	0255	35	3.	165.3	8317.5	1	JAN	0535	67	81.	210.3	8319.6
1	JAN	0020	4	3.	146.0	8316.5	1	JAN	0300	36	3.	167.3	8317.6	1	JAN	0540	68	84.	211.2	8319.7
1	JAN	0025	5	3.	146.0	8316.5	1	JAN	0305	37	3.	169.3	8317.7	1	JAN	0545	69	88.	212.1	8319.7
1	JAN	0030	6	3.	146.0	8316.5	1	JAN	0310	38	3.	171.3	8317.7	1	JAN	0550	70	91.	212.9	8319.8
1	JAN	0035	7	3.	146.0	8316.5	1	JAN	0315	39	3.	173.3	8317.8	1	JAN	0555	71	95.	213.7	8319.8
1	JAN	0040	8	3.	146.0	8316.5	1	JAN	0320	40	3.	175.3	8317.9	1	JAN	0600	72	98.	214.4	8319.8
1	JAN	0045	9	3.	146.0	8316.5	1	JAN	0325	41	4.	177.3	8318.0	1	JAN	0605	73	101.	215.1	8319.9
1	JAN	0050	10	3.	146.1	8316.5	1	JAN	0330	42	6.	179.1	8318.1	1	JAN	0610	74	103.	215.7	8319.9
1	JAN	0055	11	3.	146.1	8316.5	1	JAN	0335	43	7.	180.8	8318.2	1	JAN	0615	75	105.	216.2	8319.9
1	JAN	0100	12	3.	146.1	8316.5	1	JAN	0340	44	9.	182.4	8318.3	1	JAN	0620	76	107.	216.5	8319.9
1	JAN	0105	13	3.	146.1	8316.5	1	JAN	0345	45	11.	184.0	8318.3	1	JAN	0625	77	108.	216.8	8319.9
1	JAN	0110	14	3.	146.1	8316.5	1	JAN	0350	46	12.	185.4	8318.4	1	JAN	0630	78	109.	216.9	8320.0
1	JAN	0115	15	3.	146.1	8316.5	1	JAN	0355	47	13.	186.7	8318.5	1	JAN	0635	79	109.	217.1	8320.0
1	JAN	0120	16	3.	146.1	8316.5	1	JAN	0400	48	15.	188.0	8318.6	1	JAN	0640	80	109.	217.1	8320.0
1	JAN	0125	17	3.	146.1	8316.5	1	JAN	0405	49	16.	189.2	8318.6	1	JAN	0645	81	109.	217.1	8320.0
1	JAN	0130	18	3.	146.1	8316.5	1	JAN	0410	50	17.	190.5	8318.7	1	JAN	0650	82	109.	217.0	8320.0
1	JAN	0135	19	3.	146.1	8316.5	1	JAN	0415	51	19.	191.7	8318.7	1	JAN	0655	83	108.	216.8	8319.9
1	JAN	0140	20	3.	146.1	8316.5	1	JAN	0420	52	20.	193.0	8318.8	1	JAN	0700	84	107.	216.6	8319.9
1	JAN	0145	21	3.	146.1	8316.5	1	JAN	0425	53	21.	194.2	8318.9	1	JAN	0705	85	106.	216.3	8319.9
1	JAN	0150	22	3.	146.1	8316.5	1	JAN	0430	54	22.	195.5	8318.9	1	JAN	0710	86	104.	215.9	8319.9
1	JAN	0155	23	3.	146.1	8316.5	1	JAN	0435	55	24.	196.7	8319.0	1	JAN	0715	87	103.	215.6	8319.9
1	JAN	0200	24	3.	146.3	8316.5	1	JAN	0440	56	28.	197.9	8319.0	1	JAN	0720	88	101.	215.2	8319.9
1	JAN	0205	25	3.	146.7	8316.5	1	JAN	0445	57	33.	199.2	8319.1	1	JAN	0725	89	99.	214.7	8319.8
1	JAN	0210	26	3.	147.6	8316.6	1	JAN	0450	58	38.	200.4	8319.2	1	JAN	0730	90	97.	214.3	8319.8
1	JAN	0215	27	3.	148.9	8316.6	1	JAN	0455	59	43.	201.6	8319.2	1	JAN	0735	91	95.	213.9	8319.8
1	JAN	0220	28	3.	150.6	8316.7	1	JAN	0500	60	49.	202.8	8319.3	1	JAN	0740	92	94.	213.4	8319.8
1	JAN	0225	29	3.	152.5	8316.8	1	JAN	0505	61	54.	204.0	8319.3	1	JAN	0745	93	92.	213.0	8319.8
1	JAN	0230	30	3.	154.7	8316.9	1	JAN	0510	62	59.	205.2	8319.4	1	JAN	0750	94	90.	212.6	8319.7
1	JAN	0235	31	3.	156.8	8317.0	1	JAN	0515	63	64.	206.3	8319.4	1	JAN	0755	95	88.	212.1	8319.7
1	JAN	0240	32	3.	159.0	8317.1	1	JAN	0520	64	68.	207.4	8319.5	1	JAN	0800	96	86.	211.7	8319.7

```
  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR        24-HR        72-HR       7.92-HR
+   (CFS)        (HR)
                                   (CFS)
+     109.       6.58                53.          41.          41.          41.
                                (INCHES)       1.063        1.083        1.083        1.083
                                 (AC-FT)        26.          27.          27.          27.

 PEAK STORAGE    TIME                          MAXIMUM AVERAGE STORAGE
                                      6-HR        24-HR        72-HR       7.92-HR
+  (AC-FT)       (HR)
     217.       6.58               195.         183.         183.         183.

  PEAK STAGE     TIME                          MAXIMUM AVERAGE STAGE
                                      6-HR        24-HR        72-HR       7.92-HR
+   (FEET)       (HR)
   8319.96      6.58              8318.88      8318.30      8318.30      8318.30

                          CUMULATIVE AREA =    0.46 SQ MI

 -----DSS---ZWRITE Unit  71; Vers.    2:  /THIRD CR CR/RES OUTFLOW/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
 207 KK       *     TRR2   *     Route res out to Third Cr SR 431 at 4 fps
              *            *
              **************

                HYDROGRAPH ROUTING DATA

 208 RM           MUSKINGUM ROUTING
                        NSTPS          7 NUMBER OF SUBREACHES
                        AMSKK       0.72 MUSKINGUM K
                            X       0.40 MUSKINGUM X

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HYDROGRAPH AT STATION TRR2

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	1 JAN 0205	25	3.	1 JAN 0405	49	4.	1 JAN 0605	73	69.
1 JAN 0010	2	3.	1 JAN 0210	26	3.	1 JAN 0410	50	5.	1 JAN 0610	74	74.
1 JAN 0015	3	3.	1 JAN 0215	27	3.	1 JAN 0415	51	6.	1 JAN 0615	75	78.
1 JAN 0020	4	3.	1 JAN 0220	28	3.	1 JAN 0420	52	8.	1 JAN 0620	76	82.
1 JAN 0025	5	3.	1 JAN 0225	29	3.	1 JAN 0425	53	10.	1 JAN 0625	77	85.
1 JAN 0030	6	3.	1 JAN 0230	30	3.	1 JAN 0430	54	11.	1 JAN 0630	78	89.
1 JAN 0035	7	3.	1 JAN 0235	31	3.	1 JAN 0435	55	12.	1 JAN 0635	79	92.
1 JAN 0040	8	3.	1 JAN 0240	32	3.	1 JAN 0440	56	14.	1 JAN 0640	80	96.
1 JAN 0045	9	3.	1 JAN 0245	33	3.	1 JAN 0445	57	15.	1 JAN 0645	81	99.
1 JAN 0050	10	3.	1 JAN 0250	34	3.	1 JAN 0450	58	16.	1 JAN 0650	82	101.
1 JAN 0055	11	3.	1 JAN 0255	35	3.	1 JAN 0455	59	18.	1 JAN 0655	83	104.
1 JAN 0100	12	3.	1 JAN 0300	36	3.	1 JAN 0500	60	19.	1 JAN 0700	84	105.
1 JAN 0105	13	3.	1 JAN 0305	37	3.	1 JAN 0505	61	20.	1 JAN 0705	85	107.
1 JAN 0110	14	3.	1 JAN 0310	38	3.	1 JAN 0510	62	22.	1 JAN 0710	86	108.
1 JAN 0115	15	3.	1 JAN 0315	39	3.	1 JAN 0515	63	24.	1 JAN 0715	87	108.
1 JAN 0120	16	3.	1 JAN 0320	40	3.	1 JAN 0520	64	27.	1 JAN 0720	88	109.
1 JAN 0125	17	3.	1 JAN 0325	41	3.	1 JAN 0525	65	31.	1 JAN 0725	89	109.
1 JAN 0130	18	3.	1 JAN 0330	42	3.	1 JAN 0530	66	35.	1 JAN 0730	90	109.
1 JAN 0135	19	3.	1 JAN 0335	43	3.	1 JAN 0535	67	40.	1 JAN 0735	91	108.
1 JAN 0140	20	3.	1 JAN 0340	44	3.	1 JAN 0540	68	45.	1 JAN 0740	92	107.
1 JAN 0145	21	3.	1 JAN 0345	45	3.	1 JAN 0545	69	50.	1 JAN 0745	93	106.
1 JAN 0150	22	3.	1 JAN 0350	46	3.	1 JAN 0550	70	55.	1 JAN 0750	94	105.
1 JAN 0155	23	3.	1 JAN 0355	47	3.	1 JAN 0555	71	60.	1 JAN 0755	95	104.
1 JAN 0200	24	3.	1 JAN 0400	48	3.	1 JAN 0600	72	65.	1 JAN 0800	96	102.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
109.	7.33	(CFS)	42.	32.	32.	32.
		(INCHES)	0.841	0.861	0.861	0.861
		(AC-FT)	21.	21.	21.	21.

CUMULATIVE AREA = 0.46 SQ MI

209 KK **TRRC** Return res out to Third Cr at SR 431

210 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION TRRC
SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	1 JAN 0205	25	3.	1 JAN 0405	49	756.	1 JAN 0605	73	445.
1 JAN 0010	2	3.	1 JAN 0210	26	3.	1 JAN 0410	50	730.	1 JAN 0610	74	449.
1 JAN 0015	3	3.	1 JAN 0215	27	3.	1 JAN 0415	51	704.	1 JAN 0615	75	449.
1 JAN 0020	4	3.	1 JAN 0220	28	3.	1 JAN 0420	52	675.	1 JAN 0620	76	447.
1 JAN 0025	5	3.	1 JAN 0225	29	3.	1 JAN 0425	53	641.	1 JAN 0625	77	443.
1 JAN 0030	6	3.	1 JAN 0230	30	5.	1 JAN 0430	54	602.	1 JAN 0630	78	438.
1 JAN 0035	7	3.	1 JAN 0235	31	9.	1 JAN 0435	55	557.	1 JAN 0635	79	434.
1 JAN 0040	8	3.	1 JAN 0240	32	20.	1 JAN 0440	56	510.	1 JAN 0640	80	429.
1 JAN 0045	9	3.	1 JAN 0245	33	45.	1 JAN 0445	57	462.	1 JAN 0645	81	426.
1 JAN 0050	10	3.	1 JAN 0250	34	90.	1 JAN 0450	58	417.	1 JAN 0650	82	422.
1 JAN 0055	11	3.	1 JAN 0255	35	159.	1 JAN 0455	59	378.	1 JAN 0655	83	417.
1 JAN 0100	12	3.	1 JAN 0300	36	250.	1 JAN 0500	60	347.	1 JAN 0700	84	409.
1 JAN 0105	13	3.	1 JAN 0305	37	359.	1 JAN 0505	61	326.	1 JAN 0705	85	395.
1 JAN 0110	14	3.	1 JAN 0310	38	479.	1 JAN 0510	62	316.	1 JAN 0710	86	375.
1 JAN 0115	15	3.	1 JAN 0315	39	596.	1 JAN 0515	63	314.	1 JAN 0715	87	350.
1 JAN 0120	16	3.	1 JAN 0320	40	698.	1 JAN 0520	64	321.	1 JAN 0720	88	322.
1 JAN 0125	17	3.	1 JAN 0325	41	778.	1 JAN 0525	65	332.	1 JAN 0725	89	292.
1 JAN 0130	18	3.	1 JAN 0330	42	831.	1 JAN 0530	66	348.	1 JAN 0730	90	262.
1 JAN 0135	19	3.	1 JAN 0335	43	860.	1 JAN 0535	67	364.	1 JAN 0735	91	234.
1 JAN 0140	20	3.	1 JAN 0340	44	866.	1 JAN 0540	68	381.	1 JAN 0740	92	210.
1 JAN 0145	21	3.	1 JAN 0345	45	856.	1 JAN 0545	69	397.	1 JAN 0745	93	190.
1 JAN 0150	22	3.	1 JAN 0350	46	836.	1 JAN 0550	70	413.	1 JAN 0750	94	175.
1 JAN 0155	23	3.	1 JAN 0355	47	810.	1 JAN 0555	71	427.	1 JAN 0755	95	162.
1 JAN 0200	24	3.	1 JAN 0400	48	782.	1 JAN 0600	72	438.	1 JAN 0800	96	152.

```
 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
+  (CFS)       (HR)                  6-HR       24-HR       72-HR      7.92-HR
                              (CFS)
+    866.      3.58                 399.        303.        303.        303.
                          (INCHES)  1.485       1.489       1.489       1.489
                           (AC-FT)  198.        198.        198.        198.

                         CUMULATIVE AREA =    2.50 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

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            *            *
 211 KK     *     T4     *     Third Cr at SR 431
            *            *
            **************

 215 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE      1JAN99  STARTING DATE
                     JXTIME           5  STARTING TIME

               SUBBASIN RUNOFF DATA

 212 BA          SUBBASIN CHARACTERISTICS
                      TAREA        1.78  SUBBASIN AREA

 213 BF          BASE FLOW CHARACTERISTICS
                      STRTQ        0.00  INITIAL FLOW
                      QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                      RTIOR     1.50000  RECESSION CONSTANT

                 PRECIPITATION DATA

 214 PB               STORM        4.09  BASIN TOTAL PRECIPITATION

 216 PI            INCREMENTAL PRECIPITATION PATTERN
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                     1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                     3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                     1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                     0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                     1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                     0.67      0.67

 220 LS          SCS LOSS RATE
                      STRTL        0.88  INITIAL ABSTRACTION
                     CRVNBR       69.44  CURVE NUMBER
                      RTIMP        0.00  PERCENT IMPERVIOUS AREA

 221 UI          INPUT UNITGRAPH,  38 ORDINATES,  VOLUME = 1.00
                    120.0     361.0     564.0     744.0     860.0     991.0     974.0     949.0     894.0     814.0
                    748.0     683.0     619.0     557.0     495.0     436.0     373.0     330.0     290.0     257.0
                    231.0     204.0     183.0     162.0     146.0     131.0     116.0     100.0      89.0      80.0
                     69.0      57.0      45.0      38.0      31.0      21.0      13.0       5.0
                                                                  ***
*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION       T4

*****************************************************************************************************************************
                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
       1 JAN 0005    1    0.00    0.00    0.00         0.        *       1 JAN 0405   49    0.01    0.01    0.01       310.
       1 JAN 0010    2    0.03    0.03    0.00         0.        *       1 JAN 0410   50    0.04    0.02    0.02       292.
       1 JAN 0015    3    0.03    0.03    0.00         0.        *       1 JAN 0415   51    0.04    0.02    0.02       279.
       1 JAN 0020    4    0.03    0.03    0.00         0.        *       1 JAN 0420   52    0.04    0.02    0.02       271.
       1 JAN 0025    5    0.03    0.03    0.00         0.        *       1 JAN 0425   53    0.04    0.02    0.02       267.
       1 JAN 0030    6    0.03    0.03    0.00         0.        *       1 JAN 0430   54    0.04    0.02    0.02       267.
       1 JAN 0035    7    0.03    0.03    0.00         0.        *       1 JAN 0435   55    0.04    0.02    0.02       269.
       1 JAN 0040    8    0.03    0.03    0.00         0.        *       1 JAN 0440   56    0.04    0.02    0.03       274.
       1 JAN 0045    9    0.03    0.03    0.00         0.        *       1 JAN 0445   57    0.04    0.02    0.03       279.
       1 JAN 0050   10    0.03    0.03    0.00         0.        *       1 JAN 0450   58    0.04    0.02    0.03       284.
       1 JAN 0055   11    0.04    0.04    0.00         0.        *       1 JAN 0455   59    0.04    0.02    0.03       289.
       1 JAN 0100   12    0.04    0.04    0.00         0.        *       1 JAN 0500   60    0.04    0.02    0.03       294.
       1 JAN 0105   13    0.04    0.04    0.00         0.        *       1 JAN 0505   61    0.04    0.02    0.03       299.
       1 JAN 0110   14    0.01    0.01    0.00         0.        *       1 JAN 0510   62    0.03    0.01    0.02       303.
       1 JAN 0115   15    0.01    0.01    0.00         0.        *       1 JAN 0515   63    0.03    0.01    0.02       304.
       1 JAN 0120   16    0.01    0.01    0.00         0.        *       1 JAN 0520   64    0.03    0.01    0.02       304.
       1 JAN 0125   17    0.04    0.04    0.00         0.        *       1 JAN 0525   65    0.03    0.01    0.02       302.
       1 JAN 0130   18    0.04    0.04    0.00         0.        *       1 JAN 0530   66    0.03    0.01    0.02       299.
       1 JAN 0135   19    0.04    0.04    0.00         0.        *       1 JAN 0535   67    0.03    0.01    0.02       294.
       1 JAN 0140   20    0.15    0.15    0.00         0.        *       1 JAN 0540   68    0.03    0.01    0.02       289.
       1 JAN 0145   21    0.15    0.15    0.00         0.        *       1 JAN 0545   69    0.03    0.01    0.02       284.
       1 JAN 0150   22    0.15    0.15    0.00         0.        *       1 JAN 0550   70    0.03    0.01    0.02       280.
       1 JAN 0155   23    0.29    0.26    0.03         4.        *       1 JAN 0555   71    0.03    0.01    0.02       276.
```

1 JAN 0200	24	0.29	0.23	0.06	19.	*	1 JAN 0600	72	0.03	0.01	0.02	272.
1 JAN 0205	25	0.29	0.20	0.08	49.	*	1 JAN 0605	73	0.03	0.01	0.02	269.
1 JAN 0210	26	0.16	0.11	0.06	93.	*	1 JAN 0610	74	0.00	0.00	0.00	264.
1 JAN 0215	27	0.16	0.10	0.06	145.	*	1 JAN 0615	75	0.00	0.00	0.00	255.
1 JAN 0220	28	0.16	0.10	0.07	205.	*	1 JAN 0620	76	0.00	0.00	0.00	243.
1 JAN 0225	29	0.10	0.05	0.04	266.	*	1 JAN 0625	77	0.00	0.00	0.00	228.
1 JAN 0230	30	0.10	0.05	0.04	323.	*	1 JAN 0630	78	0.00	0.00	0.00	211.
1 JAN 0235	31	0.10	0.05	0.05	370.	*	1 JAN 0635	79	0.00	0.00	0.00	193.
1 JAN 0240	32	0.05	0.03	0.03	408.	*	1 JAN 0640	80	0.00	0.00	0.00	174.
1 JAN 0245	33	0.05	0.03	0.03	435.	*	1 JAN 0645	81	0.00	0.00	0.00	156.
1 JAN 0250	34	0.05	0.03	0.03	451.	*	1 JAN 0650	82	0.00	0.00	0.00	140.
1 JAN 0255	35	0.05	0.03	0.03	461.	*	1 JAN 0655	83	0.00	0.00	0.00	124.
1 JAN 0300	36	0.05	0.03	0.03	465.	*	1 JAN 0700	84	0.00	0.00	0.00	110.
1 JAN 0305	37	0.05	0.03	0.03	464.	*	1 JAN 0705	85	0.00	0.00	0.00	97.
1 JAN 0310	38	0.05	0.03	0.03	462.	*	1 JAN 0710	86	0.00	0.00	0.00	85.
1 JAN 0315	39	0.05	0.02	0.03	459.	*	1 JAN 0715	87	0.00	0.00	0.00	75.
1 JAN 0320	40	0.05	0.02	0.03	454.	*	1 JAN 0720	88	0.00	0.00	0.00	65.
1 JAN 0325	41	0.03	0.01	0.02	448.	*	1 JAN 0725	89	0.00	0.00	0.00	56.
1 JAN 0330	42	0.03	0.01	0.02	439.	*	1 JAN 0730	90	0.00	0.00	0.00	49.
1 JAN 0335	43	0.03	0.01	0.02	427.	*	1 JAN 0735	91	0.00	0.00	0.00	43.
1 JAN 0340	44	0.01	0.01	0.01	412.	*	1 JAN 0740	92	0.00	0.00	0.00	37.
1 JAN 0345	45	0.01	0.01	0.01	395.	*	1 JAN 0745	93	0.00	0.00	0.00	32.
1 JAN 0350	46	0.01	0.01	0.01	374.	*	1 JAN 0750	94	0.00	0.00	0.00	27.
1 JAN 0355	47	0.01	0.01	0.01	353.	*	1 JAN 0755	95	0.00	0.00	0.00	24.
1 JAN 0400	48	0.01	0.01	0.01	331.	*	1 JAN 0800	96	0.00	0.00	0.00	23.

TOTAL RAINFALL = 4.09, TOTAL LOSS = 2.74, TOTAL EXCESS = 1.35

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
465.	2.92	(CFS)	258.	195.	195.	195.
		(INCHES)	1.346	1.347	1.347	1.347
		(AC-FT)	128.	128.	128.	128.

CUMULATIVE AREA = 1.78 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /THIRD CR/SR431 LOCAL/FLOW/01JAN1999/5MIN//

226 KK T4C Combine Third at SR431, Pt 18

227 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION T4C
SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	1 JAN 0205	25	52.	1 JAN 0405	49	1066.	1 JAN 0605	73	714.
1 JAN 0010	2	3.	1 JAN 0210	26	96.	1 JAN 0410	50	1022.	1 JAN 0610	74	713.
1 JAN 0015	3	3.	1 JAN 0215	27	148.	1 JAN 0415	51	983.	1 JAN 0615	75	704.
1 JAN 0020	4	3.	1 JAN 0220	28	208.	1 JAN 0420	52	945.	1 JAN 0620	76	690.
1 JAN 0025	5	3.	1 JAN 0225	29	270.	1 JAN 0425	53	908.	1 JAN 0625	77	671.
1 JAN 0030	6	3.	1 JAN 0230	30	327.	1 JAN 0430	54	868.	1 JAN 0630	78	649.
1 JAN 0035	7	3.	1 JAN 0235	31	379.	1 JAN 0435	55	827.	1 JAN 0635	79	626.
1 JAN 0040	8	3.	1 JAN 0240	32	428.	1 JAN 0440	56	783.	1 JAN 0640	80	604.
1 JAN 0045	9	3.	1 JAN 0245	33	480.	1 JAN 0445	57	740.	1 JAN 0645	81	582.
1 JAN 0050	10	3.	1 JAN 0250	34	541.	1 JAN 0450	58	701.	1 JAN 0650	82	562.
1 JAN 0055	11	3.	1 JAN 0255	35	619.	1 JAN 0455	59	667.	1 JAN 0655	83	541.
1 JAN 0100	12	3.	1 JAN 0300	36	715.	1 JAN 0500	60	642.	1 JAN 0700	84	519.
1 JAN 0105	13	3.	1 JAN 0305	37	824.	1 JAN 0505	61	626.	1 JAN 0705	85	492.
1 JAN 0110	14	3.	1 JAN 0310	38	942.	1 JAN 0510	62	618.	1 JAN 0710	86	460.
1 JAN 0115	15	3.	1 JAN 0315	39	1055.	1 JAN 0515	63	619.	1 JAN 0715	87	425.
1 JAN 0120	16	3.	1 JAN 0320	40	1152.	1 JAN 0520	64	625.	1 JAN 0720	88	387.
1 JAN 0125	17	3.	1 JAN 0325	41	1226.	1 JAN 0525	65	635.	1 JAN 0725	89	348.
1 JAN 0130	18	3.	1 JAN 0330	42	1270.	1 JAN 0530	66	646.	1 JAN 0730	90	311.
1 JAN 0135	19	3.	1 JAN 0335	43	1287.	1 JAN 0535	67	658.	1 JAN 0735	91	277.
1 JAN 0140	20	3.	1 JAN 0340	44	1278.	1 JAN 0540	68	670.	1 JAN 0740	92	247.
1 JAN 0145	21	3.	1 JAN 0345	45	1251.	1 JAN 0545	69	682.	1 JAN 0745	93	222.
1 JAN 0150	22	3.	1 JAN 0350	46	1210.	1 JAN 0550	70	693.	1 JAN 0750	94	202.
1 JAN 0155	23	7.	1 JAN 0355	47	1163.	1 JAN 0555	71	702.	1 JAN 0755	95	186.
1 JAN 0200	24	22.	1 JAN 0400	48	1114.	1 JAN 0600	72	710.	1 JAN 0800	96	175.

PEAK FLOW TIME MAXIMUM AVERAGE FLOW

```
                                    6-HR        24-HR        72-HR       7.92-HR
+   (CFS)        (HR)
                          (CFS)
+    1287.       3.50                657.         499.         499.         499.
                          (INCHES)  1.427        1.430        1.430        1.430
                           (AC-FT)   326.         326.         326.         326.

                          CUMULATIVE AREA =    4.28 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /THIRD CR/SR431 PT18/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 229 KK     *      T4R   *     Route Third to Village B1 at 3 fps
            *            *
            **************

              HYDROGRAPH ROUTING DATA

 230 RM          MUSKINGUM ROUTING
                       NSTPS          2 NUMBER OF SUBREACHES
                       AMSKK       0.19 MUSKINGUM K
                           X       0.40 MUSKINGUM X

                                                                  ***

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                                                HYDROGRAPH AT STATION      T4R

*****************************************************************************************************************************
                                  *                                  *                                  *
   DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW
                                  *                                  *                                  *
    1 JAN 0005    1        3.     *   1 JAN 0205   25        7.     *   1 JAN 0405   49     1175.     *   1 JAN 0605   73      699.
    1 JAN 0010    2        3.     *   1 JAN 0210   26       20.     *   1 JAN 0410   50     1127.     *   1 JAN 0610   74      707.
    1 JAN 0015    3        3.     *   1 JAN 0215   27       46.     *   1 JAN 0415   51     1080.     *   1 JAN 0615   75      712.
    1 JAN 0020    4        3.     *   1 JAN 0220   28       86.     *   1 JAN 0420   52     1035.     *   1 JAN 0620   76      712.
    1 JAN 0025    5        3.     *   1 JAN 0225   29      135.     *   1 JAN 0425   53      994.     *   1 JAN 0625   77      705.
    1 JAN 0030    6        3.     *   1 JAN 0230   30      192.     *   1 JAN 0430   54      956.     *   1 JAN 0630   78      693.
    1 JAN 0035    7        3.     *   1 JAN 0235   31      253.     *   1 JAN 0435   55      918.     *   1 JAN 0635   79      675.
    1 JAN 0040    8        3.     *   1 JAN 0240   32      311.     *   1 JAN 0440   56      879.     *   1 JAN 0640   80      655.
    1 JAN 0045    9        3.     *   1 JAN 0245   33      364.     *   1 JAN 0445   57      838.     *   1 JAN 0645   81      632.
    1 JAN 0050   10        3.     *   1 JAN 0250   34      414.     *   1 JAN 0450   58      795.     *   1 JAN 0650   82      610.
    1 JAN 0055   11        3.     *   1 JAN 0255   35      466.     *   1 JAN 0455   59      753.     *   1 JAN 0655   83      588.
    1 JAN 0100   12        3.     *   1 JAN 0300   36      525.     *   1 JAN 0500   60      712.     *   1 JAN 0700   84      567.
    1 JAN 0105   13        3.     *   1 JAN 0305   37      600.     *   1 JAN 0505   61      678.     *   1 JAN 0705   85      547.
    1 JAN 0110   14        3.     *   1 JAN 0310   38      690.     *   1 JAN 0510   62      650.     *   1 JAN 0710   86      525.
    1 JAN 0115   15        3.     *   1 JAN 0315   39      795.     *   1 JAN 0515   63      632.     *   1 JAN 0715   87      499.
    1 JAN 0120   16        3.     *   1 JAN 0320   40      909.     *   1 JAN 0520   64      622.     *   1 JAN 0720   88      469.
    1 JAN 0125   17        3.     *   1 JAN 0325   41     1022.     *   1 JAN 0525   65      620.     *   1 JAN 0725   89      434.
    1 JAN 0130   18        3.     *   1 JAN 0330   42     1122.     *   1 JAN 0530   66      624.     *   1 JAN 0730   90      397.
    1 JAN 0135   19        3.     *   1 JAN 0335   43     1201.     *   1 JAN 0535   67      632.     *   1 JAN 0735   91      359.
    1 JAN 0140   20        3.     *   1 JAN 0340   44     1253.     *   1 JAN 0540   68      643.     *   1 JAN 0740   92      322.
    1 JAN 0145   21        3.     *   1 JAN 0345   45     1278.     *   1 JAN 0545   69      655.     *   1 JAN 0745   93      287.
    1 JAN 0150   22        3.     *   1 JAN 0350   46     1277.     *   1 JAN 0550   70      667.     *   1 JAN 0750   94      256.
    1 JAN 0155   23        3.     *   1 JAN 0355   47     1256.     *   1 JAN 0555   71      678.     *   1 JAN 0755   95      230.
    1 JAN 0200   24        4.     *   1 JAN 0400   48     1219.     *   1 JAN 0600   72      689.     *   1 JAN 0800   96      208.
                                  *                                  *                                  *
*****************************************************************************************************************************

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR       7.92-HR
+   (CFS)        (HR)
                          (CFS)
+    1278.       3.67                651.         494.         494.         494.
                          (INCHES)  1.414        1.417        1.417        1.417
                           (AC-FT)   323.         323.         323.         323.

                          CUMULATIVE AREA =    4.28 SQ MI

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 231 KK     *       T5   *     Third Cr at Village B1
            *            *
            **************

 235 IN          TIME DATA FOR INPUT TIME SERIES
                       JXMIN          15  TIME INTERVAL IN MINUTES
                      JXDATE      1JAN99  STARTING DATE
                      JXTIME           5  STARTING TIME

              SUBBASIN RUNOFF DATA
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232 BA          SUBBASIN CHARACTERISTICS
                     TAREA          0.07  SUBBASIN AREA

233 BF          BASE FLOW CHARACTERISTICS
                     STRTQ          0.00  INITIAL FLOW
                     QRCSN         -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR       1.50000  RECESSION CONSTANT

                PRECIPITATION DATA

234 PB               STORM          1.82  BASIN TOTAL PRECIPITATION

236 PI            INCREMENTAL PRECIPITATION PATTERN
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                    1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                    3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                    1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                    0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                    1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                    0.67      0.67

240 LS          SCS LOSS RATE
                     STRTL          0.66  INITIAL ABSTRACTION
                    CRVNBR         75.22  CURVE NUMBER
                     RTIMP          0.00  PERCENT IMPERVIOUS AREA

241 UI          INPUT UNITGRAPH,  10 ORDINATES,  VOLUME = 1.00
                    59.0     133.0     121.0      87.0      55.0      35.0      23.0      15.0       9.0       4.0
                                                          ***
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HYDROGRAPH AT STATION T5

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	*	1	JAN	0405	49	0.01	0.00	0.00	1.
1	JAN	0010	2	0.01	0.01	0.00	0.	*	1	JAN	0410	50	0.02	0.01	0.01	1.
1	JAN	0015	3	0.01	0.01	0.00	0.	*	1	JAN	0415	51	0.02	0.01	0.01	2.
1	JAN	0020	4	0.01	0.01	0.00	0.	*	1	JAN	0420	52	0.02	0.01	0.01	3.
1	JAN	0025	5	0.01	0.01	0.00	0.	*	1	JAN	0425	53	0.02	0.01	0.01	3.
1	JAN	0030	6	0.01	0.01	0.00	0.	*	1	JAN	0430	54	0.02	0.01	0.01	3.
1	JAN	0035	7	0.01	0.01	0.00	0.	*	1	JAN	0435	55	0.02	0.01	0.01	3.
1	JAN	0040	8	0.01	0.01	0.00	0.	*	1	JAN	0440	56	0.02	0.01	0.01	4.
1	JAN	0045	9	0.01	0.01	0.00	0.	*	1	JAN	0445	57	0.02	0.01	0.01	4.
1	JAN	0050	10	0.01	0.01	0.00	0.	*	1	JAN	0450	58	0.02	0.01	0.01	4.
1	JAN	0055	11	0.02	0.02	0.00	0.	*	1	JAN	0455	59	0.02	0.01	0.01	4.
1	JAN	0100	12	0.02	0.02	0.00	0.	*	1	JAN	0500	60	0.02	0.01	0.01	4.
1	JAN	0105	13	0.02	0.02	0.00	0.	*	1	JAN	0505	61	0.02	0.01	0.01	4.
1	JAN	0110	14	0.01	0.01	0.00	0.	*	1	JAN	0510	62	0.01	0.01	0.01	4.
1	JAN	0115	15	0.01	0.01	0.00	0.	*	1	JAN	0515	63	0.01	0.01	0.01	4.
1	JAN	0120	16	0.01	0.01	0.00	0.	*	1	JAN	0520	64	0.01	0.01	0.01	3.
1	JAN	0125	17	0.02	0.02	0.00	0.	*	1	JAN	0525	65	0.01	0.01	0.01	3.
1	JAN	0130	18	0.02	0.02	0.00	0.	*	1	JAN	0530	66	0.01	0.01	0.01	3.
1	JAN	0135	19	0.02	0.02	0.00	0.	*	1	JAN	0535	67	0.01	0.01	0.01	3.
1	JAN	0140	20	0.07	0.07	0.00	0.	*	1	JAN	0540	68	0.01	0.01	0.01	3.
1	JAN	0145	21	0.07	0.07	0.00	0.	*	1	JAN	0545	69	0.01	0.01	0.01	3.
1	JAN	0150	22	0.07	0.07	0.00	0.	*	1	JAN	0550	70	0.01	0.01	0.01	3.
1	JAN	0155	23	0.13	0.13	0.00	0.	*	1	JAN	0555	71	0.01	0.01	0.01	3.
1	JAN	0200	24	0.13	0.13	0.00	0.	*	1	JAN	0600	72	0.01	0.01	0.01	3.
1	JAN	0205	25	0.13	0.12	0.01	0.	*	1	JAN	0605	73	0.01	0.01	0.01	3.
1	JAN	0210	26	0.07	0.06	0.01	1.	*	1	JAN	0610	74	0.00	0.00	0.00	3.
1	JAN	0215	27	0.07	0.06	0.01	3.	*	1	JAN	0615	75	0.00	0.00	0.00	2.
1	JAN	0220	28	0.07	0.06	0.01	4.	*	1	JAN	0620	76	0.00	0.00	0.00	1.
1	JAN	0225	29	0.04	0.03	0.01	5.	*	1	JAN	0625	77	0.00	0.00	0.00	1.
1	JAN	0230	30	0.04	0.03	0.01	5.	*	1	JAN	0630	78	0.00	0.00	0.00	0.
1	JAN	0235	31	0.04	0.03	0.01	5.	*	1	JAN	0635	79	0.00	0.00	0.00	0.
1	JAN	0240	32	0.02	0.02	0.01	5.	*	1	JAN	0640	80	0.00	0.00	0.00	0.
1	JAN	0245	33	0.02	0.02	0.01	5.	*	1	JAN	0645	81	0.00	0.00	0.00	0.
1	JAN	0250	34	0.02	0.02	0.01	4.	*	1	JAN	0650	82	0.00	0.00	0.00	0.
1	JAN	0255	35	0.02	0.02	0.01	4.	*	1	JAN	0655	83	0.00	0.00	0.00	0.
1	JAN	0300	36	0.02	0.02	0.01	4.	*	1	JAN	0700	84	0.00	0.00	0.00	0.
1	JAN	0305	37	0.02	0.02	0.01	4.	*	1	JAN	0705	85	0.00	0.00	0.00	0.
1	JAN	0310	38	0.02	0.02	0.01	4.	*	1	JAN	0710	86	0.00	0.00	0.00	0.
1	JAN	0315	39	0.02	0.02	0.01	4.	*	1	JAN	0715	87	0.00	0.00	0.00	0.
1	JAN	0320	40	0.02	0.02	0.01	4.	*	1	JAN	0720	88	0.00	0.00	0.00	0.
1	JAN	0325	41	0.01	0.01	0.00	4.	*	1	JAN	0725	89	0.00	0.00	0.00	0.
1	JAN	0330	42	0.01	0.01	0.00	3.	*	1	JAN	0730	90	0.00	0.00	0.00	0.
1	JAN	0335	43	0.01	0.01	0.00	3.	*	1	JAN	0735	91	0.00	0.00	0.00	0.
1	JAN	0340	44	0.01	0.00	0.00	3.	*	1	JAN	0740	92	0.00	0.00	0.00	0.
1	JAN	0345	45	0.01	0.00	0.00	2.	*	1	JAN	0745	93	0.00	0.00	0.00	0.
1	JAN	0350	46	0.01	0.00	0.00	2.	*	1	JAN	0750	94	0.00	0.00	0.00	0.
1	JAN	0355	47	0.01	0.00	0.00	2.	*	1	JAN	0755	95	0.00	0.00	0.00	0.
1	JAN	0400	48	0.01	0.00	0.00	1.	*	1	JAN	0800	96	0.00	0.00	0.00	0.

****

TOTAL RAINFALL = 1.82, TOTAL LOSS = 1.52, TOTAL EXCESS = 0.30

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR

```
+   (CFS)        (HR)
                          (CFS)
+       5.       2.50                  2.          2.          2.          2.
                         (INCHES)    0.307       0.307       0.307       0.307
                          (AC-FT)      1.          1.          1.          1.

                         CUMULATIVE AREA =    0.07 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /THIRD CR/VILLAGE BL LOCAL/FLOW/01JAN1999/5MIN//


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 244 KK     *      T5C   *     Combine Third at Village Bl, Pt 8
            *            *
            **************

 245 HC          HYDROGRAPH COMBINATION
                      ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                                  ***

*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION      T5C
                                                     SUM OF  2 HYDROGRAPHS

*****************************************************************************************************************************
                                  *                                 *                                 *                                 *
   DA MON HRMN  ORD       FLOW    *  DA MON HRMN  ORD       FLOW    *  DA MON HRMN  ORD       FLOW    *  DA MON HRMN  ORD       FLOW
                                  *                                 *                                 *                                 *
    1 JAN 0005    1         3.    *   1 JAN 0205   25         8.    *   1 JAN 0405   49      1176.    *   1 JAN 0605   73       702.
    1 JAN 0010    2         3.    *   1 JAN 0210   26        21.    *   1 JAN 0410   50      1129.    *   1 JAN 0610   74       710.
    1 JAN 0015    3         3.    *   1 JAN 0215   27        48.    *   1 JAN 0415   51      1082.    *   1 JAN 0615   75       714.
    1 JAN 0020    4         3.    *   1 JAN 0220   28        89.    *   1 JAN 0420   52      1038.    *   1 JAN 0620   76       713.
    1 JAN 0025    5         3.    *   1 JAN 0225   29       140.    *   1 JAN 0425   53       997.    *   1 JAN 0625   77       706.
    1 JAN 0030    6         3.    *   1 JAN 0230   30       197.    *   1 JAN 0430   54       959.    *   1 JAN 0630   78       693.
    1 JAN 0035    7         3.    *   1 JAN 0235   31       258.    *   1 JAN 0435   55       922.    *   1 JAN 0635   79       676.
    1 JAN 0040    8         3.    *   1 JAN 0240   32       316.    *   1 JAN 0440   56       883.    *   1 JAN 0640   80       655.
    1 JAN 0045    9         3.    *   1 JAN 0245   33       368.    *   1 JAN 0445   57       842.    *   1 JAN 0645   81       633.
    1 JAN 0050   10         3.    *   1 JAN 0250   34       418.    *   1 JAN 0450   58       799.    *   1 JAN 0650   82       610.
    1 JAN 0055   11         3.    *   1 JAN 0255   35       470.    *   1 JAN 0455   59       756.    *   1 JAN 0655   83       588.
    1 JAN 0100   12         3.    *   1 JAN 0300   36       529.    *   1 JAN 0500   60       716.    *   1 JAN 0700   84       568.
    1 JAN 0105   13         3.    *   1 JAN 0305   37       604.    *   1 JAN 0505   61       681.    *   1 JAN 0705   85       547.
    1 JAN 0110   14         3.    *   1 JAN 0310   38       694.    *   1 JAN 0510   62       654.    *   1 JAN 0710   86       525.
    1 JAN 0115   15         3.    *   1 JAN 0315   39       799.    *   1 JAN 0515   63       635.    *   1 JAN 0715   87       499.
    1 JAN 0120   16         3.    *   1 JAN 0320   40       913.    *   1 JAN 0520   64       625.    *   1 JAN 0720   88       469.
    1 JAN 0125   17         3.    *   1 JAN 0325   41      1026.    *   1 JAN 0525   65       623.    *   1 JAN 0725   89       434.
    1 JAN 0130   18         3.    *   1 JAN 0330   42      1126.    *   1 JAN 0530   66       627.    *   1 JAN 0730   90       397.
    1 JAN 0135   19         3.    *   1 JAN 0335   43      1204.    *   1 JAN 0535   67       635.    *   1 JAN 0735   91       359.
    1 JAN 0140   20         3.    *   1 JAN 0340   44      1256.    *   1 JAN 0540   68       646.    *   1 JAN 0740   92       322.
    1 JAN 0145   21         3.    *   1 JAN 0345   45      1280.    *   1 JAN 0545   69       657.    *   1 JAN 0745   93       287.
    1 JAN 0150   22         3.    *   1 JAN 0350   46      1279.    *   1 JAN 0550   70       669.    *   1 JAN 0750   94       256.
    1 JAN 0155   23         3.    *   1 JAN 0355   47      1257.    *   1 JAN 0555   71       681.    *   1 JAN 0755   95       230.
    1 JAN 0200   24         4.    *   1 JAN 0400   48      1221.    *   1 JAN 0600   72       692.    *   1 JAN 0800   96       208.
                                  *                                 *                                 *
*****************************************************************************************************************************

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                        6-HR        24-HR       72-HR      7.92-HR
+   (CFS)        (HR)
                          (CFS)
+    1280.       3.67                   653.        496.        496.        496.
                         (INCHES)     1.397       1.399       1.399       1.399
                          (AC-FT)      324.        325.        325.        325.

                         CUMULATIVE AREA =    4.35 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /THIRD CR/VILLAGE BL PT8/FLOW/01JAN1999/5MIN//


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 247 KK     *      T5R   *     Route Third to SR 28 at 3 fps
            *            *
            **************

               HYDROGRAPH ROUTING DATA

 248 RM          MUSKINGUM ROUTING
                      NSTPS          3 NUMBER OF SUBREACHES
                      AMSKK       0.24 MUSKINGUM K
                          X       0.40 MUSKINGUM X

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HYDROGRAPH AT STATION T5R

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	1 JAN 0205	25	3.	1 JAN 0405	49	1272.	1 JAN 0605	73	671.
1 JAN 0010	2	3.	1 JAN 0210	26	3.	1 JAN 0410	50	1250.	1 JAN 0610	74	682.
1 JAN 0015	3	3.	1 JAN 0215	27	5.	1 JAN 0415	51	1214.	1 JAN 0615	75	693.
1 JAN 0020	4	3.	1 JAN 0220	28	11.	1 JAN 0420	52	1170.	1 JAN 0620	76	703.
1 JAN 0025	5	3.	1 JAN 0225	29	27.	1 JAN 0425	53	1123.	1 JAN 0625	77	710.
1 JAN 0030	6	3.	1 JAN 0230	30	56.	1 JAN 0430	54	1077.	1 JAN 0630	78	713.
1 JAN 0035	7	3.	1 JAN 0235	31	98.	1 JAN 0435	55	1033.	1 JAN 0635	79	711.
1 JAN 0040	8	3.	1 JAN 0240	32	148.	1 JAN 0440	56	993.	1 JAN 0640	80	703.
1 JAN 0045	9	3.	1 JAN 0245	33	205.	1 JAN 0445	57	955.	1 JAN 0645	81	690.
1 JAN 0050	10	3.	1 JAN 0250	34	264.	1 JAN 0450	58	917.	1 JAN 0650	82	673.
1 JAN 0055	11	3.	1 JAN 0255	35	321.	1 JAN 0455	59	877.	1 JAN 0655	83	652.
1 JAN 0100	12	3.	1 JAN 0300	36	374.	1 JAN 0500	60	836.	1 JAN 0700	84	630.
1 JAN 0105	13	3.	1 JAN 0305	37	425.	1 JAN 0505	61	794.	1 JAN 0705	85	608.
1 JAN 0110	14	3.	1 JAN 0310	38	479.	1 JAN 0510	62	752.	1 JAN 0710	86	586.
1 JAN 0115	15	3.	1 JAN 0315	39	541.	1 JAN 0515	63	713.	1 JAN 0715	87	565.
1 JAN 0120	16	3.	1 JAN 0320	40	618.	1 JAN 0520	64	680.	1 JAN 0720	88	544.
1 JAN 0125	17	3.	1 JAN 0325	41	710.	1 JAN 0525	65	654.	1 JAN 0725	89	521.
1 JAN 0130	18	3.	1 JAN 0330	42	815.	1 JAN 0530	66	636.	1 JAN 0730	90	495.
1 JAN 0135	19	3.	1 JAN 0335	43	926.	1 JAN 0535	67	626.	1 JAN 0735	91	464.
1 JAN 0140	20	3.	1 JAN 0340	44	1035.	1 JAN 0540	68	625.	1 JAN 0740	92	429.
1 JAN 0145	21	3.	1 JAN 0345	45	1130.	1 JAN 0545	69	629.	1 JAN 0745	93	392.
1 JAN 0150	22	3.	1 JAN 0350	46	1204.	1 JAN 0550	70	637.	1 JAN 0750	94	355.
1 JAN 0155	23	3.	1 JAN 0355	47	1253.	1 JAN 0555	71	648.	1 JAN 0755	95	318.
1 JAN 0200	24	3.	1 JAN 0400	48	1274.	1 JAN 0600	72	659.	1 JAN 0800	96	284.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
		(CFS)				
1274.	3.92		644.	489.	489.	489.
		(INCHES)	1.376	1.378	1.378	1.378
		(AC-FT)	319.	320.	320.	320.

CUMULATIVE AREA = 4.35 SQ MI

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                 **************
                 *            *
 249 KK          *     T6     *     Third Cr at SR 28
                 *            *
                 **************

 253 IN            TIME DATA FOR INPUT TIME SERIES
                        JXMIN          15  TIME INTERVAL IN MINUTES
                      JXDATE      1JAN99  STARTING DATE
                      JXTIME           5  STARTING TIME

                 SUBBASIN RUNOFF DATA

 250 BA            SUBBASIN CHARACTERISTICS
                        TAREA        0.52  SUBBASIN AREA

 251 BF            BASE FLOW CHARACTERISTICS
                        STRTQ        0.00  INITIAL FLOW
                        QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                        RTIOR     1.50000  RECESSION CONSTANT

                   PRECIPITATION DATA

 252 PB                 STORM        1.26  BASIN TOTAL PRECIPITATION

 254 PI              INCREMENTAL PRECIPITATION PATTERN
                       0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                       1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                       3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                       1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                       0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                       1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                       0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                       0.67      0.67

 258 LS            SCS LOSS RATE
                        STRTL        0.48  INITIAL ABSTRACTION
                       CRVNBR       80.68  CURVE NUMBER
                        RTIMP        0.00  PERCENT IMPERVIOUS AREA

 259 UI            INPUT UNITGRAPH,  12 ORDINATES,  VOLUME = 0.73
                       255.0     614.0     624.0     480.0     342.0     222.0     152.0     105.0      71.0      47.0
                        25.0       3.0
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HYDROGRAPH AT STATION T6

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.
1	JAN	0010	2	0.01	0.01	0.00	0.
1	JAN	0015	3	0.01	0.01	0.00	0.
1	JAN	0020	4	0.01	0.01	0.00	0.
1	JAN	0025	5	0.01	0.01	0.00	0.
1	JAN	0030	6	0.01	0.01	0.00	0.
1	JAN	0035	7	0.01	0.01	0.00	0.
1	JAN	0040	8	0.01	0.01	0.00	0.
1	JAN	0045	9	0.01	0.01	0.00	0.
1	JAN	0050	10	0.01	0.01	0.00	0.
1	JAN	0055	11	0.01	0.01	0.00	0.
1	JAN	0100	12	0.01	0.01	0.00	0.
1	JAN	0105	13	0.01	0.01	0.00	0.
1	JAN	0110	14	0.00	0.00	0.00	0.
1	JAN	0115	15	0.00	0.00	0.00	0.
1	JAN	0120	16	0.00	0.00	0.00	0.
1	JAN	0125	17	0.01	0.01	0.00	0.
1	JAN	0130	18	0.01	0.01	0.00	0.
1	JAN	0135	19	0.01	0.01	0.00	0.
1	JAN	0140	20	0.05	0.05	0.00	0.
1	JAN	0145	21	0.05	0.05	0.00	0.
1	JAN	0150	22	0.05	0.05	0.00	0.
1	JAN	0155	23	0.09	0.09	0.00	0.
1	JAN	0200	24	0.09	0.09	0.00	0.
1	JAN	0205	25	0.09	0.09	0.00	1.
1	JAN	0210	26	0.05	0.05	0.00	3.
1	JAN	0215	27	0.05	0.04	0.01	6.
1	JAN	0220	28	0.05	0.04	0.01	10.
1	JAN	0225	29	0.03	0.02	0.01	13.
1	JAN	0230	30	0.03	0.02	0.01	15.
1	JAN	0235	31	0.03	0.02	0.01	16.
1	JAN	0240	32	0.02	0.01	0.00	16.
1	JAN	0245	33	0.02	0.01	0.00	15.
1	JAN	0250	34	0.02	0.01	0.00	15.
1	JAN	0255	35	0.02	0.01	0.00	14.
1	JAN	0300	36	0.02	0.01	0.00	14.
1	JAN	0305	37	0.02	0.01	0.00	13.
1	JAN	0310	38	0.02	0.01	0.00	13.
1	JAN	0315	39	0.02	0.01	0.00	14.
1	JAN	0320	40	0.02	0.01	0.01	14.
1	JAN	0325	41	0.01	0.01	0.00	13.
1	JAN	0330	42	0.01	0.01	0.00	12.
1	JAN	0335	43	0.01	0.01	0.00	11.
1	JAN	0340	44	0.00	0.00	0.00	10.
1	JAN	0345	45	0.00	0.00	0.00	8.
1	JAN	0350	46	0.00	0.00	0.00	7.
1	JAN	0355	47	0.00	0.00	0.00	6.
1	JAN	0400	48	0.00	0.00	0.00	5.
1	JAN	0405	49	0.00	0.00	0.00	5.
1	JAN	0410	50	0.01	0.01	0.00	5.
1	JAN	0415	51	0.01	0.01	0.00	7.
1	JAN	0420	52	0.01	0.01	0.00	8.
1	JAN	0425	53	0.01	0.01	0.00	10.
1	JAN	0430	54	0.01	0.01	0.00	11.
1	JAN	0435	55	0.01	0.01	0.00	12.
1	JAN	0440	56	0.01	0.01	0.00	12.
1	JAN	0445	57	0.01	0.01	0.00	13.
1	JAN	0450	58	0.01	0.01	0.00	13.
1	JAN	0455	59	0.01	0.01	0.00	13.
1	JAN	0500	60	0.01	0.01	0.00	14.
1	JAN	0505	61	0.01	0.01	0.00	14.
1	JAN	0510	62	0.01	0.01	0.00	14.
1	JAN	0515	63	0.01	0.01	0.00	13.
1	JAN	0520	64	0.01	0.01	0.00	12.
1	JAN	0525	65	0.01	0.00	0.00	11.
1	JAN	0530	66	0.01	0.00	0.00	11.
1	JAN	0535	67	0.01	0.00	0.00	11.
1	JAN	0540	68	0.01	0.00	0.00	10.
1	JAN	0545	69	0.01	0.00	0.00	10.
1	JAN	0550	70	0.01	0.00	0.00	10.
1	JAN	0555	71	0.01	0.00	0.00	10.
1	JAN	0600	72	0.01	0.00	0.00	10.
1	JAN	0605	73	0.01	0.00	0.00	10.
1	JAN	0610	74	0.00	0.00	0.00	10.
1	JAN	0615	75	0.00	0.00	0.00	7.
1	JAN	0620	76	0.00	0.00	0.00	5.
1	JAN	0625	77	0.00	0.00	0.00	3.
1	JAN	0630	78	0.00	0.00	0.00	2.
1	JAN	0635	79	0.00	0.00	0.00	1.
1	JAN	0640	80	0.00	0.00	0.00	1.
1	JAN	0645	81	0.00	0.00	0.00	1.
1	JAN	0650	82	0.00	0.00	0.00	1.
1	JAN	0655	83	0.00	0.00	0.00	1.
1	JAN	0700	84	0.00	0.00	0.00	1.
1	JAN	0705	85	0.00	0.00	0.00	1.
1	JAN	0710	86	0.00	0.00	0.00	1.
1	JAN	0715	87	0.00	0.00	0.00	1.
1	JAN	0720	88	0.00	0.00	0.00	1.
1	JAN	0725	89	0.00	0.00	0.00	1.
1	JAN	0730	90	0.00	0.00	0.00	1.
1	JAN	0735	91	0.00	0.00	0.00	1.
1	JAN	0740	92	0.00	0.00	0.00	1.
1	JAN	0745	93	0.00	0.00	0.00	1.
1	JAN	0750	94	0.00	0.00	0.00	1.
1	JAN	0755	95	0.00	0.00	0.00	0.
1	JAN	0800	96	0.00	0.00	0.00	0.

TOTAL RAINFALL = 1.26, TOTAL LOSS = 1.07, TOTAL EXCESS = 0.19

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
16.	2.58	(CFS)	8.	6.	6.	6.
		(INCHES)	0.142	0.142	0.142	0.142
		(AC-FT)	4.	4.	4.	4.

CUMULATIVE AREA = 0.52 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /THIRD CR/SR28 LOCAL/FLOW/01JAN1999/5MIN//

262 KK **T6C** Combine Third at SR 28, Pt 9

263 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

HYDROGRAPH AT STATION T6C
SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	1 JAN 0205	25	4.	1 JAN 0405	49	1276.	1 JAN 0605	73	681.
1 JAN 0010	2	3.	1 JAN 0210	26	6.	1 JAN 0410	50	1255.	1 JAN 0610	74	692.
1 JAN 0015	3	3.	1 JAN 0215	27	11.	1 JAN 0415	51	1220.	1 JAN 0615	75	701.
1 JAN 0020	4	3.	1 JAN 0220	28	22.	1 JAN 0420	52	1178.	1 JAN 0620	76	708.
1 JAN 0025	5	3.	1 JAN 0225	29	41.	1 JAN 0425	53	1133.	1 JAN 0625	77	713.
1 JAN 0030	6	3.	1 JAN 0230	30	71.	1 JAN 0430	54	1088.	1 JAN 0630	78	715.
1 JAN 0035	7	3.	1 JAN 0235	31	114.	1 JAN 0435	55	1045.	1 JAN 0635	79	713.
1 JAN 0040	8	3.	1 JAN 0240	32	164.	1 JAN 0440	56	1005.	1 JAN 0640	80	704.
1 JAN 0045	9	3.	1 JAN 0245	33	221.	1 JAN 0445	57	968.	1 JAN 0645	81	691.
1 JAN 0050	10	3.	1 JAN 0250	34	279.	1 JAN 0450	58	930.	1 JAN 0650	82	673.
1 JAN 0055	11	3.	1 JAN 0255	35	335.	1 JAN 0455	59	891.	1 JAN 0655	83	653.
1 JAN 0100	12	3.	1 JAN 0300	36	387.	1 JAN 0500	60	850.	1 JAN 0700	84	631.
1 JAN 0105	13	3.	1 JAN 0305	37	438.	1 JAN 0505	61	808.	1 JAN 0705	85	608.
1 JAN 0110	14	3.	1 JAN 0310	38	492.	1 JAN 0510	62	766.	1 JAN 0710	86	587.
1 JAN 0115	15	3.	1 JAN 0315	39	555.	1 JAN 0515	63	726.	1 JAN 0715	87	566.
1 JAN 0120	16	3.	1 JAN 0320	40	632.	1 JAN 0520	64	692.	1 JAN 0720	88	545.
1 JAN 0125	17	3.	1 JAN 0325	41	723.	1 JAN 0525	65	665.	1 JAN 0725	89	522.
1 JAN 0130	18	3.	1 JAN 0330	42	827.	1 JAN 0530	66	647.	1 JAN 0730	90	495.
1 JAN 0135	19	3.	1 JAN 0335	43	937.	1 JAN 0535	67	637.	1 JAN 0735	91	464.
1 JAN 0140	20	3.	1 JAN 0340	44	1045.	1 JAN 0540	68	635.	1 JAN 0740	92	430.
1 JAN 0145	21	3.	1 JAN 0345	45	1138.	1 JAN 0545	69	639.	1 JAN 0745	93	393.
1 JAN 0150	22	3.	1 JAN 0350	46	1211.	1 JAN 0550	70	647.	1 JAN 0750	94	355.
1 JAN 0155	23	3.	1 JAN 0355	47	1258.	1 JAN 0555	71	658.	1 JAN 0755	95	319.
1 JAN 0200	24	3.	1 JAN 0400	48	1279.	1 JAN 0600	72	669.	1 JAN 0800	96	285.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
		(CFS)				
+ 1279.	3.92		652.	495.	495.	495.
		(INCHES)	1.244	1.246	1.246	1.246
		(AC-FT)	323.	324.	324.	324.

CUMULATIVE AREA = 4.87 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /THIRD CR/SR28 PT9/FLOW/01JAN1999/5MIN//

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265 KK **********
* T6R * Route Third to WF just below SR 28
****

HYDROGRAPH ROUTING DATA

266 RM MUSKINGUM ROUTING
NSTPS 1 NUMBER OF SUBREACHES
AMSKK 0.01 MUSKINGUM K
X 0.40 MUSKINGUM X

***
***** WARNING ***** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH T6R.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION T6R

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	1 JAN 0205	25	4.	1 JAN 0405	49	1278.	1 JAN 0605	73	680.
1 JAN 0010	2	3.	1 JAN 0210	26	6.	1 JAN 0410	50	1258.	1 JAN 0610	74	691.
1 JAN 0015	3	3.	1 JAN 0215	27	11.	1 JAN 0415	51	1225.	1 JAN 0615	75	700.
1 JAN 0020	4	3.	1 JAN 0220	28	20.	1 JAN 0420	52	1184.	1 JAN 0620	76	707.
1 JAN 0025	5	3.	1 JAN 0225	29	38.	1 JAN 0425	53	1138.	1 JAN 0625	77	713.
1 JAN 0030	6	3.	1 JAN 0230	30	67.	1 JAN 0430	54	1093.	1 JAN 0630	78	715.
1 JAN 0035	7	3.	1 JAN 0235	31	108.	1 JAN 0435	55	1050.	1 JAN 0635	79	713.
1 JAN 0040	8	3.	1 JAN 0240	32	158.	1 JAN 0440	56	1010.	1 JAN 0640	80	706.
1 JAN 0045	9	3.	1 JAN 0245	33	214.	1 JAN 0445	57	972.	1 JAN 0645	81	693.
1 JAN 0050	10	3.	1 JAN 0250	34	272.	1 JAN 0450	58	934.	1 JAN 0650	82	676.
1 JAN 0055	11	3.	1 JAN 0255	35	328.	1 JAN 0455	59	896.	1 JAN 0655	83	655.
1 JAN 0100	12	3.	1 JAN 0300	36	381.	1 JAN 0500	60	855.	1 JAN 0700	84	633.
1 JAN 0105	13	3.	1 JAN 0305	37	432.	1 JAN 0505	61	813.	1 JAN 0705	85	611.
1 JAN 0110	14	3.	1 JAN 0310	38	486.	1 JAN 0510	62	771.	1 JAN 0710	86	589.
1 JAN 0115	15	3.	1 JAN 0315	39	547.	1 JAN 0515	63	731.	1 JAN 0715	87	568.
1 JAN 0120	16	3.	1 JAN 0320	40	622.	1 JAN 0520	64	695.	1 JAN 0720	88	547.
1 JAN 0125	17	3.	1 JAN 0325	41	712.	1 JAN 0525	65	668.	1 JAN 0725	89	525.
1 JAN 0130	18	3.	1 JAN 0330	42	814.	1 JAN 0530	66	648.	1 JAN 0730	90	499.
1 JAN 0135	19	3.	1 JAN 0335	43	924.	1 JAN 0535	67	638.	1 JAN 0735	91	468.
1 JAN 0140	20	3.	1 JAN 0340	44	1032.	1 JAN 0540	68	635.	1 JAN 0740	92	434.
1 JAN 0145	21	3.	1 JAN 0345	45	1128.	1 JAN 0545	69	638.	1 JAN 0745	93	397.
1 JAN 0150	22	3.	1 JAN 0350	46	1204.	1 JAN 0550	70	646.	1 JAN 0750	94	360.

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 1 JAN 0155   23        3.   *   1 JAN 0355   47      1254.   *   1 JAN 0555   71       656.   *   1 JAN 0755   95       323.
 1 JAN 0200   24        3.   *   1 JAN 0400   48      1278.   *   1 JAN 0600   72       668.   *   1 JAN 0800   96       289.
                             *                                   *                                *
*****************************************************************************************************************************

 PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
+   (CFS)       (HR)                  6-HR       24-HR       72-HR      7.92-HR
                              (CFS)
+   1278.       3.92                  651.       494.        494.        494.
                            (INCHES)  1.243      1.245       1.245       1.245
                             (AC-FT)  323.       323.        323.        323.

                        CUMULATIVE AREA =    4.87 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 267 KK     *     WT1    *     WF Third Cr at Village Bl
            *            *
            **************

 271 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE      1JAN99  STARTING DATE
                     JXTIME           5  STARTING TIME

               SUBBASIN RUNOFF DATA

 268 BA          SUBBASIN CHARACTERISTICS
                      TAREA        0.84  SUBBASIN AREA

 269 BF          BASE FLOW CHARACTERISTICS
                      STRTQ        0.00  INITIAL FLOW
                      QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                      RTIOR     1.50000  RECESSION CONSTANT

                 PRECIPITATION DATA

 270 PB               STORM        2.33  BASIN TOTAL PRECIPITATION

 272 PI            INCREMENTAL PRECIPITATION PATTERN
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                     1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                     3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                     1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                     0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                     1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                     0.67      0.67

 276 LS          SCS LOSS RATE
                      STRTL        0.77  INITIAL ABSTRACTION
                     CRVNBR       72.23  CURVE NUMBER
                      RTIMP        0.00  PERCENT IMPERVIOUS AREA

 277 UI          INPUT UNITGRAPH,  21 ORDINATES,  VOLUME = 1.00
                     180.0     503.0     724.0     827.0     776.0     668.0     570.0     476.0     384.0     298.0
                     238.0     194.0     158.0     129.0     106.0      83.0      68.0      51.0      35.0      25.0
                      11.0

                                                                                                  ***
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                                                HYDROGRAPH AT STATION      WT1
*****************************************************************************************************************************

                                                                  *
   DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q           *    DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
 1 JAN 0005     1    0.00    0.00    0.00        0.          *    1 JAN 0405   49    0.01    0.00    0.00        35.
 1 JAN 0010     2    0.02    0.02    0.00        0.          *    1 JAN 0410   50    0.02    0.01    0.01        33.
 1 JAN 0015     3    0.02    0.02    0.00        0.          *    1 JAN 0415   51    0.02    0.01    0.01        33.
 1 JAN 0020     4    0.02    0.02    0.00        0.          *    1 JAN 0420   52    0.02    0.01    0.01        36.
 1 JAN 0025     5    0.02    0.02    0.00        0.          *    1 JAN 0425   53    0.02    0.01    0.01        40.
 1 JAN 0030     6    0.02    0.02    0.00        0.          *    1 JAN 0430   54    0.02    0.01    0.01        43.
 1 JAN 0035     7    0.02    0.02    0.00        0.          *    1 JAN 0435   55    0.02    0.01    0.01        47.
 1 JAN 0040     8    0.02    0.02    0.00        0.          *    1 JAN 0440   56    0.02    0.01    0.01        50.
 1 JAN 0045     9    0.02    0.02    0.00        0.          *    1 JAN 0445   57    0.02    0.01    0.01        53.
 1 JAN 0050    10    0.02    0.02    0.00        0.          *    1 JAN 0450   58    0.02    0.01    0.01        55.
 1 JAN 0055    11    0.02    0.02    0.00        0.          *    1 JAN 0455   59    0.02    0.01    0.01        57.
 1 JAN 0100    12    0.02    0.02    0.00        0.          *    1 JAN 0500   60    0.02    0.01    0.01        59.
 1 JAN 0105    13    0.02    0.02    0.00        0.          *    1 JAN 0505   61    0.02    0.01    0.01        61.
 1 JAN 0110    14    0.01    0.01    0.00        0.          *    1 JAN 0510   62    0.02    0.01    0.01        62.
 1 JAN 0115    15    0.01    0.01    0.00        0.          *    1 JAN 0515   63    0.02    0.01    0.01        61.
 1 JAN 0120    16    0.01    0.01    0.00        0.          *    1 JAN 0520   64    0.02    0.01    0.01        60.
 1 JAN 0125    17    0.02    0.02    0.00        0.          *    1 JAN 0525   65    0.02    0.01    0.01        58.
 1 JAN 0130    18    0.02    0.02    0.00        0.          *    1 JAN 0530   66    0.02    0.01    0.01        57.
 1 JAN 0135    19    0.02    0.02    0.00        0.          *    1 JAN 0535   67    0.02    0.01    0.01        55.
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1 JAN 0140	20	0.09	0.09	0.00	0.	*	1 JAN 0540	68	0.02	0.01	0.01	54.
1 JAN 0145	21	0.09	0.09	0.00	0.	*	1 JAN 0545	69	0.02	0.01	0.01	53.
1 JAN 0150	22	0.09	0.09	0.00	0.	*	1 JAN 0550	70	0.02	0.01	0.01	52.
1 JAN 0155	23	0.16	0.16	0.00	0.	*	1 JAN 0555	71	0.02	0.01	0.01	51.
1 JAN 0200	24	0.16	0.16	0.00	1.	*	1 JAN 0600	72	0.02	0.01	0.01	51.
1 JAN 0205	25	0.16	0.15	0.02	5.	*	1 JAN 0605	73	0.02	0.01	0.01	50.
1 JAN 0210	26	0.09	0.08	0.01	13.	*	1 JAN 0610	74	0.00	0.00	0.00	49.
1 JAN 0215	27	0.09	0.08	0.02	24.	*	1 JAN 0615	75	0.00	0.00	0.00	45.
1 JAN 0220	28	0.09	0.07	0.02	38.	*	1 JAN 0620	76	0.00	0.00	0.00	39.
1 JAN 0225	29	0.05	0.04	0.01	51.	*	1 JAN 0625	77	0.00	0.00	0.00	33.
1 JAN 0230	30	0.05	0.04	0.01	62.	*	1 JAN 0630	78	0.00	0.00	0.00	27.
1 JAN 0235	31	0.05	0.04	0.02	70.	*	1 JAN 0635	79	0.00	0.00	0.00	21.
1 JAN 0240	32	0.03	0.02	0.01	75.	*	1 JAN 0640	80	0.00	0.00	0.00	17.
1 JAN 0245	33	0.03	0.02	0.01	77.	*	1 JAN 0645	81	0.00	0.00	0.00	13.
1 JAN 0250	34	0.03	0.02	0.01	77.	*	1 JAN 0650	82	0.00	0.00	0.00	10.
1 JAN 0255	35	0.03	0.02	0.01	75.	*	1 JAN 0655	83	0.00	0.00	0.00	8.
1 JAN 0300	36	0.03	0.02	0.01	74.	*	1 JAN 0700	84	0.00	0.00	0.00	6.
1 JAN 0305	37	0.03	0.02	0.01	73.	*	1 JAN 0705	85	0.00	0.00	0.00	5.
1 JAN 0310	38	0.03	0.02	0.01	72.	*	1 JAN 0710	86	0.00	0.00	0.00	4.
1 JAN 0315	39	0.03	0.02	0.01	72.	*	1 JAN 0715	87	0.00	0.00	0.00	4.
1 JAN 0320	40	0.03	0.02	0.01	72.	*	1 JAN 0720	88	0.00	0.00	0.00	4.
1 JAN 0325	41	0.02	0.01	0.01	71.	*	1 JAN 0725	89	0.00	0.00	0.00	3.
1 JAN 0330	42	0.02	0.01	0.01	69.	*	1 JAN 0730	90	0.00	0.00	0.00	3.
1 JAN 0335	43	0.02	0.01	0.01	65.	*	1 JAN 0735	91	0.00	0.00	0.00	3.
1 JAN 0340	44	0.01	0.00	0.00	60.	*	1 JAN 0740	92	0.00	0.00	0.00	3.
1 JAN 0345	45	0.01	0.00	0.00	55.	*	1 JAN 0745	93	0.00	0.00	0.00	3.
1 JAN 0350	46	0.01	0.00	0.00	49.	*	1 JAN 0750	94	0.00	0.00	0.00	3.
1 JAN 0355	47	0.01	0.00	0.00	44.	*	1 JAN 0755	95	0.00	0.00	0.00	3.
1 JAN 0400	48	0.01	0.00	0.00	39.	*	1 JAN 0800	96	0.00	0.00	0.00	3.

****

TOTAL RAINFALL = 2.33, TOTAL LOSS = 1.88, TOTAL EXCESS = 0.45

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 77.	2.67		41.	31.	31.	31.
		(INCHES)	0.454	0.454	0.454	0.454
		(AC-FT)	20.	20.	20.	20.

CUMULATIVE AREA = 0.84 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /WF THIRD CR/VILLAGE BL PT6/FLOW/01JAN1999/5MIN//

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              *            *
281 KK        *     WT1R   *     Route WF Third to SR 28 at 3 fps
              *            *
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HYDROGRAPH ROUTING DATA

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282 RM          MUSKINGUM ROUTING
                     NSTPS        4 NUMBER OF SUBREACHES
                     AMSKK     0.32 MUSKINGUM K
                         X     0.40 MUSKINGUM X
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HYDROGRAPH AT STATION WT1R

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DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	*	1 JAN 0205	25	0.	*	1 JAN 0405	49	54.	*	1 JAN 0605	73	53.
1 JAN 0010	2	0.	*	1 JAN 0210	26	0.	*	1 JAN 0410	50	48.	*	1 JAN 0610	74	52.
1 JAN 0015	3	0.	*	1 JAN 0215	27	0.	*	1 JAN 0415	51	43.	*	1 JAN 0615	75	51.
1 JAN 0020	4	0.	*	1 JAN 0220	28	2.	*	1 JAN 0420	52	38.	*	1 JAN 0620	76	50.
1 JAN 0025	5	0.	*	1 JAN 0225	29	7.	*	1 JAN 0425	53	35.	*	1 JAN 0625	77	50.
1 JAN 0030	6	0.	*	1 JAN 0230	30	16.	*	1 JAN 0430	54	33.	*	1 JAN 0630	78	47.
1 JAN 0035	7	0.	*	1 JAN 0235	31	27.	*	1 JAN 0435	55	34.	*	1 JAN 0635	79	43.
1 JAN 0040	8	0.	*	1 JAN 0240	32	40.	*	1 JAN 0440	56	37.	*	1 JAN 0640	80	38.
1 JAN 0045	9	0.	*	1 JAN 0245	33	52.	*	1 JAN 0445	57	40.	*	1 JAN 0645	81	32.
1 JAN 0050	10	0.	*	1 JAN 0250	34	62.	*	1 JAN 0450	58	44.	*	1 JAN 0650	82	26.
1 JAN 0055	11	0.	*	1 JAN 0255	35	70.	*	1 JAN 0455	59	47.	*	1 JAN 0655	83	21.
1 JAN 0100	12	0.	*	1 JAN 0300	36	75.	*	1 JAN 0500	60	50.	*	1 JAN 0700	84	17.
1 JAN 0105	13	0.	*	1 JAN 0305	37	77.	*	1 JAN 0505	61	53.	*	1 JAN 0705	85	13.
1 JAN 0110	14	0.	*	1 JAN 0310	38	76.	*	1 JAN 0510	62	55.	*	1 JAN 0710	86	10.
1 JAN 0115	15	0.	*	1 JAN 0315	39	75.	*	1 JAN 0515	63	57.	*	1 JAN 0715	87	8.
1 JAN 0120	16	0.	*	1 JAN 0320	40	74.	*	1 JAN 0520	64	59.	*	1 JAN 0720	88	6.
1 JAN 0125	17	0.	*	1 JAN 0325	41	73.	*	1 JAN 0525	65	61.	*	1 JAN 0725	89	5.
1 JAN 0130	18	0.	*	1 JAN 0330	42	72.	*	1 JAN 0530	66	61.	*	1 JAN 0730	90	4.
1 JAN 0135	19	0.	*	1 JAN 0335	43	72.	*	1 JAN 0535	67	61.	*	1 JAN 0735	91	4.
1 JAN 0140	20	0.	*	1 JAN 0340	44	71.	*	1 JAN 0540	68	60.	*	1 JAN 0740	92	4.
1 JAN 0145	21	0.	*	1 JAN 0345	45	70.	*	1 JAN 0545	69	58.	*	1 JAN 0745	93	3.

1 JAN 0150	22	0.	*	1 JAN 0350	46	68.	*	1 JAN 0550	70	56.	*	1 JAN 0750	94	3.
1 JAN 0155	23	0.	*	1 JAN 0355	47	64.	*	1 JAN 0555	71	55.	*	1 JAN 0755	95	3.
1 JAN 0200	24	0.	*	1 JAN 0400	48	59.	*	1 JAN 0600	72	54.	*	1 JAN 0800	96	3.

****

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+		(CFS)				
+ 77.	3.00		41.	31.	31.	31.
		(INCHES)	0.452	0.452	0.452	0.452
		(AC-FT)	20.	20.	20.	20.

CUMULATIVE AREA = 0.84 SQ MI

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            **************
            *            *
283 KK      *     WT2    *     WF Third Cr at SR 28
            *            *
            **************

287 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           5  STARTING TIME

              SUBBASIN RUNOFF DATA

284 BA          SUBBASIN CHARACTERISTICS
                     TAREA        0.15  SUBBASIN AREA

285 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        0.00  INITIAL FLOW
                     QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR     1.50000  RECESSION CONSTANT

                PRECIPITATION DATA

286 PB               STORM        1.21  BASIN TOTAL PRECIPITATION

288 PI            INCREMENTAL PRECIPITATION PATTERN
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                    1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                    3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                    1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                    0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                    1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                    0.67      0.67

292 LS          SCS LOSS RATE
                     STRTL        0.39  INITIAL ABSTRACTION
                    CRVNBR       83.73  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

293 UI          INPUT UNITGRAPH,   7 ORDINATES,  VOLUME = 1.00
                    219.0     387.0     262.0     144.0      79.0      45.0      21.0
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HYDROGRAPH AT STATION WT2

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	*	1	JAN	0405	49	0.00	0.00	0.00	2.
1	JAN	0010	2	0.01	0.01	0.00	0.	*	1	JAN	0410	50	0.01	0.01	0.00	3.
1	JAN	0015	3	0.01	0.01	0.00	0.	*	1	JAN	0415	51	0.01	0.01	0.01	4.
1	JAN	0020	4	0.01	0.01	0.00	0.	*	1	JAN	0420	52	0.01	0.01	0.01	5.
1	JAN	0025	5	0.01	0.01	0.00	0.	*	1	JAN	0425	53	0.01	0.01	0.01	5.
1	JAN	0030	6	0.01	0.01	0.00	0.	*	1	JAN	0430	54	0.01	0.01	0.01	6.
1	JAN	0035	7	0.01	0.01	0.00	0.	*	1	JAN	0435	55	0.01	0.01	0.01	6.
1	JAN	0040	8	0.01	0.01	0.00	0.	*	1	JAN	0440	56	0.01	0.01	0.01	6.
1	JAN	0045	9	0.01	0.01	0.00	0.	*	1	JAN	0445	57	0.01	0.01	0.01	6.
1	JAN	0050	10	0.01	0.01	0.00	0.	*	1	JAN	0450	58	0.01	0.01	0.01	6.
1	JAN	0055	11	0.01	0.01	0.00	0.	*	1	JAN	0455	59	0.01	0.01	0.01	6.
1	JAN	0100	12	0.01	0.01	0.00	0.	*	1	JAN	0500	60	0.01	0.01	0.01	6.
1	JAN	0105	13	0.01	0.01	0.00	0.	*	1	JAN	0505	61	0.01	0.01	0.01	6.
1	JAN	0110	14	0.00	0.00	0.00	0.	*	1	JAN	0510	62	0.01	0.00	0.00	6.
1	JAN	0115	15	0.00	0.00	0.00	0.	*	1	JAN	0515	63	0.01	0.00	0.00	5.
1	JAN	0120	16	0.00	0.00	0.00	0.	*	1	JAN	0520	64	0.01	0.00	0.00	5.
1	JAN	0125	17	0.01	0.01	0.00	0.	*	1	JAN	0525	65	0.01	0.00	0.00	5.
1	JAN	0130	18	0.01	0.01	0.00	0.	*	1	JAN	0530	66	0.01	0.00	0.00	5.
1	JAN	0135	19	0.01	0.01	0.00	0.	*	1	JAN	0535	67	0.01	0.00	0.00	5.
1	JAN	0140	20	0.04	0.04	0.00	0.	*	1	JAN	0540	68	0.01	0.00	0.00	5.

1 JAN 0145	21	0.04	0.04	0.00	0.	*	1 JAN 0545	69	0.01	0.00	0.00	5.
1 JAN 0150	22	0.04	0.04	0.00	0.	*	1 JAN 0550	70	0.01	0.00	0.00	5.
1 JAN 0155	23	0.08	0.08	0.00	0.	*	1 JAN 0555	71	0.01	0.00	0.00	5.
1 JAN 0200	24	0.08	0.08	0.00	1.	*	1 JAN 0600	72	0.01	0.00	0.00	5.
1 JAN 0205	25	0.08	0.08	0.01	3.	*	1 JAN 0605	73	0.01	0.00	0.00	5.
1 JAN 0210	26	0.05	0.04	0.01	6.	*	1 JAN 0610	74	0.00	0.00	0.00	4.
1 JAN 0215	27	0.05	0.04	0.01	8.	*	1 JAN 0615	75	0.00	0.00	0.00	2.
1 JAN 0220	28	0.05	0.04	0.01	10.	*	1 JAN 0620	76	0.00	0.00	0.00	1.
1 JAN 0225	29	0.03	0.02	0.01	10.	*	1 JAN 0625	77	0.00	0.00	0.00	1.
1 JAN 0230	30	0.03	0.02	0.01	10.	*	1 JAN 0630	78	0.00	0.00	0.00	1.
1 JAN 0235	31	0.03	0.02	0.01	10.	*	1 JAN 0635	79	0.00	0.00	0.00	0.
1 JAN 0240	32	0.02	0.01	0.00	9.	*	1 JAN 0640	80	0.00	0.00	0.00	0.
1 JAN 0245	33	0.02	0.01	0.01	8.	*	1 JAN 0645	81	0.00	0.00	0.00	0.
1 JAN 0250	34	0.02	0.01	0.01	7.	*	1 JAN 0650	82	0.00	0.00	0.00	0.
1 JAN 0255	35	0.02	0.01	0.01	6.	*	1 JAN 0655	83	0.00	0.00	0.00	0.
1 JAN 0300	36	0.02	0.01	0.01	6.	*	1 JAN 0700	84	0.00	0.00	0.00	0.
1 JAN 0305	37	0.02	0.01	0.01	6.	*	1 JAN 0705	85	0.00	0.00	0.00	0.
1 JAN 0310	38	0.02	0.01	0.01	6.	*	1 JAN 0710	86	0.00	0.00	0.00	0.
1 JAN 0315	39	0.02	0.01	0.01	7.	*	1 JAN 0715	87	0.00	0.00	0.00	0.
1 JAN 0320	40	0.02	0.01	0.01	7.	*	1 JAN 0720	88	0.00	0.00	0.00	0.
1 JAN 0325	41	0.01	0.00	0.00	6.	*	1 JAN 0725	89	0.00	0.00	0.00	0.
1 JAN 0330	42	0.01	0.00	0.00	5.	*	1 JAN 0730	90	0.00	0.00	0.00	0.
1 JAN 0335	43	0.01	0.00	0.00	4.	*	1 JAN 0735	91	0.00	0.00	0.00	0.
1 JAN 0340	44	0.00	0.00	0.00	4.	*	1 JAN 0740	92	0.00	0.00	0.00	0.
1 JAN 0345	45	0.00	0.00	0.00	3.	*	1 JAN 0745	93	0.00	0.00	0.00	0.
1 JAN 0350	46	0.00	0.00	0.00	2.	*	1 JAN 0750	94	0.00	0.00	0.00	0.
1 JAN 0355	47	0.00	0.00	0.00	2.	*	1 JAN 0755	95	0.00	0.00	0.00	0.
1 JAN 0400	48	0.00	0.00	0.00	2.	*	1 JAN 0800	96	0.00	0.00	0.00	0.

****

TOTAL RAINFALL = 1.21, TOTAL LOSS = 0.97, TOTAL EXCESS = 0.24

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 10.	2.33	(CFS)	4.	3.	3.	3.
		(INCHES)	0.249	0.249	0.249	0.249
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = 0.15 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /WF THIRD CR/SR28 LOCAL/FLOW/01JAN1999/5MIN//

*** ***

295 KK ********** * WT2C * Combine WF Third at SR 28, Pt 7 **********

296 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION WT2C
SUM OF 2 HYDROGRAPHS

****

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	3.	1 JAN 0405	49	56.	1 JAN 0605	73	57.
1 JAN 0010	2	0.	1 JAN 0210	26	6.	1 JAN 0410	50	51.	1 JAN 0610	74	55.
1 JAN 0015	3	0.	1 JAN 0215	27	8.	1 JAN 0415	51	47.	1 JAN 0615	75	53.
1 JAN 0020	4	0.	1 JAN 0220	28	12.	1 JAN 0420	52	43.	1 JAN 0620	76	52.
1 JAN 0025	5	0.	1 JAN 0225	29	18.	1 JAN 0425	53	40.	1 JAN 0625	77	50.
1 JAN 0030	6	0.	1 JAN 0230	30	26.	1 JAN 0430	54	39.	1 JAN 0630	78	48.
1 JAN 0035	7	0.	1 JAN 0235	31	37.	1 JAN 0435	55	40.	1 JAN 0635	79	44.
1 JAN 0040	8	0.	1 JAN 0240	32	49.	1 JAN 0440	56	43.	1 JAN 0640	80	38.
1 JAN 0045	9	0.	1 JAN 0245	33	60.	1 JAN 0445	57	46.	1 JAN 0645	81	32.
1 JAN 0050	10	0.	1 JAN 0250	34	69.	1 JAN 0450	58	50.	1 JAN 0650	82	26.
1 JAN 0055	11	0.	1 JAN 0255	35	77.	1 JAN 0455	59	54.	1 JAN 0655	83	21.
1 JAN 0100	12	0.	1 JAN 0300	36	81.	1 JAN 0500	60	57.	1 JAN 0700	84	17.
1 JAN 0105	13	0.	1 JAN 0305	37	83.	1 JAN 0505	61	59.	1 JAN 0705	85	14.
1 JAN 0110	14	0.	1 JAN 0310	38	83.	1 JAN 0510	62	62.	1 JAN 0710	86	11.
1 JAN 0115	15	0.	1 JAN 0315	39	82.	1 JAN 0515	63	63.	1 JAN 0715	87	8.
1 JAN 0120	16	0.	1 JAN 0320	40	81.	1 JAN 0520	64	64.	1 JAN 0720	88	7.
1 JAN 0125	17	0.	1 JAN 0325	41	79.	1 JAN 0525	65	65.	1 JAN 0725	89	5.
1 JAN 0130	18	0.	1 JAN 0330	42	77.	1 JAN 0530	66	66.	1 JAN 0730	90	4.
1 JAN 0135	19	0.	1 JAN 0335	43	76.	1 JAN 0535	67	65.	1 JAN 0735	91	4.
1 JAN 0140	20	0.	1 JAN 0340	44	75.	1 JAN 0540	68	64.	1 JAN 0740	92	4.
1 JAN 0145	21	0.	1 JAN 0345	45	73.	1 JAN 0545	69	63.	1 JAN 0745	93	4.
1 JAN 0150	22	0.	1 JAN 0350	46	70.	1 JAN 0550	70	61.	1 JAN 0750	94	4.
1 JAN 0155	23	0.	1 JAN 0355	47	66.	1 JAN 0555	71	59.	1 JAN 0755	95	4.
1 JAN 0200	24	1.	1 JAN 0400	48	61.	1 JAN 0600	72	58.	1 JAN 0800	96	3.

****

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 83.	3.00		45.	34.	34.	34.
		(INCHES)	0.422	0.422	0.422	0.422
		(AC-FT)	22.	22.	22.	22.

CUMULATIVE AREA = 0.99 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /WF THIRD CR/SR28 PT7/FLOW/01JAN1999/5MIN//

*** ***

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          **************
          *            *
298 KK    *     T2R    *     Route main to WF just below SR 28
          *            *
          **************
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HYDROGRAPH ROUTING DATA

```
299 RM        MUSKINGUM ROUTING
                   NSTPS         1 NUMBER OF SUBREACHES
                   AMSKK      0.01 MUSKINGUM K
                       X      0.40 MUSKINGUM X
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***** WARNING ***** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH T2R.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

****

HYDROGRAPH AT STATION T2R

****

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	3.	1 JAN 0405	49	56.	1 JAN 0605	73	57.
1 JAN 0010	2	0.	1 JAN 0210	26	6.	1 JAN 0410	50	51.	1 JAN 0610	74	56.
1 JAN 0015	3	0.	1 JAN 0215	27	8.	1 JAN 0415	51	47.	1 JAN 0615	75	54.
1 JAN 0020	4	0.	1 JAN 0220	28	11.	1 JAN 0420	52	44.	1 JAN 0620	76	52.
1 JAN 0025	5	0.	1 JAN 0225	29	17.	1 JAN 0425	53	41.	1 JAN 0625	77	50.
1 JAN 0030	6	0.	1 JAN 0230	30	24.	1 JAN 0430	54	39.	1 JAN 0630	78	48.
1 JAN 0035	7	0.	1 JAN 0235	31	35.	1 JAN 0435	55	40.	1 JAN 0635	79	44.
1 JAN 0040	8	0.	1 JAN 0240	32	48.	1 JAN 0440	56	42.	1 JAN 0640	80	39.
1 JAN 0045	9	0.	1 JAN 0245	33	59.	1 JAN 0445	57	46.	1 JAN 0645	81	33.
1 JAN 0050	10	0.	1 JAN 0250	34	68.	1 JAN 0450	58	50.	1 JAN 0650	82	27.
1 JAN 0055	11	0.	1 JAN 0255	35	76.	1 JAN 0455	59	53.	1 JAN 0655	83	22.
1 JAN 0100	12	0.	1 JAN 0300	36	81.	1 JAN 0500	60	56.	1 JAN 0700	84	18.
1 JAN 0105	13	0.	1 JAN 0305	37	83.	1 JAN 0505	61	59.	1 JAN 0705	85	14.
1 JAN 0110	14	0.	1 JAN 0310	38	83.	1 JAN 0510	62	61.	1 JAN 0710	86	11.
1 JAN 0115	15	0.	1 JAN 0315	39	82.	1 JAN 0515	63	63.	1 JAN 0715	87	9.
1 JAN 0120	16	0.	1 JAN 0320	40	81.	1 JAN 0520	64	64.	1 JAN 0720	88	7.
1 JAN 0125	17	0.	1 JAN 0325	41	79.	1 JAN 0525	65	65.	1 JAN 0725	89	5.
1 JAN 0130	18	0.	1 JAN 0330	42	77.	1 JAN 0530	66	66.	1 JAN 0730	90	4.
1 JAN 0135	19	0.	1 JAN 0335	43	76.	1 JAN 0535	67	66.	1 JAN 0735	91	4.
1 JAN 0140	20	0.	1 JAN 0340	44	75.	1 JAN 0540	68	64.	1 JAN 0740	92	4.
1 JAN 0145	21	0.	1 JAN 0345	45	74.	1 JAN 0545	69	63.	1 JAN 0745	93	4.
1 JAN 0150	22	0.	1 JAN 0350	46	71.	1 JAN 0550	70	61.	1 JAN 0750	94	4.
1 JAN 0155	23	0.	1 JAN 0355	47	67.	1 JAN 0555	71	60.	1 JAN 0755	95	4.
1 JAN 0200	24	0.	1 JAN 0400	48	62.	1 JAN 0600	72	58.	1 JAN 0800	96	3.

****

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 83.	3.08		45.	34.	34.	34.
		(INCHES)	0.422	0.422	0.422	0.422
		(AC-FT)	22.	22.	22.	22.

CUMULATIVE AREA = 0.99 SQ MI

*** ***

```
          **************
          *            *
300 KK    *    T2C2    *     Combine WF and main just below SR 28
          *            *
          **************
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```
301 HC        HYDROGRAPH COMBINATION
                   ICOMP           2  NUMBER OF HYDROGRAPHS TO COMBINE
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HYDROGRAPH AT STATION T2C2
SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	1 JAN 0205	25	6.	1 JAN 0405	49	1334.	1 JAN 0605	73	737.
1 JAN 0010	2	3.	1 JAN 0210	26	12.	1 JAN 0410	50	1309.	1 JAN 0610	74	746.
1 JAN 0015	3	3.	1 JAN 0215	27	19.	1 JAN 0415	51	1272.	1 JAN 0615	75	753.
1 JAN 0020	4	3.	1 JAN 0220	28	31.	1 JAN 0420	52	1227.	1 JAN 0620	76	759.
1 JAN 0025	5	3.	1 JAN 0225	29	55.	1 JAN 0425	53	1179.	1 JAN 0625	77	763.
1 JAN 0030	6	3.	1 JAN 0230	30	91.	1 JAN 0430	54	1132.	1 JAN 0630	78	763.
1 JAN 0035	7	3.	1 JAN 0235	31	143.	1 JAN 0435	55	1090.	1 JAN 0635	79	758.
1 JAN 0040	8	3.	1 JAN 0240	32	205.	1 JAN 0440	56	1052.	1 JAN 0640	80	745.
1 JAN 0045	9	3.	1 JAN 0245	33	272.	1 JAN 0445	57	1018.	1 JAN 0645	81	726.
1 JAN 0050	10	3.	1 JAN 0250	34	340.	1 JAN 0450	58	984.	1 JAN 0650	82	703.
1 JAN 0055	11	3.	1 JAN 0255	35	404.	1 JAN 0455	59	949.	1 JAN 0655	83	677.
1 JAN 0100	12	3.	1 JAN 0300	36	462.	1 JAN 0500	60	911.	1 JAN 0700	84	651.
1 JAN 0105	13	3.	1 JAN 0305	37	515.	1 JAN 0505	61	872.	1 JAN 0705	85	625.
1 JAN 0110	14	3.	1 JAN 0310	38	568.	1 JAN 0510	62	832.	1 JAN 0710	86	600.
1 JAN 0115	15	3.	1 JAN 0315	39	629.	1 JAN 0515	63	793.	1 JAN 0715	87	577.
1 JAN 0120	16	3.	1 JAN 0320	40	702.	1 JAN 0520	64	760.	1 JAN 0720	88	554.
1 JAN 0125	17	3.	1 JAN 0325	41	791.	1 JAN 0525	65	733.	1 JAN 0725	89	530.
1 JAN 0130	18	3.	1 JAN 0330	42	891.	1 JAN 0530	66	714.	1 JAN 0730	90	503.
1 JAN 0135	19	3.	1 JAN 0335	43	1000.	1 JAN 0535	67	703.	1 JAN 0735	91	472.
1 JAN 0140	20	3.	1 JAN 0340	44	1107.	1 JAN 0540	68	699.	1 JAN 0740	92	438.
1 JAN 0145	21	3.	1 JAN 0345	45	1202.	1 JAN 0545	69	701.	1 JAN 0745	93	401.
1 JAN 0150	22	3.	1 JAN 0350	46	1274.	1 JAN 0550	70	707.	1 JAN 0750	94	364.
1 JAN 0155	23	3.	1 JAN 0355	47	1321.	1 JAN 0555	71	716.	1 JAN 0755	95	327.
1 JAN 0200	24	4.	1 JAN 0400	48	1340.	1 JAN 0600	72	726.	1 JAN 0800	96	292.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
1340.	3.92	(CFS)	696.	528.	528.	528.
		(INCHES)	1.104	1.106	1.106	1.106
		(AC-FT)	345.	346.	346.	346.

CUMULATIVE AREA = 5.86 SQ MI

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302 KK **WT6R2** Route WF Third to main at 3 fps

HYDROGRAPH ROUTING DATA

303 RM MUSKINGUM ROUTING
NSTPS 3 NUMBER OF SUBREACHES
AMSKK 0.30 MUSKINGUM K
X 0.40 MUSKINGUM X

***

HYDROGRAPH AT STATION WT6R2

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	1 JAN 0205	25	3.	1 JAN 0405	49	1225.	1 JAN 0605	73	705.
1 JAN 0010	2	3.	1 JAN 0210	26	3.	1 JAN 0410	50	1285.	1 JAN 0610	74	712.
1 JAN 0015	3	3.	1 JAN 0215	27	3.	1 JAN 0415	51	1320.	1 JAN 0615	75	721.
1 JAN 0020	4	3.	1 JAN 0220	28	5.	1 JAN 0420	52	1330.	1 JAN 0620	76	731.
1 JAN 0025	5	3.	1 JAN 0225	29	9.	1 JAN 0425	53	1318.	1 JAN 0625	77	740.
1 JAN 0030	6	3.	1 JAN 0230	30	15.	1 JAN 0430	54	1290.	1 JAN 0630	78	748.
1 JAN 0035	7	3.	1 JAN 0235	31	25.	1 JAN 0435	55	1251.	1 JAN 0635	79	755.
1 JAN 0040	8	3.	1 JAN 0240	32	44.	1 JAN 0440	56	1207.	1 JAN 0640	80	760.
1 JAN 0045	9	3.	1 JAN 0245	33	73.	1 JAN 0445	57	1160.	1 JAN 0645	81	762.
1 JAN 0050	10	3.	1 JAN 0250	34	116.	1 JAN 0450	58	1116.	1 JAN 0650	82	759.
1 JAN 0055	11	3.	1 JAN 0255	35	171.	1 JAN 0455	59	1076.	1 JAN 0655	83	750.
1 JAN 0100	12	3.	1 JAN 0300	36	234.	1 JAN 0500	60	1040.	1 JAN 0700	84	735.
1 JAN 0105	13	3.	1 JAN 0305	37	300.	1 JAN 0505	61	1005.	1 JAN 0705	85	715.
1 JAN 0110	14	3.	1 JAN 0310	38	365.	1 JAN 0510	62	970.	1 JAN 0710	86	692.
1 JAN 0115	15	3.	1 JAN 0315	39	426.	1 JAN 0515	63	933.	1 JAN 0715	87	666.
1 JAN 0120	16	3.	1 JAN 0320	40	482.	1 JAN 0520	64	895.	1 JAN 0720	88	641.
1 JAN 0125	17	3.	1 JAN 0325	41	536.	1 JAN 0525	65	856.	1 JAN 0725	89	615.

1 JAN 0130	18	3.	*	1 JAN 0330	42	594.	*	1 JAN 0530	66	817.	*	1 JAN 0730	90	591.
1 JAN 0135	19	3.	*	1 JAN 0335	43	662.	*	1 JAN 0535	67	781.	*	1 JAN 0735	91	568.
1 JAN 0140	20	3.	*	1 JAN 0340	44	742.	*	1 JAN 0540	68	751.	*	1 JAN 0740	92	544.
1 JAN 0145	21	3.	*	1 JAN 0345	45	835.	*	1 JAN 0545	69	728.	*	1 JAN 0745	93	518.
1 JAN 0150	22	3.	*	1 JAN 0350	46	937.	*	1 JAN 0550	70	712.	*	1 JAN 0750	94	490.
1 JAN 0155	23	3.	*	1 JAN 0355	47	1043.	*	1 JAN 0555	71	704.	*	1 JAN 0755	95	458.
1 JAN 0200	24	3.	*	1 JAN 0400	48	1142.	*	1 JAN 0600	72	702.	*	1 JAN 0800	96	423.
			*				*				*			

****

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 1330.	4.25	(CFS)	678.	515.	515.	515.
		(INCHES)	1.076	1.078	1.078	1.078
		(AC-FT)	336.	337.	337.	337.

CUMULATIVE AREA = 5.86 SQ MI

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              **************
              *            *
304 KK        *     T7     *     Mouth Third
              *            *
              **************

308 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           5  STARTING TIME

              SUBBASIN RUNOFF DATA

305 BA          SUBBASIN CHARACTERISTICS
                     TAREA        0.16  SUBBASIN AREA

306 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        0.00  INITIAL FLOW
                     QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR     1.50000  RECESSION CONSTANT

                PRECIPITATION DATA

307 PB               STORM        1.07  BASIN TOTAL PRECIPITATION

309 PI            INCREMENTAL PRECIPITATION PATTERN
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                    1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                    3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                    1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                    0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                    1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                    0.67      0.67

313 LS          SCS LOSS RATE
                     STRTL        0.41  INITIAL ABSTRACTION
                    CRVNBR       83.13  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

314 UI          INPUT UNITGRAPH,   9 ORDINATES,  VOLUME = 1.00
                   160.0     338.0     282.0     190.0     113.0      70.0      45.0      27.0      13.0
                                                          ***
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HYDROGRAPH AT STATION T7

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0005	1	0.00	0.00	0.00	0.	*	1 JAN 0405	49	0.00	0.00	0.00	2.
1 JAN 0010	2	0.01	0.01	0.00	0.	*	1 JAN 0410	50	0.01	0.01	0.00	2.
1 JAN 0015	3	0.01	0.01	0.00	0.	*	1 JAN 0415	51	0.01	0.01	0.00	3.
1 JAN 0020	4	0.01	0.01	0.00	0.	*	1 JAN 0420	52	0.01	0.01	0.00	3.
1 JAN 0025	5	0.01	0.01	0.00	0.	*	1 JAN 0425	53	0.01	0.01	0.00	4.
1 JAN 0030	6	0.01	0.01	0.00	0.	*	1 JAN 0430	54	0.01	0.01	0.00	4.
1 JAN 0035	7	0.01	0.01	0.00	0.	*	1 JAN 0435	55	0.01	0.01	0.00	4.
1 JAN 0040	8	0.01	0.01	0.00	0.	*	1 JAN 0440	56	0.01	0.01	0.00	5.
1 JAN 0045	9	0.01	0.01	0.00	0.	*	1 JAN 0445	57	0.01	0.01	0.00	5.
1 JAN 0050	10	0.01	0.01	0.00	0.	*	1 JAN 0450	58	0.01	0.01	0.00	5.
1 JAN 0055	11	0.01	0.01	0.00	0.	*	1 JAN 0455	59	0.01	0.01	0.00	5.
1 JAN 0100	12	0.01	0.01	0.00	0.	*	1 JAN 0500	60	0.01	0.01	0.00	5.
1 JAN 0105	13	0.01	0.01	0.00	0.	*	1 JAN 0505	61	0.01	0.01	0.00	5.
1 JAN 0110	14	0.00	0.00	0.00	0.	*	1 JAN 0510	62	0.01	0.00	0.00	5.
1 JAN 0115	15	0.00	0.00	0.00	0.	*	1 JAN 0515	63	0.01	0.00	0.00	4.
1 JAN 0120	16	0.00	0.00	0.00	0.	*	1 JAN 0520	64	0.01	0.00	0.00	4.

1 JAN 0125	17	0.01	0.01	0.00	0.	*	1 JAN 0525	65	0.01	0.00	0.00	4.
1 JAN 0130	18	0.01	0.01	0.00	0.	*	1 JAN 0530	66	0.01	0.00	0.00	4.
1 JAN 0135	19	0.01	0.01	0.00	0.	*	1 JAN 0535	67	0.01	0.00	0.00	4.
1 JAN 0140	20	0.04	0.04	0.00	0.	*	1 JAN 0540	68	0.01	0.00	0.00	4.
1 JAN 0145	21	0.04	0.04	0.00	0.	*	1 JAN 0545	69	0.01	0.00	0.00	4.
1 JAN 0150	22	0.04	0.04	0.00	0.	*	1 JAN 0550	70	0.01	0.00	0.00	4.
1 JAN 0155	23	0.07	0.07	0.00	0.	*	1 JAN 0555	71	0.01	0.00	0.00	4.
1 JAN 0200	24	0.07	0.07	0.00	0.	*	1 JAN 0600	72	0.01	0.00	0.00	4.
1 JAN 0205	25	0.07	0.07	0.00	0.	*	1 JAN 0605	73	0.01	0.00	0.00	4.
1 JAN 0210	26	0.04	0.04	0.00	2.	*	1 JAN 0610	74	0.00	0.00	0.00	3.
1 JAN 0215	27	0.04	0.04	0.01	3.	*	1 JAN 0615	75	0.00	0.00	0.00	2.
1 JAN 0220	28	0.04	0.04	0.01	4.	*	1 JAN 0620	76	0.00	0.00	0.00	1.
1 JAN 0225	29	0.02	0.02	0.00	6.	*	1 JAN 0625	77	0.00	0.00	0.00	1.
1 JAN 0230	30	0.02	0.02	0.01	6.	*	1 JAN 0630	78	0.00	0.00	0.00	0.
1 JAN 0235	31	0.02	0.02	0.01	6.	*	1 JAN 0635	79	0.00	0.00	0.00	0.
1 JAN 0240	32	0.01	0.01	0.00	6.	*	1 JAN 0640	80	0.00	0.00	0.00	0.
1 JAN 0245	33	0.01	0.01	0.00	6.	*	1 JAN 0645	81	0.00	0.00	0.00	0.
1 JAN 0250	34	0.01	0.01	0.00	5.	*	1 JAN 0650	82	0.00	0.00	0.00	0.
1 JAN 0255	35	0.01	0.01	0.00	5.	*	1 JAN 0655	83	0.00	0.00	0.00	0.
1 JAN 0300	36	0.01	0.01	0.00	5.	*	1 JAN 0700	84	0.00	0.00	0.00	0.
1 JAN 0305	37	0.01	0.01	0.00	5.	*	1 JAN 0705	85	0.00	0.00	0.00	0.
1 JAN 0310	38	0.01	0.01	0.00	5.	*	1 JAN 0710	86	0.00	0.00	0.00	0.
1 JAN 0315	39	0.01	0.01	0.00	5.	*	1 JAN 0715	87	0.00	0.00	0.00	0.
1 JAN 0320	40	0.01	0.01	0.00	5.	*	1 JAN 0720	88	0.00	0.00	0.00	0.
1 JAN 0325	41	0.01	0.00	0.00	5.	*	1 JAN 0725	89	0.00	0.00	0.00	0.
1 JAN 0330	42	0.01	0.00	0.00	4.	*	1 JAN 0730	90	0.00	0.00	0.00	0.
1 JAN 0335	43	0.01	0.00	0.00	4.	*	1 JAN 0735	91	0.00	0.00	0.00	0.
1 JAN 0340	44	0.00	0.00	0.00	3.	*	1 JAN 0740	92	0.00	0.00	0.00	0.
1 JAN 0345	45	0.00	0.00	0.00	3.	*	1 JAN 0745	93	0.00	0.00	0.00	0.
1 JAN 0350	46	0.00	0.00	0.00	2.	*	1 JAN 0750	94	0.00	0.00	0.00	0.
1 JAN 0355	47	0.00	0.00	0.00	2.	*	1 JAN 0755	95	0.00	0.00	0.00	0.
1 JAN 0400	48	0.00	0.00	0.00	2.	*	1 JAN 0800	96	0.00	0.00	0.00	0.

****

TOTAL RAINFALL = 1.07, TOTAL LOSS = 0.91, TOTAL EXCESS = 0.16

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)					
		(CFS)				
+ 6.	2.50		3.	2.	2.	2.
		(INCHES)	0.167	0.167	0.167	0.167
		(AC-FT)	1.	1.	1.	1.

CUMULATIVE AREA = 0.16 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 1: /THIRD CR/MOUTH LOCAL/FLOW/01JAN1999/5MIN//

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            **************
            *            *
316 KK      *     T7C    *     Combine Third Cr at mouth, Pt 12
            *            *
            **************
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317 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

***

****

HYDROGRAPH AT STATION T7C
SUM OF 2 HYDROGRAPHS

****

DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	3.	*	1 JAN 0205	25	4.	*	1 JAN 0405	49	1226.	*	1 JAN 0605	73	709.
1 JAN 0010	2	3.	*	1 JAN 0210	26	5.	*	1 JAN 0410	50	1287.	*	1 JAN 0610	74	715.
1 JAN 0015	3	3.	*	1 JAN 0215	27	6.	*	1 JAN 0415	51	1323.	*	1 JAN 0615	75	723.
1 JAN 0020	4	3.	*	1 JAN 0220	28	10.	*	1 JAN 0420	52	1333.	*	1 JAN 0620	76	732.
1 JAN 0025	5	3.	*	1 JAN 0225	29	15.	*	1 JAN 0425	53	1322.	*	1 JAN 0625	77	741.
1 JAN 0030	6	3.	*	1 JAN 0230	30	21.	*	1 JAN 0430	54	1294.	*	1 JAN 0630	78	749.
1 JAN 0035	7	3.	*	1 JAN 0235	31	31.	*	1 JAN 0435	55	1256.	*	1 JAN 0635	79	755.
1 JAN 0040	8	3.	*	1 JAN 0240	32	50.	*	1 JAN 0440	56	1211.	*	1 JAN 0640	80	760.
1 JAN 0045	9	3.	*	1 JAN 0245	33	79.	*	1 JAN 0445	57	1165.	*	1 JAN 0645	81	762.
1 JAN 0050	10	3.	*	1 JAN 0250	34	121.	*	1 JAN 0450	58	1121.	*	1 JAN 0650	82	760.
1 JAN 0055	11	3.	*	1 JAN 0255	35	176.	*	1 JAN 0455	59	1081.	*	1 JAN 0655	83	751.
1 JAN 0100	12	3.	*	1 JAN 0300	36	239.	*	1 JAN 0500	60	1045.	*	1 JAN 0700	84	735.
1 JAN 0105	13	3.	*	1 JAN 0305	37	305.	*	1 JAN 0505	61	1010.	*	1 JAN 0705	85	715.
1 JAN 0110	14	3.	*	1 JAN 0310	38	370.	*	1 JAN 0510	62	975.	*	1 JAN 0710	86	692.
1 JAN 0115	15	3.	*	1 JAN 0315	39	430.	*	1 JAN 0515	63	938.	*	1 JAN 0715	87	667.
1 JAN 0120	16	3.	*	1 JAN 0320	40	487.	*	1 JAN 0520	64	899.	*	1 JAN 0720	88	641.
1 JAN 0125	17	3.	*	1 JAN 0325	41	541.	*	1 JAN 0525	65	860.	*	1 JAN 0725	89	616.
1 JAN 0130	18	3.	*	1 JAN 0330	42	599.	*	1 JAN 0530	66	821.	*	1 JAN 0730	90	592.
1 JAN 0135	19	3.	*	1 JAN 0335	43	665.	*	1 JAN 0535	67	785.	*	1 JAN 0735	91	568.
1 JAN 0140	20	3.	*	1 JAN 0340	44	745.	*	1 JAN 0540	68	755.	*	1 JAN 0740	92	544.
1 JAN 0145	21	3.	*	1 JAN 0345	45	837.	*	1 JAN 0545	69	731.	*	1 JAN 0745	93	519.

1 JAN 0150	22	3.	1 JAN 0350	46	940.	1 JAN 0550	70	716.	1 JAN 0750	94	490.
1 JAN 0155	23	3.	1 JAN 0355	47	1045.	1 JAN 0555	71	708.	1 JAN 0755	95	458.
1 JAN 0200	24	3.	1 JAN 0400	48	1143.	1 JAN 0600	72	706.	1 JAN 0800	96	423.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
		(CFS)				
+ 1333.	4.25		681.	517.	517.	517.
		(INCHES)	1.052	1.053	1.053	1.053
		(AC-FT)	338.	338.	338.	338.

CUMULATIVE AREA = 6.02 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /THIRD CR/MOUTH PT 12/FLOW/01JAN1999/5MIN//

*** ***

319 KK * WI1 * WF Incline at Village Dr. Pt 10

323 IN TIME DATA FOR INPUT TIME SERIES

JXMIN 15 TIME INTERVAL IN MINUTES
JXDATE 1JAN99 STARTING DATE
JXTIME 5 STARTING TIME

SUBBASIN RUNOFF DATA

320 BA SUBBASIN CHARACTERISTICS

TAREA 1.03 SUBBASIN AREA

321 BF BASE FLOW CHARACTERISTICS

STRTQ 0.00 INITIAL FLOW
QRCSN -0.05 BEGIN BASE FLOW RECESSION
RTIOR 1.50000 RECESSION CONSTANT

PRECIPITATION DATA

322 PB STORM 3.01 BASIN TOTAL PRECIPITATION

324 PI INCREMENTAL PRECIPITATION PATTERN

0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	1.00
1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	3.67	3.67
3.67	7.00	7.00	7.00	4.00	4.00	4.00	2.33	2.33	2.33
1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	0.67
0.67	0.67	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
0.67	0.67								

328 LS SCS LOSS RATE

STRTL 1.09 INITIAL ABSTRACTION
CRVNBR 64.74 CURVE NUMBER
RTIMP 0.00 PERCENT IMPERVIOUS AREA

329 UI INPUT UNITGRAPH, 23 ORDINATES, VOLUME = 1.00

182.0	515.0	754.0	923.0	889.0	806.0	699.0	602.0	507.0	415.0
329.0	269.0	223.0	185.0	153.0	129.0	106.0	85.0	71.0	53.0
38.0	27.0	13.0							

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HYDROGRAPH AT STATION WI1

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0005	1	0.00	0.00	0.00	0.	1 JAN 0405	49	0.01	0.01	0.00	52.
1 JAN 0010	2	0.02	0.02	0.00	0.	1 JAN 0410	50	0.03	0.02	0.01	49.
1 JAN 0015	3	0.02	0.02	0.00	0.	1 JAN 0415	51	0.03	0.02	0.01	49.
1 JAN 0020	4	0.02	0.02	0.00	0.	1 JAN 0420	52	0.03	0.02	0.01	51.
1 JAN 0025	5	0.02	0.02	0.00	0.	1 JAN 0425	53	0.03	0.02	0.01	55.
1 JAN 0030	6	0.02	0.02	0.00	0.	1 JAN 0430	54	0.03	0.02	0.01	60.
1 JAN 0035	7	0.02	0.02	0.00	0.	1 JAN 0435	55	0.03	0.02	0.01	65.
1 JAN 0040	8	0.02	0.02	0.00	0.	1 JAN 0440	56	0.03	0.02	0.01	69.
1 JAN 0045	9	0.02	0.02	0.00	0.	1 JAN 0445	57	0.03	0.02	0.01	73.
1 JAN 0050	10	0.02	0.02	0.00	0.	1 JAN 0450	58	0.03	0.02	0.01	77.
1 JAN 0055	11	0.03	0.03	0.00	0.	1 JAN 0455	59	0.03	0.02	0.01	80.
1 JAN 0100	12	0.03	0.03	0.00	0.	1 JAN 0500	60	0.03	0.02	0.01	82.
1 JAN 0105	13	0.03	0.03	0.00	0.	1 JAN 0505	61	0.03	0.02	0.01	85.
1 JAN 0110	14	0.01	0.01	0.00	0.	1 JAN 0510	62	0.02	0.01	0.01	87.
1 JAN 0115	15	0.01	0.01	0.00	0.	1 JAN 0515	63	0.02	0.01	0.01	87.
1 JAN 0120	16	0.01	0.01	0.00	0.	1 JAN 0520	64	0.02	0.01	0.01	85.
1 JAN 0125	17	0.03	0.03	0.00	0.	1 JAN 0525	65	0.02	0.01	0.01	83.

1 JAN 0130	18	0.03	0.03	0.00	0.	*	1 JAN 0530	66	0.02	0.01	0.01	81.
1 JAN 0135	19	0.03	0.03	0.00	0.	*	1 JAN 0535	67	0.02	0.01	0.01	79.
1 JAN 0140	20	0.11	0.11	0.00	0.	*	1 JAN 0540	68	0.02	0.01	0.01	78.
1 JAN 0145	21	0.11	0.11	0.00	0.	*	1 JAN 0545	69	0.02	0.01	0.01	76.
1 JAN 0150	22	0.11	0.11	0.00	0.	*	1 JAN 0550	70	0.02	0.01	0.01	75.
1 JAN 0155	23	0.21	0.21	0.00	0.	*	1 JAN 0555	71	0.02	0.01	0.01	74.
1 JAN 0200	24	0.21	0.21	0.00	0.	*	1 JAN 0600	72	0.02	0.01	0.01	74.
1 JAN 0205	25	0.21	0.20	0.01	2.	*	1 JAN 0605	73	0.02	0.01	0.01	73.
1 JAN 0210	26	0.12	0.11	0.01	9.	*	1 JAN 0610	74	0.00	0.00	0.00	71.
1 JAN 0215	27	0.12	0.10	0.02	19.	*	1 JAN 0615	75	0.00	0.00	0.00	66.
1 JAN 0220	28	0.12	0.10	0.02	34.	*	1 JAN 0620	76	0.00	0.00	0.00	59.
1 JAN 0225	29	0.07	0.06	0.01	50.	*	1 JAN 0625	77	0.00	0.00	0.00	51.
1 JAN 0230	30	0.07	0.05	0.02	64.	*	1 JAN 0630	78	0.00	0.00	0.00	43.
1 JAN 0235	31	0.07	0.05	0.02	77.	*	1 JAN 0635	79	0.00	0.00	0.00	35.
1 JAN 0240	32	0.04	0.03	0.01	86.	*	1 JAN 0640	80	0.00	0.00	0.00	29.
1 JAN 0245	33	0.04	0.03	0.01	91.	*	1 JAN 0645	81	0.00	0.00	0.00	23.
1 JAN 0250	34	0.04	0.03	0.01	94.	*	1 JAN 0650	82	0.00	0.00	0.00	19.
1 JAN 0255	35	0.04	0.03	0.01	94.	*	1 JAN 0655	83	0.00	0.00	0.00	15.
1 JAN 0300	36	0.04	0.03	0.01	94.	*	1 JAN 0700	84	0.00	0.00	0.00	12.
1 JAN 0305	37	0.04	0.03	0.01	94.	*	1 JAN 0705	85	0.00	0.00	0.00	10.
1 JAN 0310	38	0.04	0.03	0.01	94.	*	1 JAN 0710	86	0.00	0.00	0.00	8.
1 JAN 0315	39	0.04	0.03	0.01	95.	*	1 JAN 0715	87	0.00	0.00	0.00	6.
1 JAN 0320	40	0.04	0.03	0.01	96.	*	1 JAN 0720	88	0.00	0.00	0.00	5.
1 JAN 0325	41	0.02	0.01	0.01	96.	*	1 JAN 0725	89	0.00	0.00	0.00	5.
1 JAN 0330	42	0.02	0.01	0.01	94.	*	1 JAN 0730	90	0.00	0.00	0.00	4.
1 JAN 0335	43	0.02	0.01	0.01	90.	*	1 JAN 0735	91	0.00	0.00	0.00	4.
1 JAN 0340	44	0.01	0.01	0.00	85.	*	1 JAN 0740	92	0.00	0.00	0.00	4.
1 JAN 0345	45	0.01	0.01	0.00	79.	*	1 JAN 0745	93	0.00	0.00	0.00	4.
1 JAN 0350	46	0.01	0.01	0.00	72.	*	1 JAN 0750	94	0.00	0.00	0.00	4.
1 JAN 0355	47	0.01	0.01	0.00	65.	*	1 JAN 0755	95	0.00	0.00	0.00	4.
1 JAN 0400	48	0.01	0.01	0.00	58.	*	1 JAN 0800	96	0.00	0.00	0.00	4.

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TOTAL RAINFALL = 3.01, TOTAL LOSS = 2.51, TOTAL EXCESS = 0.50

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+		(CFS)	56.	42.	42.	42.
+ 96.	3.33	(INCHES)	0.503	0.503	0.503	0.503
		(AC-FT)	28.	28.	28.	28.

CUMULATIVE AREA = 1.03 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /WF INCLINE CR/VILLAGE BL PT10/FLOW/01JAN1999/5MIN//

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              **************
              *            *
333 KK        *     WI1R   *     Route WF Incline to SR 28 at 3 fps
              *            *
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HYDROGRAPH ROUTING DATA

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334 RM          MUSKINGUM ROUTING
                     NSTPS        8 NUMBER OF SUBREACHES
                     AMSKK     0.79 MUSKINGUM K
                         X     0.40 MUSKINGUM X
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HYDROGRAPH AT STATION WI1R

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DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	*	1 JAN 0205	25	0.	*	1 JAN 0405	49	95.	*	1 JAN 0605	73	85.
1 JAN 0010	2	0.	*	1 JAN 0210	26	0.	*	1 JAN 0410	50	95.	*	1 JAN 0610	74	84.
1 JAN 0015	3	0.	*	1 JAN 0215	27	0.	*	1 JAN 0415	51	93.	*	1 JAN 0615	75	82.
1 JAN 0020	4	0.	*	1 JAN 0220	28	0.	*	1 JAN 0420	52	90.	*	1 JAN 0620	76	80.
1 JAN 0025	5	0.	*	1 JAN 0225	29	0.	*	1 JAN 0425	53	86.	*	1 JAN 0625	77	79.
1 JAN 0030	6	0.	*	1 JAN 0230	30	0.	*	1 JAN 0430	54	81.	*	1 JAN 0630	78	77.
1 JAN 0035	7	0.	*	1 JAN 0235	31	0.	*	1 JAN 0435	55	74.	*	1 JAN 0635	79	76.
1 JAN 0040	8	0.	*	1 JAN 0240	32	0.	*	1 JAN 0440	56	68.	*	1 JAN 0640	80	75.
1 JAN 0045	9	0.	*	1 JAN 0245	33	1.	*	1 JAN 0445	57	62.	*	1 JAN 0645	81	74.
1 JAN 0050	10	0.	*	1 JAN 0250	34	4.	*	1 JAN 0450	58	56.	*	1 JAN 0650	82	73.
1 JAN 0055	11	0.	*	1 JAN 0255	35	9.	*	1 JAN 0455	59	53.	*	1 JAN 0655	83	71.
1 JAN 0100	12	0.	*	1 JAN 0300	36	18.	*	1 JAN 0500	60	51.	*	1 JAN 0700	84	67.
1 JAN 0105	13	0.	*	1 JAN 0305	37	30.	*	1 JAN 0505	61	52.	*	1 JAN 0705	85	61.
1 JAN 0110	14	0.	*	1 JAN 0310	38	43.	*	1 JAN 0510	62	55.	*	1 JAN 0710	86	54.
1 JAN 0115	15	0.	*	1 JAN 0315	39	57.	*	1 JAN 0515	63	58.	*	1 JAN 0715	87	47.
1 JAN 0120	16	0.	*	1 JAN 0320	40	69.	*	1 JAN 0520	64	63.	*	1 JAN 0720	88	39.
1 JAN 0125	17	0.	*	1 JAN 0325	41	78.	*	1 JAN 0525	65	67.	*	1 JAN 0725	89	33.
1 JAN 0130	18	0.	*	1 JAN 0330	42	85.	*	1 JAN 0530	66	71.	*	1 JAN 0730	90	27.
1 JAN 0135	19	0.	*	1 JAN 0335	43	90.	*	1 JAN 0535	67	75.	*	1 JAN 0735	91	22.

1 JAN 0140	20	0.	*	1 JAN 0340	44	92.	*	1 JAN 0540	68	78.	*	1 JAN 0740	92	18.
1 JAN 0145	21	0.	*	1 JAN 0345	45	93.	*	1 JAN 0545	69	81.	*	1 JAN 0745	93	14.
1 JAN 0150	22	0.	*	1 JAN 0350	46	94.	*	1 JAN 0550	70	83.	*	1 JAN 0750	94	11.
1 JAN 0155	23	0.	*	1 JAN 0355	47	94.	*	1 JAN 0555	71	85.	*	1 JAN 0755	95	9.
1 JAN 0200	24	0.	*	1 JAN 0400	48	95.	*	1 JAN 0600	72	85.	*	1 JAN 0800	96	7.

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)		6-HR	24-HR	72-HR	7.92-HR
		(CFS)				
+ 95.	4.00		55.	42.	42.	42.
		(INCHES)	0.498	0.498	0.498	0.498
		(AC-FT)	27.	27.	27.	27.

CUMULATIVE AREA = 1.03 SQ MI

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              **************
              *            *
335 KK        *     WI2    *     WF Incline at SR 28
              *            *
              **************

339 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           5  STARTING TIME

              SUBBASIN RUNOFF DATA

336 BA          SUBBASIN CHARACTERISTICS
                     TAREA        0.93  SUBBASIN AREA

337 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        0.00  INITIAL FLOW
                     QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR     1.50000  RECESSION CONSTANT

                PRECIPITATION DATA

338 PB               STORM        2.04  BASIN TOTAL PRECIPITATION

340 PI            INCREMENTAL PRECIPITATION PATTERN
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                    1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                    3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                    1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                    0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                    1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                    0.67      0.67

344 LS          SCS LOSS RATE
                     STRTL        0.83  INITIAL ABSTRACTION
                    CRVNBR       70.58  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

345 UI          INPUT UNITGRAPH,  24 ORDINATES,  VOLUME = 1.00
                    152.0     432.0     638.0     792.0     779.0     722.0     629.0     547.0     467.0     389.0
                    313.0     256.0     211.0     177.0     148.0     124.0     104.0      85.0      70.0      58.0
                     43.0      32.0      22.0      10.0
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HYDROGRAPH AT STATION WI2

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0005	1	0.00	0.00	0.00	0.	*	1 JAN 0405	49	0.01	0.00	0.00	27.
1 JAN 0010	2	0.01	0.01	0.00	0.	*	1 JAN 0410	50	0.02	0.01	0.01	25.
1 JAN 0015	3	0.01	0.01	0.00	0.	*	1 JAN 0415	51	0.02	0.01	0.01	25.
1 JAN 0020	4	0.01	0.01	0.00	0.	*	1 JAN 0420	52	0.02	0.01	0.01	26.
1 JAN 0025	5	0.01	0.01	0.00	0.	*	1 JAN 0425	53	0.02	0.01	0.01	28.
1 JAN 0030	6	0.01	0.01	0.00	0.	*	1 JAN 0430	54	0.02	0.01	0.01	31.
1 JAN 0035	7	0.01	0.01	0.00	0.	*	1 JAN 0435	55	0.02	0.01	0.01	33.
1 JAN 0040	8	0.01	0.01	0.00	0.	*	1 JAN 0440	56	0.02	0.01	0.01	35.
1 JAN 0045	9	0.01	0.01	0.00	0.	*	1 JAN 0445	57	0.02	0.01	0.01	37.
1 JAN 0050	10	0.01	0.01	0.00	0.	*	1 JAN 0450	58	0.02	0.01	0.01	39.
1 JAN 0055	11	0.02	0.02	0.00	0.	*	1 JAN 0455	59	0.02	0.01	0.01	41.
1 JAN 0100	12	0.02	0.02	0.00	0.	*	1 JAN 0500	60	0.02	0.01	0.01	43.
1 JAN 0105	13	0.02	0.02	0.00	0.	*	1 JAN 0505	61	0.02	0.01	0.01	44.
1 JAN 0110	14	0.01	0.01	0.00	0.	*	1 JAN 0510	62	0.01	0.01	0.00	45.
1 JAN 0115	15	0.01	0.01	0.00	0.	*	1 JAN 0515	63	0.01	0.01	0.00	45.
1 JAN 0120	16	0.01	0.01	0.00	0.	*	1 JAN 0520	64	0.01	0.01	0.01	45.

1 JAN 0125	17	0.02	0.02	0.00	0.	*	1 JAN 0525	65	0.01	0.01	0.01	44.
1 JAN 0130	18	0.02	0.02	0.00	0.	*	1 JAN 0530	66	0.01	0.01	0.01	43.
1 JAN 0135	19	0.02	0.02	0.00	0.	*	1 JAN 0535	67	0.01	0.01	0.01	42.
1 JAN 0140	20	0.07	0.07	0.00	0.	*	1 JAN 0540	68	0.01	0.01	0.01	41.
1 JAN 0145	21	0.07	0.07	0.00	0.	*	1 JAN 0545	69	0.01	0.01	0.01	41.
1 JAN 0150	22	0.07	0.07	0.00	0.	*	1 JAN 0550	70	0.01	0.01	0.01	40.
1 JAN 0155	23	0.14	0.14	0.00	0.	*	1 JAN 0555	71	0.01	0.01	0.01	40.
1 JAN 0200	24	0.14	0.14	0.00	0.	*	1 JAN 0600	72	0.01	0.01	0.01	39.
1 JAN 0205	25	0.14	0.14	0.00	0.	*	1 JAN 0605	73	0.01	0.01	0.01	39.
1 JAN 0210	26	0.08	0.08	0.00	1.	*	1 JAN 0610	74	0.00	0.00	0.00	38.
1 JAN 0215	27	0.08	0.07	0.01	4.	*	1 JAN 0615	75	0.00	0.00	0.00	36.
1 JAN 0220	28	0.08	0.07	0.01	9.	*	1 JAN 0620	76	0.00	0.00	0.00	32.
1 JAN 0225	29	0.05	0.04	0.01	15.	*	1 JAN 0625	77	0.00	0.00	0.00	28.
1 JAN 0230	30	0.05	0.04	0.01	22.	*	1 JAN 0630	78	0.00	0.00	0.00	24.
1 JAN 0235	31	0.05	0.04	0.01	28.	*	1 JAN 0635	79	0.00	0.00	0.00	20.
1 JAN 0240	32	0.03	0.02	0.01	33.	*	1 JAN 0640	80	0.00	0.00	0.00	16.
1 JAN 0245	33	0.03	0.02	0.01	36.	*	1 JAN 0645	81	0.00	0.00	0.00	13.
1 JAN 0250	34	0.03	0.02	0.01	38.	*	1 JAN 0650	82	0.00	0.00	0.00	11.
1 JAN 0255	35	0.03	0.02	0.01	40.	*	1 JAN 0655	83	0.00	0.00	0.00	9.
1 JAN 0300	36	0.03	0.02	0.01	41.	*	1 JAN 0700	84	0.00	0.00	0.00	7.
1 JAN 0305	37	0.03	0.02	0.01	42.	*	1 JAN 0705	85	0.00	0.00	0.00	6.
1 JAN 0310	38	0.03	0.02	0.01	43.	*	1 JAN 0710	86	0.00	0.00	0.00	5.
1 JAN 0315	39	0.03	0.02	0.01	44.	*	1 JAN 0715	87	0.00	0.00	0.00	4.
1 JAN 0320	40	0.03	0.02	0.01	45.	*	1 JAN 0720	88	0.00	0.00	0.00	3.
1 JAN 0325	41	0.01	0.01	0.00	45.	*	1 JAN 0725	89	0.00	0.00	0.00	2.
1 JAN 0330	42	0.01	0.01	0.00	45.	*	1 JAN 0730	90	0.00	0.00	0.00	2.
1 JAN 0335	43	0.01	0.01	0.00	44.	*	1 JAN 0735	91	0.00	0.00	0.00	2.
1 JAN 0340	44	0.01	0.00	0.00	42.	*	1 JAN 0740	92	0.00	0.00	0.00	2.
1 JAN 0345	45	0.01	0.00	0.00	39.	*	1 JAN 0745	93	0.00	0.00	0.00	2.
1 JAN 0350	46	0.01	0.00	0.00	36.	*	1 JAN 0750	94	0.00	0.00	0.00	2.
1 JAN 0355	47	0.01	0.00	0.00	33.	*	1 JAN 0755	95	0.00	0.00	0.00	2.
1 JAN 0400	48	0.01	0.00	0.00	30.	*	1 JAN 0800	96	0.00	0.00	0.00	2.

****

TOTAL RAINFALL = 2.04, TOTAL LOSS = 1.77, TOTAL EXCESS = 0.27

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	7.92-HR
+ (CFS)	(HR)	(CFS)				
+ 45.	3.33		27.	21.	21.	21.
		(INCHES)	0.272	0.272	0.272	0.272
		(AC-FT)	13.	13.	13.	13.

CUMULATIVE AREA = 0.93 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /WF INCLINE CR/SR28 LOCAL/FLOW/01JAN1999/5MIN//

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              **************
              *            *
349 KK        *     WI2C   *     Combine WF Incline at SR 28, Pt 11
              *            *
              **************

350 HC          HYDROGRAPH COMBINATION
                     ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE
                                                        ***
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HYDROGRAPH AT STATION WI2C
SUM OF 2 HYDROGRAPHS

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DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	*	1 JAN 0205	25	0.	*	1 JAN 0405	49	122.	*	1 JAN 0605	73	124.
1 JAN 0010	2	0.	*	1 JAN 0210	26	1.	*	1 JAN 0410	50	120.	*	1 JAN 0610	74	122.
1 JAN 0015	3	0.	*	1 JAN 0215	27	4.	*	1 JAN 0415	51	118.	*	1 JAN 0615	75	118.
1 JAN 0020	4	0.	*	1 JAN 0220	28	9.	*	1 JAN 0420	52	117.	*	1 JAN 0620	76	113.
1 JAN 0025	5	0.	*	1 JAN 0225	29	15.	*	1 JAN 0425	53	114.	*	1 JAN 0625	77	107.
1 JAN 0030	6	0.	*	1 JAN 0230	30	22.	*	1 JAN 0430	54	111.	*	1 JAN 0630	78	101.
1 JAN 0035	7	0.	*	1 JAN 0235	31	28.	*	1 JAN 0435	55	107.	*	1 JAN 0635	79	96.
1 JAN 0040	8	0.	*	1 JAN 0240	32	33.	*	1 JAN 0440	56	103.	*	1 JAN 0640	80	91.
1 JAN 0045	9	0.	*	1 JAN 0245	33	37.	*	1 JAN 0445	57	99.	*	1 JAN 0645	81	88.
1 JAN 0050	10	0.	*	1 JAN 0250	34	42.	*	1 JAN 0450	58	96.	*	1 JAN 0650	82	84.
1 JAN 0055	11	0.	*	1 JAN 0255	35	49.	*	1 JAN 0455	59	94.	*	1 JAN 0655	83	79.
1 JAN 0100	12	0.	*	1 JAN 0300	36	59.	*	1 JAN 0500	60	94.	*	1 JAN 0700	84	74.
1 JAN 0105	13	0.	*	1 JAN 0305	37	72.	*	1 JAN 0505	61	96.	*	1 JAN 0705	85	67.
1 JAN 0110	14	0.	*	1 JAN 0310	38	86.	*	1 JAN 0510	62	100.	*	1 JAN 0710	86	59.
1 JAN 0115	15	0.	*	1 JAN 0315	39	100.	*	1 JAN 0515	63	104.	*	1 JAN 0715	87	50.
1 JAN 0120	16	0.	*	1 JAN 0320	40	113.	*	1 JAN 0520	64	107.	*	1 JAN 0720	88	42.
1 JAN 0125	17	0.	*	1 JAN 0325	41	123.	*	1 JAN 0525	65	111.	*	1 JAN 0725	89	35.
1 JAN 0130	18	0.	*	1 JAN 0330	42	130.	*	1 JAN 0530	66	114.	*	1 JAN 0730	90	29.
1 JAN 0135	19	0.	*	1 JAN 0335	43	133.	*	1 JAN 0535	67	117.	*	1 JAN 0735	91	24.
1 JAN 0140	20	0.	*	1 JAN 0340	44	134.	*	1 JAN 0540	68	119.	*	1 JAN 0740	92	20.
1 JAN 0145	21	0.	*	1 JAN 0345	45	132.	*	1 JAN 0545	69	121.	*	1 JAN 0745	93	16.

1 JAN 0150	22	0.	*	1 JAN 0350	46	129.	*	1 JAN 0550	70	123.	*	1 JAN 0750	94	13.
1 JAN 0155	23	0.	*	1 JAN 0355	47	127.	*	1 JAN 0555	71	124.	*	1 JAN 0755	95	11.
1 JAN 0200	24	0.	*	1 JAN 0400	48	124.	*	1 JAN 0600	72	125.	*	1 JAN 0800	96	9.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
134.	3.58	(CFS)	82.	62.	62.	62.
		(INCHES)	0.390	0.390	0.390	0.390
		(AC-FT)	41.	41.	41.	41.

CUMULATIVE AREA = 1.96 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /WF INCLINE CR/SR28 PT11/FLOW/01JAN1999/5MIN//

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*            *
*     WI2R   *
*            *
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352 KK Route WF Incline Cr to main at 3 fps

HYDROGRAPH ROUTING DATA

353 RM MUSKINGUM ROUTING

NSTPS	3	NUMBER OF SUBREACHES
AMSKK	0.33	MUSKINGUM K
X	0.40	MUSKINGUM X

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***** WARNING ***** POSSIBLE INSTABILITIES IN THE MUSKINGUM ROUTING FOR REACH WI2R.
REDUCE NSTPS OR DECREASE YOUR COMPUTATION INTERVAL (FIRST FIELD OF THE IT RECORD).

HYDROGRAPH AT STATION WI2R

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	0.	1 JAN 0405	49	131.	1 JAN 0605	73	121.
1 JAN 0010	2	0.	1 JAN 0210	26	0.	1 JAN 0410	50	129.	1 JAN 0610	74	123.
1 JAN 0015	3	0.	1 JAN 0215	27	0.	1 JAN 0415	51	127.	1 JAN 0615	75	124.
1 JAN 0020	4	0.	1 JAN 0220	28	0.	1 JAN 0420	52	124.	1 JAN 0620	76	124.
1 JAN 0025	5	0.	1 JAN 0225	29	1.	1 JAN 0425	53	122.	1 JAN 0625	77	123.
1 JAN 0030	6	0.	1 JAN 0230	30	2.	1 JAN 0430	54	120.	1 JAN 0630	78	121.
1 JAN 0035	7	0.	1 JAN 0235	31	5.	1 JAN 0435	55	118.	1 JAN 0635	79	117.
1 JAN 0040	8	0.	1 JAN 0240	32	10.	1 JAN 0440	56	116.	1 JAN 0640	80	112.
1 JAN 0045	9	0.	1 JAN 0245	33	16.	1 JAN 0445	57	114.	1 JAN 0645	81	106.
1 JAN 0050	10	0.	1 JAN 0250	34	22.	1 JAN 0450	58	111.	1 JAN 0650	82	101.
1 JAN 0055	11	0.	1 JAN 0255	35	28.	1 JAN 0455	59	107.	1 JAN 0655	83	96.
1 JAN 0100	12	0.	1 JAN 0300	36	33.	1 JAN 0500	60	103.	1 JAN 0700	84	92.
1 JAN 0105	13	0.	1 JAN 0305	37	37.	1 JAN 0505	61	99.	1 JAN 0705	85	88.
1 JAN 0110	14	0.	1 JAN 0310	38	43.	1 JAN 0510	62	96.	1 JAN 0710	86	84.
1 JAN 0115	15	0.	1 JAN 0315	39	51.	1 JAN 0515	63	95.	1 JAN 0715	87	79.
1 JAN 0120	16	0.	1 JAN 0320	40	61.	1 JAN 0520	64	95.	1 JAN 0720	88	73.
1 JAN 0125	17	0.	1 JAN 0325	41	73.	1 JAN 0525	65	97.	1 JAN 0725	89	66.
1 JAN 0130	18	0.	1 JAN 0330	42	87.	1 JAN 0530	66	100.	1 JAN 0730	90	58.
1 JAN 0135	19	0.	1 JAN 0335	43	100.	1 JAN 0535	67	104.	1 JAN 0735	91	50.
1 JAN 0140	20	0.	1 JAN 0340	44	113.	1 JAN 0540	68	107.	1 JAN 0740	92	42.
1 JAN 0145	21	0.	1 JAN 0345	45	122.	1 JAN 0545	69	111.	1 JAN 0745	93	35.
1 JAN 0150	22	0.	1 JAN 0350	46	129.	1 JAN 0550	70	114.	1 JAN 0750	94	29.
1 JAN 0155	23	0.	1 JAN 0355	47	132.	1 JAN 0555	71	116.	1 JAN 0755	95	24.
1 JAN 0200	24	0.	1 JAN 0400	48	132.	1 JAN 0600	72	119.	1 JAN 0800	96	20.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
132.	3.92	(CFS)	82.	62.	62.	62.
		(INCHES)	0.387	0.387	0.387	0.387
		(AC-FT)	40.	40.	40.	40.

CUMULATIVE AREA = 1.96 SQ MI

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*     I1     *
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354 KK Incline Cr at Ski Way, pt 19

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358 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           5  STARTING TIME

              SUBBASIN RUNOFF DATA

355 BA          SUBBASIN CHARACTERISTICS
                     TAREA        4.20  SUBBASIN AREA

356 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        0.00  INITIAL FLOW
                     QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR     1.50000  RECESSION CONSTANT

                PRECIPITATION DATA

357 PB               STORM        3.56  BASIN TOTAL PRECIPITATION

359 PI            INCREMENTAL PRECIPITATION PATTERN
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                    1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                    3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                    1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                    0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                    1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                    0.67      0.67

363 LS          SCS LOSS RATE
                     STRTL        1.00  INITIAL ABSTRACTION
                    CRVNBR       66.58  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

364 UI          INPUT UNITGRAPH,  55 ORDINATES,  VOLUME = 1.00
                   144.0     432.0     720.0     938.0    1175.0    1336.0    1500.0    1649.0    1684.0    1640.0
                  1597.0    1545.0    1443.0    1355.0    1276.0    1199.0    1121.0    1044.0     971.0     895.0
                   822.0     752.0     676.0     606.0     557.0     513.0     463.0     428.0     398.0     363.0
                   335.0     311.0     283.0     261.0     244.0     225.0     207.0     190.0     171.0     155.0
                   144.0     133.0     121.0     107.0      91.0      80.0      69.0      61.0      52.0      42.0
                    30.0      23.0      14.0       8.0       2.0
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HYDROGRAPH AT STATION I1

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	*	1	JAN	0405	49	0.01	0.01	0.01	499.
1	JAN	0010	2	0.02	0.02	0.00	0.	*	1	JAN	0410	50	0.04	0.02	0.02	481.
1	JAN	0015	3	0.02	0.02	0.00	0.	*	1	JAN	0415	51	0.04	0.02	0.02	466.
1	JAN	0020	4	0.02	0.02	0.00	0.	*	1	JAN	0420	52	0.04	0.02	0.02	455.
1	JAN	0025	5	0.02	0.02	0.00	0.	*	1	JAN	0425	53	0.04	0.02	0.02	447.
1	JAN	0030	6	0.02	0.02	0.00	0.	*	1	JAN	0430	54	0.04	0.02	0.02	442.
1	JAN	0035	7	0.02	0.02	0.00	0.	*	1	JAN	0435	55	0.04	0.02	0.02	441.
1	JAN	0040	8	0.02	0.02	0.00	0.	*	1	JAN	0440	56	0.04	0.02	0.02	443.
1	JAN	0045	9	0.02	0.02	0.00	0.	*	1	JAN	0445	57	0.04	0.02	0.02	448.
1	JAN	0050	10	0.02	0.02	0.00	0.	*	1	JAN	0450	58	0.04	0.02	0.02	454.
1	JAN	0055	11	0.04	0.04	0.00	0.	*	1	JAN	0455	59	0.04	0.02	0.02	462.
1	JAN	0100	12	0.04	0.04	0.00	0.	*	1	JAN	0500	60	0.04	0.02	0.02	470.
1	JAN	0105	13	0.04	0.04	0.00	0.	*	1	JAN	0505	61	0.04	0.02	0.02	478.
1	JAN	0110	14	0.01	0.01	0.00	0.	*	1	JAN	0510	62	0.02	0.01	0.01	486.
1	JAN	0115	15	0.01	0.01	0.00	0.	*	1	JAN	0515	63	0.02	0.01	0.01	491.
1	JAN	0120	16	0.01	0.01	0.00	0.	*	1	JAN	0520	64	0.02	0.01	0.01	495.
1	JAN	0125	17	0.04	0.04	0.00	0.	*	1	JAN	0525	65	0.02	0.01	0.01	498.
1	JAN	0130	18	0.04	0.04	0.00	0.	*	1	JAN	0530	66	0.02	0.01	0.01	499.
1	JAN	0135	19	0.04	0.04	0.00	0.	*	1	JAN	0535	67	0.02	0.01	0.01	500.
1	JAN	0140	20	0.13	0.13	0.00	0.	*	1	JAN	0540	68	0.02	0.01	0.01	498.
1	JAN	0145	21	0.13	0.13	0.00	0.	*	1	JAN	0545	69	0.02	0.01	0.01	495.
1	JAN	0150	22	0.13	0.13	0.00	0.	*	1	JAN	0550	70	0.02	0.01	0.01	492.
1	JAN	0155	23	0.25	0.25	0.00	0.	*	1	JAN	0555	71	0.02	0.01	0.01	488.
1	JAN	0200	24	0.25	0.23	0.02	4.	*	1	JAN	0600	72	0.02	0.01	0.01	484.
1	JAN	0205	25	0.25	0.21	0.04	16.	*	1	JAN	0605	73	0.02	0.01	0.01	479.
1	JAN	0210	26	0.14	0.11	0.03	39.	*	1	JAN	0610	74	0.00	0.00	0.00	473.
1	JAN	0215	27	0.14	0.11	0.04	70.	*	1	JAN	0615	75	0.00	0.00	0.00	463.
1	JAN	0220	28	0.14	0.10	0.04	110.	*	1	JAN	0620	76	0.00	0.00	0.00	450.
1	JAN	0225	29	0.08	0.06	0.03	157.	*	1	JAN	0625	77	0.00	0.00	0.00	433.
1	JAN	0230	30	0.08	0.05	0.03	206.	*	1	JAN	0630	78	0.00	0.00	0.00	414.
1	JAN	0235	31	0.08	0.05	0.03	259.	*	1	JAN	0635	79	0.00	0.00	0.00	393.
1	JAN	0240	32	0.05	0.03	0.02	312.	*	1	JAN	0640	80	0.00	0.00	0.00	370.
1	JAN	0245	33	0.05	0.03	0.02	358.	*	1	JAN	0645	81	0.00	0.00	0.00	345.
1	JAN	0250	34	0.05	0.03	0.02	399.	*	1	JAN	0650	82	0.00	0.00	0.00	321.
1	JAN	0255	35	0.05	0.03	0.02	435.	*	1	JAN	0655	83	0.00	0.00	0.00	297.
1	JAN	0300	36	0.05	0.03	0.02	464.	*	1	JAN	0700	84	0.00	0.00	0.00	274.
1	JAN	0305	37	0.05	0.03	0.02	488.	*	1	JAN	0705	85	0.00	0.00	0.00	252.
1	JAN	0310	38	0.05	0.03	0.02	508.	*	1	JAN	0710	86	0.00	0.00	0.00	232.
1	JAN	0315	39	0.05	0.03	0.02	524.	*	1	JAN	0715	87	0.00	0.00	0.00	213.
1	JAN	0320	40	0.05	0.03	0.02	538.	*	1	JAN	0720	88	0.00	0.00	0.00	196.
1	JAN	0325	41	0.02	0.01	0.01	550.	*	1	JAN	0725	89	0.00	0.00	0.00	179.

1 JAN 0330	42	0.02	0.01	0.01	558.	*	1 JAN 0730	90	0.00	0.00	0.00	164.
1 JAN 0335	43	0.02	0.01	0.01	562.	*	1 JAN 0735	91	0.00	0.00	0.00	149.
1 JAN 0340	44	0.01	0.01	0.01	562.	*	1 JAN 0740	92	0.00	0.00	0.00	136.
1 JAN 0345	45	0.01	0.01	0.01	557.	*	1 JAN 0745	93	0.00	0.00	0.00	124.
1 JAN 0350	46	0.01	0.01	0.01	548.	*	1 JAN 0750	94	0.00	0.00	0.00	113.
1 JAN 0355	47	0.01	0.01	0.01	534.	*	1 JAN 0755	95	0.00	0.00	0.00	103.
1 JAN 0400	48	0.01	0.01	0.01	518.	*	1 JAN 0800	96	0.00	0.00	0.00	93.

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TOTAL RAINFALL = 3.56, TOTAL LOSS = 2.70, TOTAL EXCESS = 0.86

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 562.	3.50	(CFS)	379.	287.	287.	287.
		(INCHES)	0.839	0.840	0.840	0.840
		(AC-FT)	188.	188.	188.	188.

CUMULATIVE AREA = 4.20 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /INCLINE CR/SKI WY PT19/FLOW/01JAN1999/5MIN//

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371 KK **********
* *
* I1R *
* *
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Route Incline to SR 28 at 3 fps

HYDROGRAPH ROUTING DATA

372 RM MUSKINGUM ROUTING

NSTPS	4	NUMBER OF SUBREACHES
AMSKK	0.38	MUSKINGUM K
X	0.40	MUSKINGUM X

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HYDROGRAPH AT STATION I1R

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	0.	1 JAN 0405	49	558.	1 JAN 0605	73	496.
1 JAN 0010	2	0.	1 JAN 0210	26	0.	1 JAN 0410	50	551.	1 JAN 0610	74	493.
1 JAN 0015	3	0.	1 JAN 0215	27	1.	1 JAN 0415	51	540.	1 JAN 0615	75	490.
1 JAN 0020	4	0.	1 JAN 0220	28	3.	1 JAN 0420	52	526.	1 JAN 0620	76	486.
1 JAN 0025	5	0.	1 JAN 0225	29	12.	1 JAN 0425	53	509.	1 JAN 0625	77	481.
1 JAN 0030	6	0.	1 JAN 0230	30	30.	1 JAN 0430	54	492.	1 JAN 0630	78	476.
1 JAN 0035	7	0.	1 JAN 0235	31	56.	1 JAN 0435	55	476.	1 JAN 0635	79	467.
1 JAN 0040	8	0.	1 JAN 0240	32	91.	1 JAN 0440	56	462.	1 JAN 0640	80	456.
1 JAN 0045	9	0.	1 JAN 0245	33	133.	1 JAN 0445	57	452.	1 JAN 0645	81	441.
1 JAN 0050	10	0.	1 JAN 0250	34	180.	1 JAN 0450	58	446.	1 JAN 0650	82	424.
1 JAN 0055	11	0.	1 JAN 0255	35	231.	1 JAN 0455	59	443.	1 JAN 0655	83	404.
1 JAN 0100	12	0.	1 JAN 0300	36	282.	1 JAN 0500	60	443.	1 JAN 0700	84	382.
1 JAN 0105	13	0.	1 JAN 0305	37	330.	1 JAN 0505	61	446.	1 JAN 0705	85	359.
1 JAN 0110	14	0.	1 JAN 0310	38	374.	1 JAN 0510	62	451.	1 JAN 0710	86	334.
1 JAN 0115	15	0.	1 JAN 0315	39	413.	1 JAN 0515	63	458.	1 JAN 0715	87	310.
1 JAN 0120	16	0.	1 JAN 0320	40	445.	1 JAN 0520	64	465.	1 JAN 0720	88	287.
1 JAN 0125	17	0.	1 JAN 0325	41	472.	1 JAN 0525	65	473.	1 JAN 0725	89	265.
1 JAN 0130	18	0.	1 JAN 0330	42	495.	1 JAN 0530	66	481.	1 JAN 0730	90	244.
1 JAN 0135	19	0.	1 JAN 0335	43	514.	1 JAN 0535	67	487.	1 JAN 0735	91	224.
1 JAN 0140	20	0.	1 JAN 0340	44	529.	1 JAN 0540	68	493.	1 JAN 0740	92	206.
1 JAN 0145	21	0.	1 JAN 0345	45	542.	1 JAN 0545	69	496.	1 JAN 0745	93	189.
1 JAN 0150	22	0.	1 JAN 0350	46	552.	1 JAN 0550	70	498.	1 JAN 0750	94	173.
1 JAN 0155	23	0.	1 JAN 0355	47	558.	1 JAN 0555	71	499.	1 JAN 0755	95	158.
1 JAN 0200	24	0.	1 JAN 0400	48	560.	1 JAN 0600	72	498.	1 JAN 0800	96	144.

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 560.	3.92	(CFS)	372.	282.	282.	282.
		(INCHES)	0.823	0.823	0.823	0.823
		(AC-FT)	184.	184.	184.	184.

CUMULATIVE AREA = 4.20 SQ MI

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                *            *
373 KK          *     I2     *     Incline Cr at SR 28
                *            *
                **************

377 IN            TIME DATA FOR INPUT TIME SERIES
                       JXMIN          15  TIME INTERVAL IN MINUTES
                      JXDATE      1JAN99  STARTING DATE
                      JXTIME           5  STARTING TIME

                SUBBASIN RUNOFF DATA

374 BA            SUBBASIN CHARACTERISTICS
                       TAREA        0.25  SUBBASIN AREA

375 BF            BASE FLOW CHARACTERISTICS
                       STRTQ        0.00  INITIAL FLOW
                       QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                       RTIOR     1.50000  RECESSION CONSTANT

                  PRECIPITATION DATA

376 PB                 STORM        1.50  BASIN TOTAL PRECIPITATION

378 PI            INCREMENTAL PRECIPITATION PATTERN
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                    1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                    3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                    1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                    0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                    1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                    0.67      0.67

382 LS            SCS LOSS RATE
                       STRTL        0.51  INITIAL ABSTRACTION
                      CRVNBR       79.59  CURVE NUMBER
                       RTIMP        0.00  PERCENT IMPERVIOUS AREA

383 UI            INPUT UNITGRAPH,  12 ORDINATES,  VOLUME = 1.00
                    160.0     391.0     406.0     316.0     229.0     151.0     103.0      72.0      50.0      33.0
                     19.0       8.0

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*****************************************************************************************************************
                                        HYDROGRAPH AT STATION      I2
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0005	1	0.00	0.00	0.00	0.	*	1 JAN 0405	49	0.01	0.00	0.00	4.
1 JAN 0010	2	0.01	0.01	0.00	0.	*	1 JAN 0410	50	0.01	0.01	0.01	5.
1 JAN 0015	3	0.01	0.01	0.00	0.	*	1 JAN 0415	51	0.01	0.01	0.01	6.
1 JAN 0020	4	0.01	0.01	0.00	0.	*	1 JAN 0420	52	0.01	0.01	0.01	7.
1 JAN 0025	5	0.01	0.01	0.00	0.	*	1 JAN 0425	53	0.01	0.01	0.01	9.
1 JAN 0030	6	0.01	0.01	0.00	0.	*	1 JAN 0430	54	0.01	0.01	0.01	10.
1 JAN 0035	7	0.01	0.01	0.00	0.	*	1 JAN 0435	55	0.01	0.01	0.01	10.
1 JAN 0040	8	0.01	0.01	0.00	0.	*	1 JAN 0440	56	0.01	0.01	0.01	11.
1 JAN 0045	9	0.01	0.01	0.00	0.	*	1 JAN 0445	57	0.01	0.01	0.01	11.
1 JAN 0050	10	0.01	0.01	0.00	0.	*	1 JAN 0450	58	0.01	0.01	0.01	12.
1 JAN 0055	11	0.01	0.01	0.00	0.	*	1 JAN 0455	59	0.01	0.01	0.01	12.
1 JAN 0100	12	0.01	0.01	0.00	0.	*	1 JAN 0500	60	0.01	0.01	0.01	12.
1 JAN 0105	13	0.01	0.01	0.00	0.	*	1 JAN 0505	61	0.01	0.01	0.01	12.
1 JAN 0110	14	0.00	0.00	0.00	0.	*	1 JAN 0510	62	0.01	0.01	0.00	12.
1 JAN 0115	15	0.01	0.01	0.00	0.	*	1 JAN 0515	63	0.01	0.01	0.00	11.
1 JAN 0120	16	0.00	0.00	0.00	0.	*	1 JAN 0520	64	0.01	0.01	0.00	11.
1 JAN 0125	17	0.01	0.01	0.00	0.	*	1 JAN 0525	65	0.01	0.01	0.00	10.
1 JAN 0130	18	0.01	0.01	0.00	0.	*	1 JAN 0530	66	0.01	0.01	0.00	10.
1 JAN 0135	19	0.01	0.01	0.00	0.	*	1 JAN 0535	67	0.01	0.01	0.00	9.
1 JAN 0140	20	0.05	0.05	0.00	0.	*	1 JAN 0540	68	0.01	0.01	0.00	9.
1 JAN 0145	21	0.06	0.06	0.00	0.	*	1 JAN 0545	69	0.01	0.01	0.00	9.
1 JAN 0150	22	0.05	0.05	0.00	0.	*	1 JAN 0550	70	0.01	0.01	0.00	9.
1 JAN 0155	23	0.10	0.10	0.00	0.	*	1 JAN 0555	71	0.01	0.01	0.00	9.
1 JAN 0200	24	0.10	0.10	0.00	0.	*	1 JAN 0600	72	0.01	0.01	0.00	9.
1 JAN 0205	25	0.10	0.10	0.01	2.	*	1 JAN 0605	73	0.01	0.01	0.00	9.
1 JAN 0210	26	0.06	0.05	0.01	5.	*	1 JAN 0610	74	0.00	0.00	0.00	8.
1 JAN 0215	27	0.06	0.05	0.01	9.	*	1 JAN 0615	75	0.00	0.00	0.00	7.
1 JAN 0220	28	0.06	0.05	0.01	12.	*	1 JAN 0620	76	0.00	0.00	0.00	5.
1 JAN 0225	29	0.03	0.03	0.01	15.	*	1 JAN 0625	77	0.00	0.00	0.00	3.
1 JAN 0230	30	0.04	0.03	0.01	16.	*	1 JAN 0630	78	0.00	0.00	0.00	2.
1 JAN 0235	31	0.03	0.03	0.01	17.	*	1 JAN 0635	79	0.00	0.00	0.00	1.
1 JAN 0240	32	0.02	0.01	0.01	16.	*	1 JAN 0640	80	0.00	0.00	0.00	1.
1 JAN 0245	33	0.02	0.01	0.01	15.	*	1 JAN 0645	81	0.00	0.00	0.00	1.
1 JAN 0250	34	0.02	0.01	0.01	14.	*	1 JAN 0650	82	0.00	0.00	0.00	1.
1 JAN 0255	35	0.02	0.01	0.01	14.	*	1 JAN 0655	83	0.00	0.00	0.00	1.
1 JAN 0300	36	0.02	0.01	0.01	13.	*	1 JAN 0700	84	0.00	0.00	0.00	1.
1 JAN 0305	37	0.02	0.01	0.01	13.	*	1 JAN 0705	85	0.00	0.00	0.00	1.
1 JAN 0310	38	0.02	0.01	0.01	13.	*	1 JAN 0710	86	0.00	0.00	0.00	1.
1 JAN 0315	39	0.02	0.01	0.01	13.	*	1 JAN 0715	87	0.00	0.00	0.00	1.
1 JAN 0320	40	0.02	0.01	0.01	13.	*	1 JAN 0720	88	0.00	0.00	0.00	1.
1 JAN 0325	41	0.01	0.01	0.00	12.	*	1 JAN 0725	89	0.00	0.00	0.00	1.

1 JAN 0330	42	0.01	0.01	0.00	11.	*	1 JAN 0730	90	0.00	0.00	0.00	1.
1 JAN 0335	43	0.01	0.01	0.00	10.	*	1 JAN 0735	91	0.00	0.00	0.00	1.
1 JAN 0340	44	0.01	0.00	0.00	9.	*	1 JAN 0740	92	0.00	0.00	0.00	1.
1 JAN 0345	45	0.00	0.00	0.00	7.	*	1 JAN 0745	93	0.00	0.00	0.00	1.
1 JAN 0350	46	0.01	0.00	0.00	6.	*	1 JAN 0750	94	0.00	0.00	0.00	1.
1 JAN 0355	47	0.01	0.00	0.00	5.	*	1 JAN 0755	95	0.00	0.00	0.00	1.
1 JAN 0400	48	0.00	0.00	0.00	5.	*	1 JAN 0800	96	0.00	0.00	0.00	0.

****

TOTAL RAINFALL = 1.50, TOTAL LOSS = 1.23, TOTAL EXCESS = 0.27

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 17.	2.50	(CFS)	8.	6.	6.	6.
		(INCHES)	0.279	0.279	0.279	0.279
		(AC-FT)	4.	4.	4.	4.

CUMULATIVE AREA = 0.25 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /INCLINE CR/SR28 LOCAL/FLOW/01JAN1999/5MIN//

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386 KK **********
* I2C *
********** Combine Incline at SR 28, Pt 13

387 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION I2C
SUM OF 2 HYDROGRAPHS

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	2.	1 JAN 0405	49	562.	1 JAN 0605	73	505.
1 JAN 0010	2	0.	1 JAN 0210	26	5.	1 JAN 0410	50	556.	1 JAN 0610	74	502.
1 JAN 0015	3	0.	1 JAN 0215	27	9.	1 JAN 0415	51	546.	1 JAN 0615	75	496.
1 JAN 0020	4	0.	1 JAN 0220	28	16.	1 JAN 0420	52	533.	1 JAN 0620	76	490.
1 JAN 0025	5	0.	1 JAN 0225	29	27.	1 JAN 0425	53	518.	1 JAN 0625	77	484.
1 JAN 0030	6	0.	1 JAN 0230	30	46.	1 JAN 0430	54	501.	1 JAN 0630	78	478.
1 JAN 0035	7	0.	1 JAN 0235	31	73.	1 JAN 0435	55	486.	1 JAN 0635	79	469.
1 JAN 0040	8	0.	1 JAN 0240	32	107.	1 JAN 0440	56	473.	1 JAN 0640	80	457.
1 JAN 0045	9	0.	1 JAN 0245	33	149.	1 JAN 0445	57	464.	1 JAN 0645	81	442.
1 JAN 0050	10	0.	1 JAN 0250	34	194.	1 JAN 0450	58	458.	1 JAN 0650	82	424.
1 JAN 0055	11	0.	1 JAN 0255	35	244.	1 JAN 0455	59	455.	1 JAN 0655	83	405.
1 JAN 0100	12	0.	1 JAN 0300	36	295.	1 JAN 0500	60	455.	1 JAN 0700	84	383.
1 JAN 0105	13	0.	1 JAN 0305	37	343.	1 JAN 0505	61	459.	1 JAN 0705	85	359.
1 JAN 0110	14	0.	1 JAN 0310	38	387.	1 JAN 0510	62	464.	1 JAN 0710	86	335.
1 JAN 0115	15	0.	1 JAN 0315	39	425.	1 JAN 0515	63	469.	1 JAN 0715	87	311.
1 JAN 0120	16	0.	1 JAN 0320	40	458.	1 JAN 0520	64	476.	1 JAN 0720	88	288.
1 JAN 0125	17	0.	1 JAN 0325	41	485.	1 JAN 0525	65	483.	1 JAN 0725	89	266.
1 JAN 0130	18	0.	1 JAN 0330	42	506.	1 JAN 0530	66	491.	1 JAN 0730	90	245.
1 JAN 0135	19	0.	1 JAN 0335	43	524.	1 JAN 0535	67	497.	1 JAN 0735	91	225.
1 JAN 0140	20	0.	1 JAN 0340	44	538.	1 JAN 0540	68	502.	1 JAN 0740	92	207.
1 JAN 0145	21	0.	1 JAN 0345	45	550.	1 JAN 0545	69	505.	1 JAN 0745	93	189.
1 JAN 0150	22	0.	1 JAN 0350	46	558.	1 JAN 0550	70	507.	1 JAN 0750	94	173.
1 JAN 0155	23	0.	1 JAN 0355	47	563.	1 JAN 0555	71	508.	1 JAN 0755	95	158.
1 JAN 0200	24	0.	1 JAN 0400	48	565.	1 JAN 0600	72	507.	1 JAN 0800	96	144.

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 565.	3.92	(CFS)	379.	287.	287.	287.
		(INCHES)	0.792	0.792	0.792	0.792
		(AC-FT)	188.	188.	188.	188.

CUMULATIVE AREA = 4.45 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /INCLINE CR/SR28 PT13/FLOW/01JAN1999/5MIN//

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389 KK      *        I2R  *      Route Incline to mouth at 3 fps
            *             *
            **************

            HYDROGRAPH ROUTING DATA

390 RM        MUSKINGUM ROUTING
                    NSTPS          4 NUMBER OF SUBREACHES
                    AMSKK       0.33 MUSKINGUM K
                        X       0.40 MUSKINGUM X

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HYDROGRAPH AT STATION I2R

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	0.	1 JAN 0405	49	549.	1 JAN 0605	73	505.
1 JAN 0010	2	0.	1 JAN 0210	26	0.	1 JAN 0410	50	557.	1 JAN 0610	74	507.
1 JAN 0015	3	0.	1 JAN 0215	27	0.	1 JAN 0415	51	562.	1 JAN 0615	75	507.
1 JAN 0020	4	0.	1 JAN 0220	28	1.	1 JAN 0420	52	563.	1 JAN 0620	76	507.
1 JAN 0025	5	0.	1 JAN 0225	29	3.	1 JAN 0425	53	560.	1 JAN 0625	77	505.
1 JAN 0030	6	0.	1 JAN 0230	30	6.	1 JAN 0430	54	554.	1 JAN 0630	78	501.
1 JAN 0035	7	0.	1 JAN 0235	31	10.	1 JAN 0435	55	544.	1 JAN 0635	79	496.
1 JAN 0040	8	0.	1 JAN 0240	32	18.	1 JAN 0440	56	532.	1 JAN 0640	80	490.
1 JAN 0045	9	0.	1 JAN 0245	33	31.	1 JAN 0445	57	517.	1 JAN 0645	81	484.
1 JAN 0050	10	0.	1 JAN 0250	34	50.	1 JAN 0450	58	501.	1 JAN 0650	82	477.
1 JAN 0055	11	0.	1 JAN 0255	35	77.	1 JAN 0455	59	486.	1 JAN 0655	83	467.
1 JAN 0100	12	0.	1 JAN 0300	36	112.	1 JAN 0500	60	474.	1 JAN 0700	84	455.
1 JAN 0105	13	0.	1 JAN 0305	37	152.	1 JAN 0505	61	465.	1 JAN 0705	85	440.
1 JAN 0110	14	0.	1 JAN 0310	38	198.	1 JAN 0510	62	459.	1 JAN 0710	86	423.
1 JAN 0115	15	0.	1 JAN 0315	39	247.	1 JAN 0515	63	456.	1 JAN 0715	87	403.
1 JAN 0120	16	0.	1 JAN 0320	40	296.	1 JAN 0520	64	457.	1 JAN 0720	88	381.
1 JAN 0125	17	0.	1 JAN 0325	41	343.	1 JAN 0525	65	459.	1 JAN 0725	89	358.
1 JAN 0130	18	0.	1 JAN 0330	42	387.	1 JAN 0530	66	464.	1 JAN 0730	90	334.
1 JAN 0135	19	0.	1 JAN 0335	43	425.	1 JAN 0535	67	470.	1 JAN 0735	91	310.
1 JAN 0140	20	0.	1 JAN 0340	44	457.	1 JAN 0540	68	477.	1 JAN 0740	92	287.
1 JAN 0145	21	0.	1 JAN 0345	45	484.	1 JAN 0545	69	484.	1 JAN 0745	93	265.
1 JAN 0150	22	0.	1 JAN 0350	46	505.	1 JAN 0550	70	490.	1 JAN 0750	94	244.
1 JAN 0155	23	0.	1 JAN 0355	47	523.	1 JAN 0555	71	497.	1 JAN 0755	95	225.
1 JAN 0200	24	0.	1 JAN 0400	48	538.	1 JAN 0600	72	501.	1 JAN 0800	96	206.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 563.	4.25	(CFS)	370.	280.	280.	280.
		(INCHES)	0.772	0.772	0.772	0.772
		(AC-FT)	183.	183.	183.	183.

CUMULATIVE AREA = 4.45 SQ MI

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            **************
            *            *
391 KK      *        I3  *      Incline Cr at mouth
            *            *
            **************

395 IN        TIME DATA FOR INPUT TIME SERIES
                    JXMIN          15  TIME INTERVAL IN MINUTES
                   JXDATE      1JAN99  STARTING DATE
                   JXTIME           5  STARTING TIME

            SUBBASIN RUNOFF DATA

392 BA        SUBBASIN CHARACTERISTICS
                    TAREA        0.26  SUBBASIN AREA

393 BF        BASE FLOW CHARACTERISTICS
                    STRTQ        0.00  INITIAL FLOW
                    QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                    RTIOR     1.50000  RECESSION CONSTANT

              PRECIPITATION DATA

394 PB              STORM        1.38  BASIN TOTAL PRECIPITATION

396 PI          INCREMENTAL PRECIPITATION PATTERN
                  0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                  0.67      0.67      1.00      1.00      1.00      2.67      2.67      2.67      3.67      3.67
                  3.67      6.67      6.67      6.67      1.67      1.67      1.67      1.67      1.67      1.67
                  1.67      1.67      1.67      1.67      1.67      1.67      1.67      1.67      1.67      1.67
                  1.67      1.67      1.00      1.00      1.00      0.67      0.67      0.67      0.67      0.67
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                0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.33
                0.33      0.33

400 LS        SCS LOSS RATE
                STRTL        0.40  INITIAL ABSTRACTION
                CRVNBR      83.34  CURVE NUMBER
                RTIMP        0.00  PERCENT IMPERVIOUS AREA

401 UI        INPUT UNITGRAPH,   9 ORDINATES,  VOLUME = 1.00
                270.0     563.0     459.0     304.0     179.0     111.0      69.0      40.0      17.0
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HYDROGRAPH AT STATION I3

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1	JAN	0005	1	0.00	0.00	0.00	0.	1	JAN	0405	49	0.01	0.00	0.00	11.
1	JAN	0010	2	0.01	0.01	0.00	0.	1	JAN	0410	50	0.01	0.00	0.00	10.
1	JAN	0015	3	0.01	0.01	0.00	0.	1	JAN	0415	51	0.01	0.00	0.00	9.
1	JAN	0020	4	0.01	0.01	0.00	0.	1	JAN	0420	52	0.01	0.00	0.00	9.
1	JAN	0025	5	0.01	0.01	0.00	0.	1	JAN	0425	53	0.01	0.00	0.00	9.
1	JAN	0030	6	0.01	0.01	0.00	0.	1	JAN	0430	54	0.01	0.00	0.00	9.
1	JAN	0035	7	0.01	0.01	0.00	0.	1	JAN	0435	55	0.01	0.00	0.00	9.
1	JAN	0040	8	0.01	0.01	0.00	0.	1	JAN	0440	56	0.01	0.00	0.00	9.
1	JAN	0045	9	0.01	0.01	0.00	0.	1	JAN	0445	57	0.01	0.00	0.00	9.
1	JAN	0050	10	0.01	0.01	0.00	0.	1	JAN	0450	58	0.01	0.00	0.00	9.
1	JAN	0055	11	0.01	0.01	0.00	0.	1	JAN	0455	59	0.01	0.00	0.00	9.
1	JAN	0100	12	0.01	0.01	0.00	0.	1	JAN	0500	60	0.01	0.00	0.00	9.
1	JAN	0105	13	0.01	0.01	0.00	0.	1	JAN	0505	61	0.01	0.00	0.00	9.
1	JAN	0110	14	0.01	0.01	0.00	0.	1	JAN	0510	62	0.01	0.00	0.00	10.
1	JAN	0115	15	0.01	0.01	0.00	0.	1	JAN	0515	63	0.01	0.00	0.00	10.
1	JAN	0120	16	0.01	0.01	0.00	0.	1	JAN	0520	64	0.01	0.00	0.00	10.
1	JAN	0125	17	0.04	0.04	0.00	0.	1	JAN	0525	65	0.01	0.00	0.00	10.
1	JAN	0130	18	0.04	0.04	0.00	0.	1	JAN	0530	66	0.01	0.00	0.00	10.
1	JAN	0135	19	0.04	0.04	0.00	0.	1	JAN	0535	67	0.01	0.00	0.00	10.
1	JAN	0140	20	0.05	0.05	0.00	0.	1	JAN	0540	68	0.01	0.00	0.00	10.
1	JAN	0145	21	0.05	0.05	0.00	0.	1	JAN	0545	69	0.01	0.00	0.00	10.
1	JAN	0150	22	0.05	0.05	0.00	0.	1	JAN	0550	70	0.01	0.00	0.01	10.
1	JAN	0155	23	0.09	0.09	0.01	1.	1	JAN	0555	71	0.00	0.00	0.00	9.
1	JAN	0200	24	0.09	0.08	0.01	6.	1	JAN	0600	72	0.00	0.00	0.00	8.
1	JAN	0205	25	0.09	0.07	0.02	15.	1	JAN	0605	73	0.00	0.00	0.00	7.
1	JAN	0210	26	0.02	0.02	0.01	20.	1	JAN	0610	74	0.00	0.00	0.00	5.
1	JAN	0215	27	0.02	0.02	0.01	18.	1	JAN	0615	75	0.00	0.00	0.00	4.
1	JAN	0220	28	0.02	0.02	0.01	16.	1	JAN	0620	76	0.00	0.00	0.00	2.
1	JAN	0225	29	0.02	0.02	0.01	15.	1	JAN	0625	77	0.00	0.00	0.00	1.
1	JAN	0230	30	0.02	0.02	0.01	15.	1	JAN	0630	78	0.00	0.00	0.00	1.
1	JAN	0235	31	0.02	0.02	0.01	14.	1	JAN	0635	79	0.00	0.00	0.00	1.
1	JAN	0240	32	0.02	0.02	0.01	14.	1	JAN	0640	80	0.00	0.00	0.00	1.
1	JAN	0245	33	0.02	0.02	0.01	15.	1	JAN	0645	81	0.00	0.00	0.00	1.
1	JAN	0250	34	0.02	0.01	0.01	15.	1	JAN	0650	82	0.00	0.00	0.00	1.
1	JAN	0255	35	0.02	0.01	0.01	16.	1	JAN	0655	83	0.00	0.00	0.00	1.
1	JAN	0300	36	0.02	0.01	0.01	16.	1	JAN	0700	84	0.00	0.00	0.00	1.
1	JAN	0305	37	0.02	0.01	0.01	17.	1	JAN	0705	85	0.00	0.00	0.00	1.
1	JAN	0310	38	0.02	0.01	0.01	17.	1	JAN	0710	86	0.00	0.00	0.00	1.
1	JAN	0315	39	0.02	0.01	0.01	18.	1	JAN	0715	87	0.00	0.00	0.00	1.
1	JAN	0320	40	0.02	0.01	0.01	18.	1	JAN	0720	88	0.00	0.00	0.00	1.
1	JAN	0325	41	0.02	0.01	0.01	19.	1	JAN	0725	89	0.00	0.00	0.00	1.
1	JAN	0330	42	0.02	0.01	0.01	19.	1	JAN	0730	90	0.00	0.00	0.00	1.
1	JAN	0335	43	0.02	0.01	0.01	20.	1	JAN	0735	91	0.00	0.00	0.00	1.
1	JAN	0340	44	0.01	0.01	0.01	19.	1	JAN	0740	92	0.00	0.00	0.00	1.
1	JAN	0345	45	0.01	0.01	0.01	17.	1	JAN	0745	93	0.00	0.00	0.00	1.
1	JAN	0350	46	0.01	0.01	0.01	15.	1	JAN	0750	94	0.00	0.00	0.00	1.
1	JAN	0355	47	0.01	0.00	0.00	14.	1	JAN	0755	95	0.00	0.00	0.00	1.
1	JAN	0400	48	0.01	0.00	0.00	12.	1	JAN	0800	96	0.00	0.00	0.00	1.

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   TOTAL RAINFALL =    1.38, TOTAL LOSS =    1.06, TOTAL EXCESS =    0.32

 PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR      7.92-HR
+   (CFS)        (HR)
                                    (CFS)
+     20.        3.50                  9.          7.          7.          7.
                                  (INCHES)     0.328       0.328       0.328       0.328
                                   (AC-FT)       5.          5.          5.          5.

                                CUMULATIVE AREA =    0.26 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /INCLINE CR/MOUTH LOCAL/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
403 KK      *     I3C    *     Combine Incline at mouth, Pt 14
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          *            *
          **************

404 HC          HYDROGRAPH COMBINATION
                     ICOMP          3  NUMBER OF HYDROGRAPHS TO COMBINE

                                                   ***
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HYDROGRAPH AT STATION I3C
SUM OF 3 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	0.	1 JAN 0205	25	15.	1 JAN 0405	49	691.	1 JAN 0605	73	633.
1 JAN 0010	2	0.	1 JAN 0210	26	20.	1 JAN 0410	50	696.	1 JAN 0610	74	635.
1 JAN 0015	3	0.	1 JAN 0215	27	18.	1 JAN 0415	51	698.	1 JAN 0615	75	635.
1 JAN 0020	4	0.	1 JAN 0220	28	17.	1 JAN 0420	52	696.	1 JAN 0620	76	633.
1 JAN 0025	5	0.	1 JAN 0225	29	18.	1 JAN 0425	53	691.	1 JAN 0625	77	629.
1 JAN 0030	6	0.	1 JAN 0230	30	22.	1 JAN 0430	54	683.	1 JAN 0630	78	623.
1 JAN 0035	7	0.	1 JAN 0235	31	30.	1 JAN 0435	55	672.	1 JAN 0635	79	614.
1 JAN 0040	8	0.	1 JAN 0240	32	43.	1 JAN 0440	56	657.	1 JAN 0640	80	603.
1 JAN 0045	9	0.	1 JAN 0245	33	61.	1 JAN 0445	57	640.	1 JAN 0645	81	591.
1 JAN 0050	10	0.	1 JAN 0250	34	87.	1 JAN 0450	58	621.	1 JAN 0650	82	578.
1 JAN 0055	11	0.	1 JAN 0255	35	120.	1 JAN 0455	59	603.	1 JAN 0655	83	564.
1 JAN 0100	12	0.	1 JAN 0300	36	160.	1 JAN 0500	60	586.	1 JAN 0700	84	548.
1 JAN 0105	13	0.	1 JAN 0305	37	206.	1 JAN 0505	61	573.	1 JAN 0705	85	529.
1 JAN 0110	14	0.	1 JAN 0310	38	258.	1 JAN 0510	62	565.	1 JAN 0710	86	507.
1 JAN 0115	15	0.	1 JAN 0315	39	315.	1 JAN 0515	63	561.	1 JAN 0715	87	482.
1 JAN 0120	16	0.	1 JAN 0320	40	375.	1 JAN 0520	64	561.	1 JAN 0720	88	455.
1 JAN 0125	17	0.	1 JAN 0325	41	435.	1 JAN 0525	65	566.	1 JAN 0725	89	424.
1 JAN 0130	18	0.	1 JAN 0330	42	493.	1 JAN 0530	66	574.	1 JAN 0730	90	393.
1 JAN 0135	19	0.	1 JAN 0335	43	545.	1 JAN 0535	67	584.	1 JAN 0735	91	361.
1 JAN 0140	20	0.	1 JAN 0340	44	589.	1 JAN 0540	68	594.	1 JAN 0740	92	330.
1 JAN 0145	21	0.	1 JAN 0345	45	623.	1 JAN 0545	69	604.	1 JAN 0745	93	301.
1 JAN 0150	22	0.	1 JAN 0350	46	649.	1 JAN 0550	70	614.	1 JAN 0750	94	274.
1 JAN 0155	23	1.	1 JAN 0355	47	669.	1 JAN 0555	71	622.	1 JAN 0755	95	249.
1 JAN 0200	24	6.	1 JAN 0400	48	682.	1 JAN 0600	72	628.	1 JAN 0800	96	227.

```
 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR       7.92-HR
+   (CFS)       (HR)
                          (CFS)
+    698.       4.17                460.         349.         349.         349.
                         (INCHES)   0.642        0.642        0.642        0.642
                          (AC-FT)   228.         228.         228.         228.

                         CUMULATIVE AREA =     6.67 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /INCLINE CR/MOUTH PT14/FLOW/01JAN1999/5MIN//


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
406 KK    *        M1  *     Mill Cr above Res #2
          *            *
          **************
                         There is no Res #1 upstream of #2

411 IN          TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE      1JAN99  STARTING DATE
                    JXTIME           5  STARTING TIME

              SUBBASIN RUNOFF DATA

408 BA          SUBBASIN CHARACTERISTICS
                     TAREA        1.26  SUBBASIN AREA

409 BF          BASE FLOW CHARACTERISTICS
                     STRTQ        5.00  INITIAL FLOW
                     QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                     RTIOR     1.03000  RECESSION CONSTANT

                PRECIPITATION DATA

410 PB               STORM        3.04  BASIN TOTAL PRECIPITATION

412 PI            INCREMENTAL PRECIPITATION PATTERN
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                    1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                    3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                    1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                    0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                    1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                    0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
```

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                    0.67       0.67

416 LS          SCS LOSS RATE
                     STRTL        1.02  INITIAL ABSTRACTION
                    CRVNBR       66.32  CURVE NUMBER
                     RTIMP        0.00  PERCENT IMPERVIOUS AREA

417 UI          INPUT UNITGRAPH,  21 ORDINATES,  VOLUME = 1.00
                   265.0     741.0    1070.0    1230.0    1158.0    1000.0     856.0     716.0     581.0     452.0
                   362.0     295.0     240.0     196.0     161.0     128.0     104.0      80.0      60.0      40.0
                    19.0
                                                                                                   ***
*****************************************************************************************************************
                                                HYDROGRAPH AT STATION      M1
*****************************************************************************************************************
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0005	1	0.00	0.00	0.00	5.
1 JAN 0010	2	0.02	0.02	0.00	5.
1 JAN 0015	3	0.02	0.02	0.00	5.
1 JAN 0020	4	0.02	0.02	0.00	5.
1 JAN 0025	5	0.02	0.02	0.00	5.
1 JAN 0030	6	0.02	0.02	0.00	5.
1 JAN 0035	7	0.02	0.02	0.00	5.
1 JAN 0040	8	0.02	0.02	0.00	5.
1 JAN 0045	9	0.02	0.02	0.00	5.
1 JAN 0050	10	0.02	0.02	0.00	5.
1 JAN 0055	11	0.03	0.03	0.00	5.
1 JAN 0100	12	0.03	0.03	0.00	5.
1 JAN 0105	13	0.03	0.03	0.00	5.
1 JAN 0110	14	0.01	0.01	0.00	5.
1 JAN 0115	15	0.01	0.01	0.00	5.
1 JAN 0120	16	0.01	0.01	0.00	5.
1 JAN 0125	17	0.03	0.03	0.00	5.
1 JAN 0130	18	0.03	0.03	0.00	5.
1 JAN 0135	19	0.03	0.03	0.00	5.
1 JAN 0140	20	0.11	0.11	0.00	5.
1 JAN 0145	21	0.11	0.11	0.00	5.
1 JAN 0150	22	0.11	0.11	0.00	5.
1 JAN 0155	23	0.21	0.21	0.00	5.
1 JAN 0200	24	0.21	0.21	0.00	6.
1 JAN 0205	25	0.21	0.19	0.02	13.
1 JAN 0210	26	0.12	0.10	0.02	28.
1 JAN 0215	27	0.12	0.10	0.02	49.
1 JAN 0220	28	0.12	0.10	0.03	75.
1 JAN 0225	29	0.07	0.05	0.02	100.
1 JAN 0230	30	0.07	0.05	0.02	120.
1 JAN 0235	31	0.07	0.05	0.02	136.
1 JAN 0240	32	0.04	0.03	0.01	146.
1 JAN 0245	33	0.04	0.03	0.01	151.
1 JAN 0250	34	0.04	0.03	0.01	151.
1 JAN 0255	35	0.04	0.03	0.01	148.
1 JAN 0300	36	0.04	0.03	0.01	145.
1 JAN 0305	37	0.04	0.03	0.01	143.
1 JAN 0310	38	0.04	0.03	0.01	142.
1 JAN 0315	39	0.04	0.03	0.01	142.
1 JAN 0320	40	0.04	0.03	0.01	142.
1 JAN 0325	41	0.02	0.01	0.01	141.
1 JAN 0330	42	0.02	0.01	0.01	137.
1 JAN 0335	43	0.02	0.01	0.01	130.
1 JAN 0340	44	0.01	0.01	0.00	121.
1 JAN 0345	45	0.01	0.01	0.00	110.
1 JAN 0350	46	0.01	0.01	0.00	99.
1 JAN 0355	47	0.01	0.01	0.00	89.
1 JAN 0400	48	0.01	0.01	0.00	79.
1 JAN 0405	49	0.01	0.01	0.00	72.
1 JAN 0410	50	0.03	0.02	0.01	68.
1 JAN 0415	51	0.03	0.02	0.01	69.
1 JAN 0420	52	0.03	0.02	0.01	73.
1 JAN 0425	53	0.03	0.02	0.01	81.
1 JAN 0430	54	0.03	0.02	0.01	88.
1 JAN 0435	55	0.03	0.02	0.01	95.
1 JAN 0440	56	0.03	0.02	0.01	101.
1 JAN 0445	57	0.03	0.02	0.01	106.
1 JAN 0450	58	0.03	0.02	0.01	111.
1 JAN 0455	59	0.03	0.02	0.01	115.
1 JAN 0500	60	0.03	0.02	0.01	118.
1 JAN 0505	61	0.03	0.02	0.01	121.
1 JAN 0510	62	0.02	0.01	0.01	123.
1 JAN 0515	63	0.02	0.01	0.01	123.
1 JAN 0520	64	0.02	0.01	0.01	120.
1 JAN 0525	65	0.02	0.01	0.01	117.
1 JAN 0530	66	0.02	0.01	0.01	113.
1 JAN 0535	67	0.02	0.01	0.01	111.
1 JAN 0540	68	0.02	0.01	0.01	108.
1 JAN 0545	69	0.02	0.01	0.01	106.
1 JAN 0550	70	0.02	0.01	0.01	104.
1 JAN 0555	71	0.02	0.01	0.01	103.
1 JAN 0600	72	0.02	0.01	0.01	102.
1 JAN 0605	73	0.02	0.01	0.01	101.
1 JAN 0610	74	0.00	0.00	0.00	98.
1 JAN 0615	75	0.00	0.00	0.00	91.
1 JAN 0620	76	0.00	0.00	0.00	80.
1 JAN 0625	77	0.00	0.00	0.00	68.
1 JAN 0630	78	0.00	0.00	0.00	56.
1 JAN 0635	79	0.00	0.00	0.00	46.
1 JAN 0640	80	0.00	0.00	0.00	38.
1 JAN 0645	81	0.00	0.00	0.00	31.
1 JAN 0650	82	0.00	0.00	0.00	25.
1 JAN 0655	83	0.00	0.00	0.00	20.
1 JAN 0700	84	0.00	0.00	0.00	17.
1 JAN 0705	85	0.00	0.00	0.00	14.
1 JAN 0710	86	0.00	0.00	0.00	12.
1 JAN 0715	87	0.00	0.00	0.00	10.
1 JAN 0720	88	0.00	0.00	0.00	8.
1 JAN 0725	89	0.00	0.00	0.00	8.
1 JAN 0730	90	0.00	0.00	0.00	8.
1 JAN 0735	91	0.00	0.00	0.00	7.
1 JAN 0740	92	0.00	0.00	0.00	7.
1 JAN 0745	93	0.00	0.00	0.00	7.
1 JAN 0750	94	0.00	0.00	0.00	7.
1 JAN 0755	95	0.00	0.00	0.00	7.
1 JAN 0800	96	0.00	0.00	0.00	7.

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*****************************************************************************************************************
    TOTAL RAINFALL =    3.04, TOTAL LOSS =    2.46, TOTAL EXCESS =    0.58

  PEAK FLOW      TIME                          MAXIMUM AVERAGE FLOW
+   (CFS)        (HR)                 6-HR        24-HR        72-HR       7.92-HR
                                    (CFS)
+    151.        2.75                 83.          64.          64.          64.
                                 (INCHES)        0.611        0.622        0.622        0.622
                                   (AC-FT)         41.          42.          42.          42.

                                CUMULATIVE AREA =    1.26 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /MILL CR/RES INFLOW/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
421 KK      *     MRR    *     Route through Mill Cr #2 Res
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*            *
**************
                    Route through Mill Cr #2 Res
                    Spillway crest=6409', Dam crest=6414'
                    8" Suction pipe outlet at 6400', assume 5 cfs capacity
                    25AF storage subtracted from actual S/E curve
                    to approximate operation

              HYDROGRAPH ROUTING DATA

427 RS          STORAGE ROUTING
                     NSTPS          1  NUMBER OF SUBREACHES
                      ITYP       STOR  TYPE OF INITIAL CONDITION
                    RSVRIC       0.00  INITIAL CONDITION
                         X       0.00 WORKING R AND D COEFFICIENT

428 SV            STORAGE        0.0      11.0      25.0      26.5      41.0      45.0      64.0

429 SQ          DISCHARGE         5.       5.        5.       36.      374.      1487.    16724.

430 SE          ELEVATION     6400.00   6405.00   6409.00   6410.00   6414.00   6415.00   6420.00

                                                                  ***

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN    1487. TO    16724.
                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.)
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HYDROGRAPH AT STATION MRR

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
1	JAN	0005	1	5.	0.0	6400.0	1	JAN	0245	33	5.	4.8	6402.2	1	JAN	0525	65	64.	27.7	6410.3
1	JAN	0010	2	5.	0.0	6400.0	1	JAN	0250	34	5.	5.8	6402.6	1	JAN	0530	66	72.	28.0	6410.4
1	JAN	0015	3	5.	0.0	6400.0	1	JAN	0255	35	5.	6.8	6403.1	1	JAN	0535	67	78.	28.3	6410.5
1	JAN	0020	4	5.	0.0	6400.0	1	JAN	0300	36	5.	7.8	6403.5	1	JAN	0540	68	82.	28.5	6410.5
1	JAN	0025	5	5.	0.0	6400.0	1	JAN	0305	37	5.	8.7	6404.0	1	JAN	0545	69	86.	28.6	6410.6
1	JAN	0030	6	5.	0.0	6400.0	1	JAN	0310	38	5.	9.7	6404.4	1	JAN	0550	70	89.	28.8	6410.6
1	JAN	0035	7	5.	0.0	6400.0	1	JAN	0315	39	5.	10.6	6404.8	1	JAN	0555	71	91.	28.9	6410.7
1	JAN	0040	8	5.	0.0	6400.0	1	JAN	0320	40	5.	11.6	6405.2	1	JAN	0600	72	93.	28.9	6410.7
1	JAN	0045	9	5.	0.0	6400.0	1	JAN	0325	41	5.	12.5	6405.4	1	JAN	0605	73	94.	29.0	6410.7
1	JAN	0050	10	5.	0.0	6400.0	1	JAN	0330	42	5.	13.4	6405.7	1	JAN	0610	74	95.	29.0	6410.7
1	JAN	0055	11	5.	0.0	6400.0	1	JAN	0335	43	5.	14.3	6405.9	1	JAN	0615	75	95.	29.0	6410.7
1	JAN	0100	12	5.	0.0	6400.0	1	JAN	0340	44	5.	15.1	6406.2	1	JAN	0620	76	93.	29.0	6410.7
1	JAN	0105	13	5.	0.0	6400.0	1	JAN	0345	45	5.	15.9	6406.4	1	JAN	0625	77	91.	28.8	6410.6
1	JAN	0110	14	5.	0.0	6400.0	1	JAN	0350	46	5.	16.6	6406.6	1	JAN	0630	78	86.	28.7	6410.6
1	JAN	0115	15	5.	0.0	6400.0	1	JAN	0355	47	5.	17.2	6406.8	1	JAN	0635	79	81.	28.4	6410.5
1	JAN	0120	16	5.	0.0	6400.0	1	JAN	0400	48	5.	17.8	6406.9	1	JAN	0640	80	75.	28.2	6410.5
1	JAN	0125	17	5.	0.0	6400.0	1	JAN	0405	49	5.	18.2	6407.1	1	JAN	0645	81	69.	27.9	6410.4
1	JAN	0130	18	5.	0.0	6400.0	1	JAN	0410	50	5.	18.7	6407.2	1	JAN	0650	82	63.	27.7	6410.3
1	JAN	0135	19	5.	0.0	6400.0	1	JAN	0415	51	5.	19.1	6407.3	1	JAN	0655	83	57.	27.4	6410.2
1	JAN	0140	20	5.	0.0	6400.0	1	JAN	0420	52	5.	19.6	6407.5	1	JAN	0700	84	51.	27.2	6410.2
1	JAN	0145	21	5.	0.0	6400.0	1	JAN	0425	53	5.	20.1	6407.6	1	JAN	0705	85	46.	26.9	6410.1
1	JAN	0150	22	5.	0.0	6400.0	1	JAN	0430	54	5.	20.6	6407.7	1	JAN	0710	86	41.	26.7	6410.1
1	JAN	0155	23	5.	0.0	6400.0	1	JAN	0435	55	5.	21.2	6407.9	1	JAN	0715	87	37.	26.5	6410.0
1	JAN	0200	24	5.	0.0	6400.0	1	JAN	0440	56	5.	21.9	6408.1	1	JAN	0720	88	33.	26.3	6409.9
1	JAN	0205	25	5.	0.0	6400.0	1	JAN	0445	57	5.	22.5	6408.3	1	JAN	0725	89	30.	26.2	6409.8
1	JAN	0210	26	5.	0.1	6400.1	1	JAN	0450	58	5.	23.2	6408.5	1	JAN	0730	90	27.	26.0	6409.7
1	JAN	0215	27	5.	0.3	6400.2	1	JAN	0455	59	5.	24.0	6408.7	1	JAN	0735	91	24.	25.9	6409.6
1	JAN	0220	28	5.	0.7	6400.3	1	JAN	0500	60	5.	24.7	6408.9	1	JAN	0740	92	22.	25.8	6409.5
1	JAN	0225	29	5.	1.3	6400.6	1	JAN	0505	61	15.	25.5	6409.3	1	JAN	0745	93	20.	25.7	6409.5
1	JAN	0230	30	5.	2.0	6400.9	1	JAN	0510	62	30.	26.2	6409.8	1	JAN	0750	94	18.	25.6	6409.4
1	JAN	0235	31	5.	2.9	6401.3	1	JAN	0515	63	43.	26.8	6410.1	1	JAN	0755	95	17.	25.6	6409.4
1	JAN	0240	32	5.	3.8	6401.7	1	JAN	0520	64	54.	27.3	6410.2	1	JAN	0800	96	16.	25.5	6409.3

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
		(CFS)				
95.	6.08		31.	25.	25.	25.
		(INCHES)	0.231	0.243	0.243	0.243
		(AC-FT)	16.	16.	16.	16.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	7.92-HR
29.	6.08	20.	15.	15.	15.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	7.92-HR
6410.70	6.08	6407.52	6405.70	6405.70	6405.70

CUMULATIVE AREA = 1.26 SQ MI

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-----DSS---ZWRITE Unit  71; Vers.    2:  /MILL CR/RES OUTFLOW/FLOW/01JAN1999/5MIN//
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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
432 KK        *     M1R    *     Route Mill to SR 28 at 3 fps
              *            *
              **************

                HYDROGRAPH ROUTING DATA

433 RM            MUSKINGUM ROUTING
                       NSTPS          1 NUMBER OF SUBREACHES
                       AMSKK       0.09 MUSKINGUM K
                           X       0.40 MUSKINGUM X

                                                                  ***
*****************************************************************************************************************************************
                                                HYDROGRAPH AT STATION      M1R
*****************************************************************************************************************************************
```

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	5.	1 JAN 0205	25	5.	1 JAN 0405	49	5.	1 JAN 0605	73	93.
1 JAN 0010	2	5.	1 JAN 0210	26	5.	1 JAN 0410	50	5.	1 JAN 0610	74	94.
1 JAN 0015	3	5.	1 JAN 0215	27	5.	1 JAN 0415	51	5.	1 JAN 0615	75	95.
1 JAN 0020	4	5.	1 JAN 0220	28	5.	1 JAN 0420	52	5.	1 JAN 0620	76	95.
1 JAN 0025	5	5.	1 JAN 0225	29	5.	1 JAN 0425	53	5.	1 JAN 0625	77	93.
1 JAN 0030	6	5.	1 JAN 0230	30	5.	1 JAN 0430	54	5.	1 JAN 0630	78	91.
1 JAN 0035	7	5.	1 JAN 0235	31	5.	1 JAN 0435	55	5.	1 JAN 0635	79	87.
1 JAN 0040	8	5.	1 JAN 0240	32	5.	1 JAN 0440	56	5.	1 JAN 0640	80	81.
1 JAN 0045	9	5.	1 JAN 0245	33	5.	1 JAN 0445	57	5.	1 JAN 0645	81	76.
1 JAN 0050	10	5.	1 JAN 0250	34	5.	1 JAN 0450	58	5.	1 JAN 0650	82	70.
1 JAN 0055	11	5.	1 JAN 0255	35	5.	1 JAN 0455	59	5.	1 JAN 0655	83	63.
1 JAN 0100	12	5.	1 JAN 0300	36	5.	1 JAN 0500	60	5.	1 JAN 0700	84	57.
1 JAN 0105	13	5.	1 JAN 0305	37	5.	1 JAN 0505	61	6.	1 JAN 0705	85	52.
1 JAN 0110	14	5.	1 JAN 0310	38	5.	1 JAN 0510	62	15.	1 JAN 0710	86	46.
1 JAN 0115	15	5.	1 JAN 0315	39	5.	1 JAN 0515	63	29.	1 JAN 0715	87	41.
1 JAN 0120	16	5.	1 JAN 0320	40	5.	1 JAN 0520	64	42.	1 JAN 0720	88	37.
1 JAN 0125	17	5.	1 JAN 0325	41	5.	1 JAN 0525	65	53.	1 JAN 0725	89	33.
1 JAN 0130	18	5.	1 JAN 0330	42	5.	1 JAN 0530	66	63.	1 JAN 0730	90	30.
1 JAN 0135	19	5.	1 JAN 0335	43	5.	1 JAN 0535	67	71.	1 JAN 0735	91	27.
1 JAN 0140	20	5.	1 JAN 0340	44	5.	1 JAN 0540	68	77.	1 JAN 0740	92	24.
1 JAN 0145	21	5.	1 JAN 0345	45	5.	1 JAN 0545	69	82.	1 JAN 0745	93	22.
1 JAN 0150	22	5.	1 JAN 0350	46	5.	1 JAN 0550	70	86.	1 JAN 0750	94	20.
1 JAN 0155	23	5.	1 JAN 0355	47	5.	1 JAN 0555	71	89.	1 JAN 0755	95	18.
1 JAN 0200	24	5.	1 JAN 0400	48	5.	1 JAN 0600	72	91.	1 JAN 0800	96	17.

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*****************************************************************************************************************************************
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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 95.	6.17	(CFS)	31.	25.	25.	25.
		(INCHES)	0.229	0.241	0.241	0.241
		(AC-FT)	15.	16.	16.	16.

CUMULATIVE AREA = 1.26 SQ MI

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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

              **************
              *            *
434 KK        *     M2     *     Mill Cr btw dam and SR 28
              *            *
              **************

                SUBBASIN RUNOFF DATA

435 BA            SUBBASIN CHARACTERISTICS
                       TAREA          0.06  SUBBASIN AREA

436 BF            BASE FLOW CHARACTERISTICS
                       STRTQ          0.00  INITIAL FLOW
                       QRCSN         -0.05  BEGIN BASE FLOW RECESSION
                       RTIOR      1.50000  RECESSION CONSTANT

                  PRECIPITATION DATA

437 PB                 STORM          1.82  BASIN TOTAL PRECIPITATION

412 PI            INCREMENTAL PRECIPITATION PATTERN
                       0.67       0.67       0.67       0.67       0.67       0.67       0.67       0.67       0.67       1.00
                       1.00       1.00       0.33       0.33       0.33       1.00       1.00       1.00       3.67       3.67
                       3.67       7.00       7.00       7.00       4.00       4.00       4.00       2.33       2.33       2.33
                       1.33       1.33       1.33       1.33       1.33       1.33       1.33       1.33       1.33       0.67
                       0.67       0.67       0.33       0.33       0.33       0.33       0.33       0.33       1.00       1.00
```

```
                1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                0.67      0.67

438 LS        SCS LOSS RATE
                 STRTL        0.70  INITIAL ABSTRACTION
                CRVNBR       74.12  CURVE NUMBER
                 RTIMP        0.00  PERCENT IMPERVIOUS AREA

439 UI        INPUT UNITGRAPH,   9 ORDINATES,  VOLUME = 1.00
                61.0     128.0     106.0      71.0      42.0      26.0      17.0      10.0       4.0
                                                          ***
*****************************************************************************************************************************

                                          HYDROGRAPH AT STATION       M2
*****************************************************************************************************************************
                                                                  *
     DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q         *     DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      1 JAN 0005    1    0.00    0.00    0.00         0.         *      1 JAN 0405   49    0.01    0.00    0.00         1.
      1 JAN 0010    2    0.01    0.01    0.00         0.         *      1 JAN 0410   50    0.02    0.01    0.01         1.
      1 JAN 0015    3    0.01    0.01    0.00         0.         *      1 JAN 0415   51    0.02    0.01    0.01         2.
      1 JAN 0020    4    0.01    0.01    0.00         0.         *      1 JAN 0420   52    0.02    0.01    0.01         2.
      1 JAN 0025    5    0.01    0.01    0.00         0.         *      1 JAN 0425   53    0.02    0.01    0.01         2.
      1 JAN 0030    6    0.01    0.01    0.00         0.         *      1 JAN 0430   54    0.02    0.01    0.01         3.
      1 JAN 0035    7    0.01    0.01    0.00         0.         *      1 JAN 0435   55    0.02    0.01    0.01         3.
      1 JAN 0040    8    0.01    0.01    0.00         0.         *      1 JAN 0440   56    0.02    0.01    0.01         3.
      1 JAN 0045    9    0.01    0.01    0.00         0.         *      1 JAN 0445   57    0.02    0.01    0.01         3.
      1 JAN 0050   10    0.01    0.01    0.00         0.         *      1 JAN 0450   58    0.02    0.01    0.01         3.
      1 JAN 0055   11    0.02    0.02    0.00         0.         *      1 JAN 0455   59    0.02    0.01    0.01         3.
      1 JAN 0100   12    0.02    0.02    0.00         0.         *      1 JAN 0500   60    0.02    0.01    0.01         3.
      1 JAN 0105   13    0.02    0.02    0.00         0.         *      1 JAN 0505   61    0.02    0.01    0.01         3.
      1 JAN 0110   14    0.01    0.01    0.00         0.         *      1 JAN 0510   62    0.01    0.01    0.00         3.
      1 JAN 0115   15    0.01    0.01    0.00         0.         *      1 JAN 0515   63    0.01    0.01    0.00         3.
      1 JAN 0120   16    0.01    0.01    0.00         0.         *      1 JAN 0520   64    0.01    0.01    0.00         3.
      1 JAN 0125   17    0.02    0.02    0.00         0.         *      1 JAN 0525   65    0.01    0.01    0.00         2.
      1 JAN 0130   18    0.02    0.02    0.00         0.         *      1 JAN 0530   66    0.01    0.01    0.00         2.
      1 JAN 0135   19    0.02    0.02    0.00         0.         *      1 JAN 0535   67    0.01    0.01    0.00         2.
      1 JAN 0140   20    0.07    0.07    0.00         0.         *      1 JAN 0540   68    0.01    0.01    0.00         2.
      1 JAN 0145   21    0.07    0.07    0.00         0.         *      1 JAN 0545   69    0.01    0.01    0.01         2.
      1 JAN 0150   22    0.07    0.07    0.00         0.         *      1 JAN 0550   70    0.01    0.01    0.01         2.
      1 JAN 0155   23    0.13    0.13    0.00         0.         *      1 JAN 0555   71    0.01    0.01    0.01         2.
      1 JAN 0200   24    0.13    0.13    0.00         0.         *      1 JAN 0600   72    0.01    0.01    0.01         2.
      1 JAN 0205   25    0.13    0.12    0.00         0.         *      1 JAN 0605   73    0.01    0.01    0.01         2.
      1 JAN 0210   26    0.07    0.07    0.01         1.         *      1 JAN 0610   74    0.00    0.00    0.00         2.
      1 JAN 0215   27    0.07    0.06    0.01         2.         *      1 JAN 0615   75    0.00    0.00    0.00         1.
      1 JAN 0220   28    0.07    0.06    0.01         3.         *      1 JAN 0620   76    0.00    0.00    0.00         1.
      1 JAN 0225   29    0.04    0.03    0.01         3.         *      1 JAN 0625   77    0.00    0.00    0.00         1.
      1 JAN 0230   30    0.04    0.03    0.01         4.         *      1 JAN 0630   78    0.00    0.00    0.00         0.
      1 JAN 0235   31    0.04    0.03    0.01         4.         *      1 JAN 0635   79    0.00    0.00    0.00         0.
      1 JAN 0240   32    0.02    0.02    0.01         4.         *      1 JAN 0640   80    0.00    0.00    0.00         0.
      1 JAN 0245   33    0.02    0.02    0.01         3.         *      1 JAN 0645   81    0.00    0.00    0.00         0.
      1 JAN 0250   34    0.02    0.02    0.01         3.         *      1 JAN 0650   82    0.00    0.00    0.00         0.
      1 JAN 0255   35    0.02    0.02    0.01         3.         *      1 JAN 0655   83    0.00    0.00    0.00         0.
      1 JAN 0300   36    0.02    0.02    0.01         3.         *      1 JAN 0700   84    0.00    0.00    0.00         0.
      1 JAN 0305   37    0.02    0.02    0.01         3.         *      1 JAN 0705   85    0.00    0.00    0.00         0.
      1 JAN 0310   38    0.02    0.02    0.01         3.         *      1 JAN 0710   86    0.00    0.00    0.00         0.
      1 JAN 0315   39    0.02    0.02    0.01         3.         *      1 JAN 0715   87    0.00    0.00    0.00         0.
      1 JAN 0320   40    0.02    0.02    0.01         3.         *      1 JAN 0720   88    0.00    0.00    0.00         0.
      1 JAN 0325   41    0.01    0.01    0.00         3.         *      1 JAN 0725   89    0.00    0.00    0.00         0.
      1 JAN 0330   42    0.01    0.01    0.00         3.         *      1 JAN 0730   90    0.00    0.00    0.00         0.
      1 JAN 0335   43    0.01    0.01    0.00         2.         *      1 JAN 0735   91    0.00    0.00    0.00         0.
      1 JAN 0340   44    0.01    0.00    0.00         2.         *      1 JAN 0740   92    0.00    0.00    0.00         0.
      1 JAN 0345   45    0.01    0.00    0.00         2.         *      1 JAN 0745   93    0.00    0.00    0.00         0.
      1 JAN 0350   46    0.01    0.00    0.00         1.         *      1 JAN 0750   94    0.00    0.00    0.00         0.
      1 JAN 0355   47    0.01    0.00    0.00         1.         *      1 JAN 0755   95    0.00    0.00    0.00         0.
      1 JAN 0400   48    0.01    0.00    0.00         1.         *      1 JAN 0800   96    0.00    0.00    0.00         0.
                                                                  *
*****************************************************************************************************************************

   TOTAL RAINFALL =    1.82, TOTAL LOSS =    1.55, TOTAL EXCESS =    0.27

  PEAK FLOW      TIME                                MAXIMUM AVERAGE FLOW
                                        6-HR        24-HR        72-HR       7.92-HR
+   (CFS)        (HR)
                                  (CFS)
+       4.       2.50                  2.           1.           1.           1.
                                (INCHES)       0.278        0.278        0.278        0.278
                                 (AC-FT)          1.           1.           1.           1.

                                CUMULATIVE AREA =    0.06 SQ MI

-----DSS---ZWRITE Unit  71; Vers.    2:  /MILL CR/SR28 LOCAL/FLOW/01JAN1999/5MIN//


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
441 KK      *     M2C    *     Add SR 28 local to Mill, Pt 15
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*            *
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442 HC          HYDROGRAPH COMBINATION
                     ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

                                                  ***
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HYDROGRAPH AT STATION M2C
SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	5.	1 JAN 0205	25	5.	1 JAN 0405	49	6.	1 JAN 0605	73	95.
1 JAN 0010	2	5.	1 JAN 0210	26	6.	1 JAN 0410	50	6.	1 JAN 0610	74	96.
1 JAN 0015	3	5.	1 JAN 0215	27	7.	1 JAN 0415	51	7.	1 JAN 0615	75	96.
1 JAN 0020	4	5.	1 JAN 0220	28	8.	1 JAN 0420	52	7.	1 JAN 0620	76	96.
1 JAN 0025	5	5.	1 JAN 0225	29	8.	1 JAN 0425	53	7.	1 JAN 0625	77	94.
1 JAN 0030	6	5.	1 JAN 0230	30	9.	1 JAN 0430	54	8.	1 JAN 0630	78	91.
1 JAN 0035	7	5.	1 JAN 0235	31	9.	1 JAN 0435	55	8.	1 JAN 0635	79	87.
1 JAN 0040	8	5.	1 JAN 0240	32	9.	1 JAN 0440	56	8.	1 JAN 0640	80	82.
1 JAN 0045	9	5.	1 JAN 0245	33	8.	1 JAN 0445	57	8.	1 JAN 0645	81	76.
1 JAN 0050	10	5.	1 JAN 0250	34	8.	1 JAN 0450	58	8.	1 JAN 0650	82	70.
1 JAN 0055	11	5.	1 JAN 0255	35	8.	1 JAN 0455	59	8.	1 JAN 0655	83	64.
1 JAN 0100	12	5.	1 JAN 0300	36	8.	1 JAN 0500	60	8.	1 JAN 0700	84	58.
1 JAN 0105	13	5.	1 JAN 0305	37	8.	1 JAN 0505	61	9.	1 JAN 0705	85	52.
1 JAN 0110	14	5.	1 JAN 0310	38	8.	1 JAN 0510	62	18.	1 JAN 0710	86	47.
1 JAN 0115	15	5.	1 JAN 0315	39	8.	1 JAN 0515	63	31.	1 JAN 0715	87	42.
1 JAN 0120	16	5.	1 JAN 0320	40	8.	1 JAN 0520	64	44.	1 JAN 0720	88	37.
1 JAN 0125	17	5.	1 JAN 0325	41	8.	1 JAN 0525	65	56.	1 JAN 0725	89	33.
1 JAN 0130	18	5.	1 JAN 0330	42	8.	1 JAN 0530	66	65.	1 JAN 0730	90	30.
1 JAN 0135	19	5.	1 JAN 0335	43	7.	1 JAN 0535	67	73.	1 JAN 0735	91	27.
1 JAN 0140	20	5.	1 JAN 0340	44	7.	1 JAN 0540	68	79.	1 JAN 0740	92	24.
1 JAN 0145	21	5.	1 JAN 0345	45	7.	1 JAN 0545	69	84.	1 JAN 0745	93	22.
1 JAN 0150	22	5.	1 JAN 0350	46	6.	1 JAN 0550	70	88.	1 JAN 0750	94	20.
1 JAN 0155	23	5.	1 JAN 0355	47	6.	1 JAN 0555	71	91.	1 JAN 0755	95	19.
1 JAN 0200	24	5.	1 JAN 0400	48	6.	1 JAN 0600	72	93.	1 JAN 0800	96	17.

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
96.	6.17	(CFS)	33.	26.	26.	26.
		(INCHES)	0.232	0.243	0.243	0.243
		(AC-FT)	16.	17.	17.	17.

CUMULATIVE AREA = 1.32 SQ MI

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-----DSS---ZWRITE Unit  71; Vers.    2:  /MILL CR/SR28 PT15/FLOW/01JAN1999/5MIN//

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
444 KK      *     M2R    *     Route Mill to mouth at 3 fps
            *            *
            **************

              HYDROGRAPH ROUTING DATA

445 RM          MUSKINGUM ROUTING
                     NSTPS          1 NUMBER OF SUBREACHES
                     AMSKK       0.09 MUSKINGUM K
                         X       0.40 MUSKINGUM X

                                                  ***
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HYDROGRAPH AT STATION M2R

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	5.	1 JAN 0205	25	5.	1 JAN 0405	49	6.	1 JAN 0605	73	93.
1 JAN 0010	2	5.	1 JAN 0210	26	5.	1 JAN 0410	50	6.	1 JAN 0610	74	95.
1 JAN 0015	3	5.	1 JAN 0215	27	6.	1 JAN 0415	51	6.	1 JAN 0615	75	96.
1 JAN 0020	4	5.	1 JAN 0220	28	7.	1 JAN 0420	52	7.	1 JAN 0620	76	96.
1 JAN 0025	5	5.	1 JAN 0225	29	8.	1 JAN 0425	53	7.	1 JAN 0625	77	96.
1 JAN 0030	6	5.	1 JAN 0230	30	8.	1 JAN 0430	54	7.	1 JAN 0630	78	94.
1 JAN 0035	7	5.	1 JAN 0235	31	9.	1 JAN 0435	55	8.	1 JAN 0635	79	91.
1 JAN 0040	8	5.	1 JAN 0240	32	9.	1 JAN 0440	56	8.	1 JAN 0640	80	87.
1 JAN 0045	9	5.	1 JAN 0245	33	9.	1 JAN 0445	57	8.	1 JAN 0645	81	82.
1 JAN 0050	10	5.	1 JAN 0250	34	8.	1 JAN 0450	58	8.	1 JAN 0650	82	76.
1 JAN 0055	11	5.	1 JAN 0255	35	8.	1 JAN 0455	59	8.	1 JAN 0655	83	70.

1 JAN 0100	12	5.	*	1 JAN 0300	36	8.	*	1 JAN 0500	60	8.	*	1 JAN 0700	84	64.
1 JAN 0105	13	5.	*	1 JAN 0305	37	8.	*	1 JAN 0505	61	8.	*	1 JAN 0705	85	58.
1 JAN 0110	14	5.	*	1 JAN 0310	38	8.	*	1 JAN 0510	62	9.	*	1 JAN 0710	86	52.
1 JAN 0115	15	5.	*	1 JAN 0315	39	8.	*	1 JAN 0515	63	18.	*	1 JAN 0715	87	47.
1 JAN 0120	16	5.	*	1 JAN 0320	40	8.	*	1 JAN 0520	64	30.	*	1 JAN 0720	88	42.
1 JAN 0125	17	5.	*	1 JAN 0325	41	8.	*	1 JAN 0525	65	43.	*	1 JAN 0725	89	38.
1 JAN 0130	18	5.	*	1 JAN 0330	42	8.	*	1 JAN 0530	66	55.	*	1 JAN 0730	90	34.
1 JAN 0135	19	5.	*	1 JAN 0335	43	8.	*	1 JAN 0535	67	65.	*	1 JAN 0735	91	30.
1 JAN 0140	20	5.	*	1 JAN 0340	44	7.	*	1 JAN 0540	68	72.	*	1 JAN 0740	92	27.
1 JAN 0145	21	5.	*	1 JAN 0345	45	7.	*	1 JAN 0545	69	79.	*	1 JAN 0745	93	25.
1 JAN 0150	22	5.	*	1 JAN 0350	46	7.	*	1 JAN 0550	70	84.	*	1 JAN 0750	94	22.
1 JAN 0155	23	5.	*	1 JAN 0355	47	6.	*	1 JAN 0555	71	88.	*	1 JAN 0755	95	20.
1 JAN 0200	24	5.	*	1 JAN 0400	48	6.	*	1 JAN 0600	72	91.	*	1 JAN 0800	96	19.
			*				*				*			

****

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)		6-HR	24-HR	72-HR	7.92-HR
		(CFS)				
+ 96.	6.25		33.	26.	26.	26.
		(INCHES)	0.230	0.242	0.242	0.242
		(AC-FT)	16.	17.	17.	17.

CUMULATIVE AREA = 1.32 SQ MI

*** ***

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            **************
            *            *
 446 KK     *     M3     *     Mill Cr at mouth
            *            *
            **************

 450 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE      1JAN99  STARTING DATE
                     JXTIME           5  STARTING TIME

               SUBBASIN RUNOFF DATA

 447 BA          SUBBASIN CHARACTERISTICS
                      TAREA        0.70  SUBBASIN AREA

 448 BF          BASE FLOW CHARACTERISTICS
                      STRTQ        0.00  INITIAL FLOW
                      QRCSN       -0.05  BEGIN BASE FLOW RECESSION
                      RTIOR     1.50000  RECESSION CONSTANT

                 PRECIPITATION DATA

 449 PB               STORM        1.67  BASIN TOTAL PRECIPITATION

 451 PI            INCREMENTAL PRECIPITATION PATTERN
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      1.00
                     1.00      1.00      0.33      0.33      0.33      1.00      1.00      1.00      3.67      3.67
                     3.67      7.00      7.00      7.00      4.00      4.00      4.00      2.33      2.33      2.33
                     1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      1.33      0.67
                     0.67      0.67      0.33      0.33      0.33      0.33      0.33      0.33      1.00      1.00
                     1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00      1.00
                     0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67      0.67
                     0.67      0.67

 455 LS          SCS LOSS RATE
                      STRTL        0.69  INITIAL ABSTRACTION
                     CRVNBR       74.43  CURVE NUMBER
                      RTIMP        0.00  PERCENT IMPERVIOUS AREA

 456 UI          INPUT UNITGRAPH,  15 ORDINATES,  VOLUME = 1.00
                     315.0     809.0    1000.0     867.0     685.0     518.0     365.0     263.0     195.0     145.0
                     105.0      76.0      47.0      24.0      12.0
                                                                  ***
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HYDROGRAPH AT STATION M3

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
1 JAN 0005	1	0.00	0.00	0.00	0.	*	1 JAN 0405	49	0.01	0.00	0.00	12.
1 JAN 0010	2	0.01	0.01	0.00	0.	*	1 JAN 0410	50	0.02	0.01	0.00	12.
1 JAN 0015	3	0.01	0.01	0.00	0.	*	1 JAN 0415	51	0.02	0.01	0.01	14.
1 JAN 0020	4	0.01	0.01	0.00	0.	*	1 JAN 0420	52	0.02	0.01	0.01	17.
1 JAN 0025	5	0.01	0.01	0.00	0.	*	1 JAN 0425	53	0.02	0.01	0.01	19.
1 JAN 0030	6	0.01	0.01	0.00	0.	*	1 JAN 0430	54	0.02	0.01	0.01	22.
1 JAN 0035	7	0.01	0.01	0.00	0.	*	1 JAN 0435	55	0.02	0.01	0.01	24.
1 JAN 0040	8	0.01	0.01	0.00	0.	*	1 JAN 0440	56	0.02	0.01	0.01	25.
1 JAN 0045	9	0.01	0.01	0.00	0.	*	1 JAN 0445	57	0.02	0.01	0.01	27.

1 JAN 0050	10	0.01	0.01	0.00	0.	*	1 JAN 0450	58	0.02	0.01	0.01	28.
1 JAN 0055	11	0.02	0.02	0.00	0.	*	1 JAN 0455	59	0.02	0.01	0.01	29.
1 JAN 0100	12	0.02	0.02	0.00	0.	*	1 JAN 0500	60	0.02	0.01	0.01	29.
1 JAN 0105	13	0.02	0.02	0.00	0.	*	1 JAN 0505	61	0.02	0.01	0.01	30.
1 JAN 0110	14	0.01	0.01	0.00	0.	*	1 JAN 0510	62	0.01	0.01	0.00	30.
1 JAN 0115	15	0.01	0.01	0.00	0.	*	1 JAN 0515	63	0.01	0.01	0.00	29.
1 JAN 0120	16	0.01	0.01	0.00	0.	*	1 JAN 0520	64	0.01	0.01	0.00	27.
1 JAN 0125	17	0.02	0.02	0.00	0.	*	1 JAN 0525	65	0.01	0.01	0.00	26.
1 JAN 0130	18	0.02	0.02	0.00	0.	*	1 JAN 0530	66	0.01	0.01	0.00	25.
1 JAN 0135	19	0.02	0.02	0.00	0.	*	1 JAN 0535	67	0.01	0.01	0.00	24.
1 JAN 0140	20	0.06	0.06	0.00	0.	*	1 JAN 0540	68	0.01	0.01	0.00	24.
1 JAN 0145	21	0.06	0.06	0.00	0.	*	1 JAN 0545	69	0.01	0.01	0.00	23.
1 JAN 0150	22	0.06	0.06	0.00	0.	*	1 JAN 0550	70	0.01	0.01	0.00	23.
1 JAN 0155	23	0.12	0.12	0.00	0.	*	1 JAN 0555	71	0.01	0.01	0.00	23.
1 JAN 0200	24	0.12	0.12	0.00	0.	*	1 JAN 0600	72	0.01	0.01	0.00	23.
1 JAN 0205	25	0.12	0.12	0.00	0.	*	1 JAN 0605	73	0.01	0.01	0.00	23.
1 JAN 0210	26	0.07	0.06	0.00	2.	*	1 JAN 0610	74	0.00	0.00	0.00	22.
1 JAN 0215	27	0.07	0.06	0.01	6.	*	1 JAN 0615	75	0.00	0.00	0.00	19.
1 JAN 0220	28	0.07	0.06	0.01	12.	*	1 JAN 0620	76	0.00	0.00	0.00	14.
1 JAN 0225	29	0.04	0.03	0.01	18.	*	1 JAN 0625	77	0.00	0.00	0.00	10.
1 JAN 0230	30	0.04	0.03	0.01	23.	*	1 JAN 0630	78	0.00	0.00	0.00	8.
1 JAN 0235	31	0.04	0.03	0.01	27.	*	1 JAN 0635	79	0.00	0.00	0.00	5.
1 JAN 0240	32	0.02	0.02	0.00	29.	*	1 JAN 0640	80	0.00	0.00	0.00	4.
1 JAN 0245	33	0.02	0.02	0.00	29.	*	1 JAN 0645	81	0.00	0.00	0.00	3.
1 JAN 0250	34	0.02	0.02	0.00	28.	*	1 JAN 0650	82	0.00	0.00	0.00	2.
1 JAN 0255	35	0.02	0.02	0.00	28.	*	1 JAN 0655	83	0.00	0.00	0.00	1.
1 JAN 0300	36	0.02	0.02	0.01	28.	*	1 JAN 0700	84	0.00	0.00	0.00	1.
1 JAN 0305	37	0.02	0.02	0.01	28.	*	1 JAN 0705	85	0.00	0.00	0.00	1.
1 JAN 0310	38	0.02	0.02	0.01	28.	*	1 JAN 0710	86	0.00	0.00	0.00	1.
1 JAN 0315	39	0.02	0.02	0.01	29.	*	1 JAN 0715	87	0.00	0.00	0.00	1.
1 JAN 0320	40	0.02	0.02	0.01	29.	*	1 JAN 0720	88	0.00	0.00	0.00	1.
1 JAN 0325	41	0.01	0.01	0.00	29.	*	1 JAN 0725	89	0.00	0.00	0.00	1.
1 JAN 0330	42	0.01	0.01	0.00	27.	*	1 JAN 0730	90	0.00	0.00	0.00	1.
1 JAN 0335	43	0.01	0.01	0.00	25.	*	1 JAN 0735	91	0.00	0.00	0.00	1.
1 JAN 0340	44	0.01	0.00	0.00	22.	*	1 JAN 0740	92	0.00	0.00	0.00	1.
1 JAN 0345	45	0.01	0.00	0.00	19.	*	1 JAN 0745	93	0.00	0.00	0.00	1.
1 JAN 0350	46	0.01	0.00	0.00	17.	*	1 JAN 0750	94	0.00	0.00	0.00	1.
1 JAN 0355	47	0.01	0.00	0.00	14.	*	1 JAN 0755	95	0.00	0.00	0.00	1.
1 JAN 0400	48	0.01	0.00	0.00	13.	*	1 JAN 0800	96	0.00	0.00	0.00	1.

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TOTAL RAINFALL = 1.67, TOTAL LOSS = 1.45, TOTAL EXCESS = 0.22

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
+ 30.	5.00	(CFS)	17.	13.	13.	13.
		(INCHES)	0.221	0.221	0.221	0.221
		(AC-FT)	8.	8.	8.	8.

CUMULATIVE AREA = 0.70 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /MILL CR/MOUTH LOCAL/FLOW/01JAN1999/5MIN//

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              **************
              *            *
459 KK        *     M3C    *     Add local at mouth to Mill Pt 16
              *            *
              **************
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460 HC HYDROGRAPH COMBINATION
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

***

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HYDROGRAPH AT STATION M3C
SUM OF 2 HYDROGRAPHS

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DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW	*	DA MON HRMN	ORD	FLOW
1 JAN 0005	1	5.	*	1 JAN 0205	25	5.	*	1 JAN 0405	49	18.	*	1 JAN 0605	73	116.
1 JAN 0010	2	5.	*	1 JAN 0210	26	7.	*	1 JAN 0410	50	18.	*	1 JAN 0610	74	117.
1 JAN 0015	3	5.	*	1 JAN 0215	27	12.	*	1 JAN 0415	51	20.	*	1 JAN 0615	75	114.
1 JAN 0020	4	5.	*	1 JAN 0220	28	19.	*	1 JAN 0420	52	23.	*	1 JAN 0620	76	110.
1 JAN 0025	5	5.	*	1 JAN 0225	29	26.	*	1 JAN 0425	53	27.	*	1 JAN 0625	77	106.
1 JAN 0030	6	5.	*	1 JAN 0230	30	31.	*	1 JAN 0430	54	29.	*	1 JAN 0630	78	102.
1 JAN 0035	7	5.	*	1 JAN 0235	31	35.	*	1 JAN 0435	55	31.	*	1 JAN 0635	79	96.
1 JAN 0040	8	5.	*	1 JAN 0240	32	38.	*	1 JAN 0440	56	33.	*	1 JAN 0640	80	91.
1 JAN 0045	9	5.	*	1 JAN 0245	33	38.	*	1 JAN 0445	57	34.	*	1 JAN 0645	81	85.
1 JAN 0050	10	5.	*	1 JAN 0250	34	37.	*	1 JAN 0450	58	36.	*	1 JAN 0650	82	78.
1 JAN 0055	11	5.	*	1 JAN 0255	35	36.	*	1 JAN 0455	59	37.	*	1 JAN 0655	83	72.
1 JAN 0100	12	5.	*	1 JAN 0300	36	36.	*	1 JAN 0500	60	37.	*	1 JAN 0700	84	66.
1 JAN 0105	13	5.	*	1 JAN 0305	37	36.	*	1 JAN 0505	61	38.	*	1 JAN 0705	85	60.
1 JAN 0110	14	5.	*	1 JAN 0310	38	36.	*	1 JAN 0510	62	39.	*	1 JAN 0710	86	54.

1 JAN 0115	15	5.	*	1 JAN 0315	39	37.	*	1 JAN 0515	63	47.	*	1 JAN 0715	87	48.
1 JAN 0120	16	5.	*	1 JAN 0320	40	37.	*	1 JAN 0520	64	58.	*	1 JAN 0720	88	43.
1 JAN 0125	17	5.	*	1 JAN 0325	41	37.	*	1 JAN 0525	65	69.	*	1 JAN 0725	89	39.
1 JAN 0130	18	5.	*	1 JAN 0330	42	35.	*	1 JAN 0530	66	80.	*	1 JAN 0730	90	35.
1 JAN 0135	19	5.	*	1 JAN 0335	43	32.	*	1 JAN 0535	67	89.	*	1 JAN 0735	91	31.
1 JAN 0140	20	5.	*	1 JAN 0340	44	29.	*	1 JAN 0540	68	96.	*	1 JAN 0740	92	28.
1 JAN 0145	21	5.	*	1 JAN 0345	45	26.	*	1 JAN 0545	69	102.	*	1 JAN 0745	93	26.
1 JAN 0150	22	5.	*	1 JAN 0350	46	23.	*	1 JAN 0550	70	107.	*	1 JAN 0750	94	23.
1 JAN 0155	23	5.	*	1 JAN 0355	47	21.	*	1 JAN 0555	71	111.	*	1 JAN 0755	95	21.
1 JAN 0200	24	5.	*	1 JAN 0400	48	19.	*	1 JAN 0600	72	114.	*	1 JAN 0800	96	20.
			*				*				*			

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	7.92-HR
117.	6.08	(CFS)	49.	39.	39.	39.
		(INCHES)	0.227	0.235	0.235	0.235
		(AC-FT)	24.	25.	25.	25.

CUMULATIVE AREA = 2.02 SQ MI

-----DSS---ZWRITE Unit 71; Vers. 2: /MILL CR/MOUTH PT16/FLOW/01JAN1999/5MIN//
1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	F1	176.	3.33	111.	84.	84.	1.72		
HYDROGRAPH AT	S1	262.	3.33	158.	120.	120.	1.73		
HYDROGRAPH AT	BCB1	65.	2.50	27.	21.	21.	0.43		
HYDROGRAPH AT	BC1	53.	2.42	20.	15.	15.	0.27		
HYDROGRAPH AT	W1	358.	3.17	208.	157.	157.	1.70		
ROUTED TO	W1R	357.	3.50	206.	156.	156.	1.70		
HYDROGRAPH AT	W2	16.	2.42	6.	5.	5.	0.19		
2 COMBINED AT	W2C	366.	3.42	213.	161.	161.	1.89		
ROUTED TO	W2R	366.	3.67	211.	160.	160.	1.89		
HYDROGRAPH AT	W3	8.	2.33	3.	2.	2.	0.08		
2 COMBINED AT	W3C	368.	3.67	214.	162.	162.	1.97		
HYDROGRAPH AT	T1	513.	2.75	256.	195.	195.	1.03		
DIVERSION TO	OPDIV	50.	2.75	43.	33.	33.	1.03		
HYDROGRAPH AT	TD1	463.	2.75	213.	162.	162.	1.03		
ROUTED TO	T1R	462.	2.92	213.	162.	162.	1.03		
HYDROGRAPH AT	T2	675.	2.58	276.	211.	211.	1.01		
2 COMBINED AT	T2C	1096.	2.67	489.	373.	373.	2.04		
DIVERSION TO	INDIV	208.	2.67	127.	98.	98.	2.04		
HYDROGRAPH AT	TD2	887.	2.67	362.	275.	275.	2.04		
ROUTED TO	T2R	863.	3.58	358.	271.	271.	2.04		
HYDROGRAPH AT	TD2R	208.	2.67	127.	98.	98.	0.00		

+	ROUTED TO	T2RB	208.	2.92	127.	97.	97.	0.00	
+	HYDROGRAPH AT	T3	167.	2.33	58.	44.	44.	0.46	
+	2 COMBINED AT	T3C	323.	2.50	185.	141.	141.	0.46	
+	ROUTED TO	TRR	109.	6.58	53.	41.	41.	0.46	
+									8319.96 6.58
+	ROUTED TO	TRR2	109.	7.33	42.	32.	32.	0.46	
+	2 COMBINED AT	TRRC	866.	3.58	399.	303.	303.	2.50	
+	HYDROGRAPH AT	T4	465.	2.92	258.	195.	195.	1.78	
+	2 COMBINED AT	T4C	1287.	3.50	657.	499.	499.	4.28	
+	ROUTED TO	T4R	1278.	3.67	651.	494.	494.	4.28	
+	HYDROGRAPH AT	T5	5.	2.50	2.	2.	2.	0.07	
+	2 COMBINED AT	T5C	1280.	3.67	653.	496.	496.	4.35	
+	ROUTED TO	T5R	1274.	3.92	644.	489.	489.	4.35	
+	HYDROGRAPH AT	T6	16.	2.58	8.	6.	6.	0.52	
+	2 COMBINED AT	T6C	1279.	3.92	652.	495.	495.	4.87	
+	ROUTED TO	T6R	1278.	3.92	651.	494.	494.	4.87	
+	HYDROGRAPH AT	WT1	77.	2.67	41.	31.	31.	0.84	
+	ROUTED TO	WT1R	77.	3.00	41.	31.	31.	0.84	
+	HYDROGRAPH AT	WT2	10.	2.33	4.	3.	3.	0.15	
+	2 COMBINED AT	WT2C	83.	3.00	45.	34.	34.	0.99	
+	ROUTED TO	T2R	83.	3.08	45.	34.	34.	0.99	
+	2 COMBINED AT	T2C2	1340.	3.92	696.	528.	528.	5.86	
+	ROUTED TO	WT6R2	1330.	4.25	678.	515.	515.	5.86	
+	HYDROGRAPH AT	T7	6.	2.50	3.	2.	2.	0.16	
+	2 COMBINED AT	T7C	1333.	4.25	681.	517.	517.	6.02	
+	HYDROGRAPH AT	WI1	96.	3.33	56.	42.	42.	1.03	
+	ROUTED TO	WI1R	95.	4.00	55.	42.	42.	1.03	
+	HYDROGRAPH AT	WI2	45.	3.33	27.	21.	21.	0.93	
+	2 COMBINED AT	WI2C	134.	3.58	82.	62.	62.	1.96	
+	ROUTED TO	WI2R	132.	3.92	82.	62.	62.	1.96	
+	HYDROGRAPH AT	I1	562.	3.50	379.	287.	287.	4.20	
+	ROUTED TO	I1R	560.	3.92	372.	282.	282.	4.20	

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         HYDROGRAPH AT
+                          I2        17.    2.50          8.         6.         6.      0.25

         2 COMBINED AT
+                          I2C      565.    3.92        379.       287.       287.      4.45

         ROUTED TO
+                          I2R      563.    4.25        370.       280.       280.      4.45

         HYDROGRAPH AT
+                          I3        20.    3.50          9.         7.         7.      0.26

         3 COMBINED AT
+                          I3C      698.    4.17        460.       349.       349.      6.67

         HYDROGRAPH AT
+                          M1       151.    2.75         83.        64.        64.      1.26

         ROUTED TO
+                          MRR       95.    6.08         31.        25.        25.      1.26
+                                                                                                6410.70        6.08

         ROUTED TO
+                          M1R       95.    6.17         31.        25.        25.      1.26

         HYDROGRAPH AT
+                          M2         4.    2.50          2.         1.         1.      0.06

         2 COMBINED AT
+                          M2C       96.    6.17         33.        26.        26.      1.32

         ROUTED TO
+                          M2R       96.    6.25         33.        26.        26.      1.32

         HYDROGRAPH AT
+                          M3        30.    5.00         17.        13.        13.      0.70

         2 COMBINED AT
+                          M3C      117.    6.08         49.        39.        39.      2.02


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


    -----DSS---ZCLOSE Unit:  71,    File: INCL100R.DSS
              Pointer Utilization:  0.25
              Number of Records:     42
              File Size:     84.0  Kbytes
              Percent Inactive:   0.0
```